

RELEASE FROM PAIN

DON'T BE A VICTIM
OF THE
PAIN PANDEMIC

Essentials of Orthopaedic Medicine

Paul H. Goodley, M.D.

www.DrGoodley.com

If you want to live with less pain –if you want to help relieve the pain of others - or better represent them; *if you are a student in any of the healing professions - or contemplating it* - if you want to contribute to resolving what historians may well call this last century - *a time of unnecessarily perpetuated pain* - then please continue reading...

*The cry of mankind is not for
pleasure, but release from pain.*

Goethe

REVIEW

“I finally stopped dog-earring the pages because I was dog-earring all of them.”

Release From Pain is one book that should not have had to be written. Dr. Goodley will convince you that Medicine’s Fundamental Flaw is so obvious and pervasive that it is almost inconceivable that it took a century and a professional life’s effort to prove it so powerfully.

Dr. Goodley’s pilgrimage is captivating, sometimes infuriating and always educational. It is the story of a titanic struggle between truth and institutional power in which he always sides with patients in pain and through them validates what he contends.

Nothing about this book is remote. It is deeply personal from Dr. Goodley to his reader. It is passionate, and there is anger here that is only another expression of the love and compassion that drives this man to make things right.

Dr. Goodley’s vast range of compelling stories leads one easily to the conclusion that destiny is being revealed here from one whose striving offers real hope to many.

In a word, Release From Pain is a vitally important book. The essence of its lesson is that adherence to sound principle is a practical and rewarding option that turns conformity pale. And from that, Release From Pain may now well be destined.

**Richard S. Weiner, Ph.D.
Executive Director
American Association of Pain**

Management

Much has changed since I began writing this book in 1992. In my opinion, among the more notable:

On the positive side:

Leaders in chiropractic have remarkably advanced its professionalism.

On the negative:

'Pain management," a new discipline, is increasingly equated with specialized (expensive), fluoroscopic-monitored injection techniques as a primary approach to treatment.

There is no realization that it is another circumvention of the fundamental essential to initially approach pain problems, even in the first clinical encounter, with knowledgeable hands-on examination.

And - its title "management" encourages self-defeat: incurability is presumed: the intent to cure is unconsidered: the sands are not continually sifted for those individuals whose pain persists only for lack of directed therapy. I will discuss this more.

It has been reported that medical training is shifting even more from teaching hands-on clinical skills to the emphasized reliance on technology for attempting to diagnose. That would be suicidally delusional.

Dedication

Ted Loseff, M.D. was my friend. This fulfills, in part, my eulogy to him.

By specialty he was an orthopedic surgeon. Above all, he was a physician. Had he lived, we would have advanced the art and science of medicine together.

Tomio Yamamoto, M.D. Chief of Orthopedic Surgery, Osaka Koseinenkin Hospital, Japan.

We spoke for only a short time, but he joined Ted in spirit. Our conversation was the immediate impetus to concentrate my medical writing into this book. You will meet him in the first chapter.

Drs. Loseff and Yamamoto honor our profession and their specialty by not blinking when they realized that there is a vital *medical* aspect to orthopedics that they, as surgeons, had never been exposed to. That fact is the key to resolving the Fundamental Flaw and resultant Pain Pandemic. They personify what I hope will come from others, especially in their specialty, in response to the intent of this book.

...I think of the afflictions I have cured with these fundamentals - the pain and despair relieved – the quality of lives restored and, in at least one case, saved life itself.

From just one practice, disability costs were reduced by multi millions of dollars.

I have lived an extraordinary, challenging life from adhering to principles that distinguish reasoned from “traditional” ritualized care.

We must resolve the Fundamental Flaw by disseminating these essentials so that many will enjoy release from pain.

What is now, need not be.

It is incredible that the body, with its wondrous ability to perform through such exquisite ranges of expression - the voice of a singer - the playing of musical instruments - mind boggling athletic achievement, is truly expected to comprehensively yield answers about its impairments to crude, too often poorly performed, physical examinations that are essentially designed to disclose only major abnormalities. Yet, because of the Fundamental Flaw, they are now the rigid criteria of medical determinism!

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AN ALLOPATHIC PHYSICIAN

Herman J. Flax, M.D.

AN OSTEOPATHIC PHYSICIAN

Viola M. Frymann, D.O.

A DOCTOR OF CHIROPRACTIC

Frank Schoenholtz, D.C.

Herman J. Flax, M.D.

The skeletal system with its muscles is the largest structure in the body. Yet, physicians often fail to consider extenuating conditions of musculoskeletal origin in the differential diagnosis of diseases causing pain and discomfort. If special procedures that require high tech instrumentation, like computerized axial tomography (CT Scan) and magnetic resonance imaging (MRI), do not show any abnormal findings, there is no justification for the continuous complaint in the minds of many. Unfortunately for the patient, these expensive studies are of little value in diagnosing soft-tissue and joint problems resulting from minimal derangements of the functional anatomy that may be disabling regardless. On the other hand, a careful examination, inspecting the surface anatomy and joints and palpating muscles and other soft tissues, will reveal the diagnosis in most cases.

Dr. Goodley is a firm believer in the science and art of manipulative therapy as an essential component of medical care, and he has written this provocative book to assert his case. For longer than I have known him, he has tried to attract serious attention to this fundamental problem within our profession. Finally, he has decided he must make everyone aware of the penalties of inadequate medical examination and failure to apply essential skills.

Throughout the many interesting and instructive chapters, he makes a constant and persuasive plea for the medical profession to recognize the value of therapeutic manipulation and, perhaps even more, to come to understand the underlying principles which will markedly improve overall care. That is the crux of his book.

He also finds it necessary to censure his profession for being responsible for perpetuating this fault and for promoting the stigma a century ago that led to the present prejudice against manipulation. By so doing, he accepts the risk of incurring the displeasure of some of his colleagues who may not accept his documented criticism with grace; but, for him, this has been a life-long battle, and he seeks the higher goal that our profession will listen now and provide better care. Dr. Goodley's ethic is if he does not release this information now, he is commensurately responsible for future cases such as those he so

graphically describes.

Nevertheless, he is right, because manipulation can and does relieve pain by adjusting derangements in joint mobility, as does massage and stretching of muscles for symptoms of myofascial pain syndromes. Dr. Goodley carefully describes other far reaching alterations in body physiology because of these conditions, and he describes therapeutic methods, some of which are of such detail that manipulation is clearly seen as a completely logical application of sound biomechanics. He removes the mystery of manipulation well enough that a few procedures can even be performed, if circumstances warrant, by a careful reader.

I applaud Dr. Goodley for his straightforward way of bringing this ancient concept to our modern practice of medicine. More than other physicians, Dr. Goodley is highly qualified to write this book. He is a physiatrist, a specialist in Physical Medicine and Rehabilitation, and he has studied with and mastered the manipulative concepts of the best teachers in the world.

Dr. Goodley carefully describes why he has been such a strong advocate for these methods since shortly after his graduation from medical school where he learned none of them. This book relates his experiences and enviable triumphs in restoring disabled patients to a productive life with these methods. Yet, during that same time, he tirelessly taught, or tried to, what he had learned so there might not be a distinction between his accomplishments and those of too many others in our profession who have been unwilling to reexamine the manipulative procedures.

Those of us in the medical profession who have practiced Orthopaedic Medicine can vouch for the effective outcome of properly applied manipulative therapy. Would that we all had the ability and dexterity of Paul H. Goodley.

Herman J. Flax, M.D., M. Med. Sc. (Phys Med), FACP, FAAPMR, ACRM, ABPMR, ABEM, Hon Prof in Med Scs, Universidad Catolica Madre y Maestra
Professor in PMR, University of Puerto Rico
Past President International Rehabilitation Medicine Association
Gold Key Award, The American Congress of Rehabilitation Medicine
Distinguished Clinician Award, The American Academy of Physical Medicine and Rehabilitation
Former Chief, PMR Service, San Juan VAMC. Staff Physiatrist, Veterans Affairs Medical Center, Washington, D.C.

Viola M. Frymann, D.O.

"The collection of cases described is...awesome."

Manipulation to relieve pain is as old as antiquity when children were trained to walk on the spines of their grandparents to relieve their aching backs. The sensitive interdependence of structure and function in the human body was realized in 1874 by Dr. Andrew Taylor Still, and Dr. Goodley well describes his work in this remarkable book. He was another reluctant maverick who saw too many die of disease during the Civil War, and then three of his immediate family from spinal meningitis despite the best that medicine had to offer.

In 1960, during his maiden voyage into general practice, Paul H. Goodley, M.D. applied the technique he had learned in an introductory course on manipulation to Ozzie Hansen and saved this man's life. The experience also changed the road for Dr. Goodley who discovered that he had within his hands a therapeutic skill heretofore undreamed of. I also had to discover the benefit a patient could experience under my hands for, in the final analysis, it is not the wonders that Still, or others, performed that mattered, but whether *my patients or Dr. Goodley's patients* could similarly benefit.

I remember the bricklayer who had fallen from a scaffold in 1953. He was brought into my office supported by two men because severe vertigo prevented him from standing alone. My joy was as great as his was when, after that one specific treatment his vertigo was gone and he walked out unassisted.

Dr. Goodley's story of Richard in "the case of the strangling pituitary" which occurred in the early eighties, brings to mind some of Sutherland's early experiments as he sought to understand the implications of cranial trauma and develop techniques for correcting it.

In this book Dr. Goodley has dared to challenge his first profession. He has dared to expose an imbedded blind spot in its vision, and in this time of profound change in the system of medical care, he has revealed the essential need to address a whole patient.

The musculoskeletal system comprises 65% of this patient. It is the machinery of life. Emotion can only be expressed through it. Prevention must be addressed within it and the inner healing forces of the body can be liberated through it.

Read, mark, learn and inwardly digest the profound wisdom to be found within these pages.

Viola M. Frymann D.O., F.A.A.O.
Director of the Osteopathic Center for Children
La Jolla, California
Professor of Osteopathic Principles and Practice of the
College of Osteopathic Medicine of the Pacific.

Frank Schoenholtz, D.C.

I met Paul under unusual circumstances. He agreed to come to Los Angeles Chiropractic College to teach during one of our annual sessions. I'd never heard of him before, but for an M.D. to accept such an invitation in 1977 was unusual in itself.

What first captured my attention was his intensity. There was nothing casual about him. He was a man with a passionate mission, and what he said made sense. It also countered the "prevailing wisdom" of his medical colleagues and got him into considerable trouble over time. Despite those obstacles he persisted because he was committed to what he had to do.

We were so impressed with his integrity and his knowledge that, at one time, he was invited to teach on faculty at LACC. Amazingly, I suppose, he seriously considered it for the sake of what his professional life had become. It didn't come to pass because of other influences that were unforeseen and beyond any of our control.

When LACC was selected by the chiropractic colleges to administer a federal \$2 million research grant for research concerning the efficacy of manipulation, Paul was the only M.D. selected. Again, unforeseen circumstances cancelled it, but, again, chiropractors from all over the United States and Canada had a chance to meet Paul and test his integrity. He was trusted.

More than most, Paul has experienced and understands the strengths and weaknesses of chiropractic. In this book, he has dealt with all his professional colleagues: allopaths, osteopaths, chiropractors and physical therapists honestly, according to his experiences.

Till now, it is the sum of Paul's professional work. It is a statement of the essential ingredient that medicine must reconsider and replace into its primary thinking. If there is any book that will break the bonds of ignorance, fear and prejudice that have kept manipulation from being seen in the light, this is it. It is not cute. Its primary purpose is not to plead. As Paul Goodley is honest, so is this book. He tells it like it is because that may be the only way people will listen. And they must, or we will continue to suffer the wages of bad medicine.

Frank Schoenholtz, D.C.

Regent Emeritus
Los Angeles Chiropractic College
Whittier, California

Peter I. Edgelow, P.T., PhD

Dr. Goodley and I became friends when we first met, in 1972, while I was coordinating a one-month course in San Francisco by Geoffrey Maitland. Our paths have crossed many times since both professionally and personally. My involvement in the evolution of manual therapy in physical therapy for the past 32 years coincides with his efforts, in medicine, which he began in the early 60's. A difference is that physical therapists, in general, did not resist the flow of essential skills that are so intuitively logical to my profession whereas Paul largely encountered the massive resistance of his profession that was threatened and unwilling to listen that biomechanics, the foundation of virtually all physical examination, had not been part of the training of virtually any physician for over a hundred years. He persisted regardless because he knew he was right, and eventually events made clear to him that it was his destiny to be a maverick with a vital message. *Release From Pain* is the culmination of his professional lifetime of experiences in proving these methods.

In 1974, I became both founding secretary/treasurer of the International Federation of Manipulative Therapy, a special interest group within the World Confederation of Physical Therapy and a member of the Orthopaedic section of the American Physical Therapy Association. In 1979, I participated in the founding of the first one-year residency program in the U.S.A. for physical therapists in Manual Therapy at Kaiser-Permanente in Northern California. (My own manipulative skills came from my spending three months with Geoffrey Maitland in Australia in 1970.) I state the facts about myself to qualify my remarks concerning Dr. Goodley's efforts in *Release From Pain*.

I have observed Dr. Goodley in his clinical work and assisted him in his teaching, most specifically when he was the Consultant to the U.S. Veterans Administration in Orthopaedic Medicine when, for a few years, he trained the chief P.T.s of each hospital. I had the pleasure of

introducing him once as, “The best physical therapist I know.” And, as his friend, I am well aware of his decades of battle for the basics of medicine to be restored. I have seen his integrity hold against the stresses, so I am honored to write this Foreword from the perspective of a physical therapist.

Release From Pain represents the essence of what Dr. Goodley has learned and applied over his professional lifetime in his task of trying to understand and relieve pain syndromes early on. It is a fascinating voyage of discovery that you can travel with him and “live with” some very special patients, some of whose problems eluded the best medicine had to offer until they were subjected to what should have been done first as general procedure – understanding the patient’s history, seeking the responsible biomechanical expressions of their problems – and resolving them accordingly.

Dr. Goodley has integrated medical skill, manipulative skill and patient respect in this book. *Release From Pain* is replete with clinical examples that both illustrate the clinical reasoning he learned by persisting in his search for solutions to his patients needs, and which he illuminates with case studies to inspire the reader how positive outcomes may be achieved. (Four, maybe five, of his cases resulted in the discovery of new diagnoses – three of them in cases that had been failures at medical universities.) From this perspective, he authoritatively addresses chronic pain (long standing pain) and implicitly challenges what has been the status quo in Western medicine.

To those who are frustrated in pain, perhaps unnecessary pain – chronic pain – this book will bring hope and the peace that comes from knowing that you are not alone, crazy, malingering or faint of heart.

Recent research in the neurophysiology of chronic pain makes this book even more important and well timed. Dr. Lidbeck states in his abstract, “Recent investigations of dysfunctional pain processing in the central nervous system have contributed much knowledge about the

development of chronic musculoskeletal pain. Many chronic musculoskeletal pain syndromes – including regional myofascial pain syndromes, whiplash pain syndromes, work related neck-shoulder pain, certain types of chronic low back pain, fibromyalgia and others – may essentially be explained by abnormalities in central pain modulation.” When musculoskeletal injuries are treated early and effectively as described in *Release From Pain*, then this central pain modulation can be modified, even prevented. When patients have not been treated realistically according to the dictates of their injuries, and chronic pain has developed, Dr. Goodley illustrates how the restoration of function and tissue balance can still benefit and relieve pain. Under any circumstance, once the pain dynamic has become resident in the central nervous system, the expectation for full relief being provided must be markedly modified – all the reason for the main contention – the need for early accurate diagnosis and treatment.

David Butler, a physical therapist, has authored a textbook, *The Sensitive Nervous System*, and he and G.L. Moseley have written a book for patients entitled *Explain Pain*. The knowledge in these books helps both the patient and the therapist to understand pain from the perspective of the scientist. Dr. Goodley’s book - *Release From Pain* - comprehensively approaches such problems from practical perspective to present clinical tools to more effectively treat such patients plagued by unremitting pain from musculoskeletal injury and the neurovascular consequences of that injury. In this area of medicine, now, nothing is more important to patients than their own knowledge about their conditions from which they may no longer be passive recipients of therapy but can reasonably assess what is being done to them.

For those who are ready to hear, now listen. Each generation of healing professionals make contributions that allow us to do more for patients with chronic musculoskeletal and neurovascular pain. Dr. Goodley’s unique contribution arises from his having reintegrated his medical background with manipulative (and other) skills he learned from osteopaths, chiropractors and physical therapists from which he offers as his legacy this powerful expounding

of history, wisdom and commentary dedicated to understanding and treating patients with chronic pain.

Peter I. Edgelow, MAPT, PhD

Associate Clinical Professor UCSF/SFSU Graduate Program in Physical Therapy

Consultant, Department of Vascular Surgery, UCSF Medical Center

Recipient:

Royce P. Noland Award of Merit, California Chapter, APTA, 1988

Henry O. and Florence P. Kendall Practice Award, APTA, 1999

Peter I. Edgelow, P.T., PhD

PREFACE

“I swear eternal hostility over every form of tyranny over the minds of men.”

Thomas Jefferson

When Nebuchadnezzar, King of ancient Babylon, destroyed Jerusalem he called the elders of Israel before him to boast of his power. They responded that all he had done was grind fine flour. He was only the instrument of their punishment because they had neglected the fundamentals that had been entrusted to them.

That is an essence of medicine’s story today. The *Fundamental Flaw* began over a century ago and causes a *Pain Pandemic* wherever westernized medicine is practiced. It is medicine’s lost blunder. Its persistence during the time of medicine’s most remarkable technological advances in history only tends to make the Pandemic worse because technology further distracts us from the fundamental and cannot substitute for what it is not designed to do. Despite its marvels, attempting to insinuate instrumentation inappropriately only feeds a profound and pervasive confusion into pain treatment.

There is no substitute for a focused mind, observant eyes and trained hands to relieve the most common painful impairments.

This is the entire authoritative story of the Pandemic that is unimpeachably proven in the lives of real people: the history, the thinking, the methods, the potential results and reflections about how we may reverse the recent past and restore medicine’s essential foundation.

What we now call medicine began to coalesce in the prehistoric mists. Methods slowly evolved and only persisted if they helped often enough. One essential was the concept that the body is a structure

whose function can be influenced for worse or for better through the state of its mechanics. Eventually the word manipulation was used.

Manipulation connotes first the need to determine if *dysfunction* is present – and then refers to a procedure to restore balance. The same approach has within it the means to immediately evaluate its effects. The penalties for ignorance about such vital knowledge are profound.

If the function of a doorknob is denied, the essence of the door is denied as well, yet in principle that is precisely what traditionalism did - and still largely does. *That is the Fundamental Flaw.*

Despite that hands-on care of the body's biomechanics had been in medicine's tradition for millennia, medicine irrationally repudiated it during one of its lowest intellectual ebbs and unwittingly shattered and scattered its foundational principles among what became three competitive professions. As the schism established osteopathy, then chiropractic - whose approaches centralized around manipulation – medicine reflexively reacted antagonistically.

Logic died.

Despite the pleadings of some strong voices, no reevaluation was attempted. The passage of time only resulted in further festering of the wound at any mention of “manipulation” as the mantra repeated: “If we don't teach it, of what possible value could it be?” The answer had to be self-evident: “It couldn't be, it mustn't be valuable! It had to be below our standards. It had to be below our *science!*”

Eventually, while the schism's origin was lost like dark legend, the prejudice against manipulation propagated itself, and there was always some evidence to justify that attitude. There have always been charlatans.

So instead of the manipulative fundamentals dynamically developing as a cohesive, trustworthy guide within traditional medicine, it was discredited as the synonymous, derelict symbol of its most despised competitor - *chiropractic*. The battle was no longer about medicine or science. It was all about *power!* Future generations born into the hardening tradition of pervasive belligerence against anything manipulative were indoctrinated to unquestioningly accepted this verdict.

In recent years, while there have been isolated beginnings of change, nothing has visibly improved institutional understanding. And now we are confounded, as well, with managed care, and obamination “care” which have so often divorced themselves from wisdom that they provide no resource

to comprehend the long-range savings from sound, comprehensive, early-on, purely clinical hands-on care; no power structure exists that will likely spontaneously lead in correcting the Fundamental Flaw. So, the wheel goes round and round as the costs go up and up while traditionalism religiously insists on its doctrinal correctness. Most of you who required, and require, these methods for your relief become fodder in the pervasive war of the Pain Pandemic.

The conflict remains so near unimaginable that future historians may well describe the past century as a time of unnecessarily perpetuated pain.

Only recently have there been coalescing efforts for change. On November 11, 1999, in the journal *SPINE*, sixty-one international medical organizations announced the “The Bone and Joint Decade, 2000 – 2010, for Prevention and Treatment of Musculoskeletal Disorders”. Initially, the membership was dominantly surgical. In its evolution, medical specialties and both osteopathic and chiropractic organizations were represented. It is now 2013. A statement made long ago by The Menninger Foundation Clinic concerning another issue applies: “*The mountains labored and produced a mouse.*”

There have been many reactions to *Release From Pain*. A few doctors were enraged. An orthopedic surgeon of thirty-five years’ experience paled when he met me after reading it as he confessed that he had not realized he’d been a “barbarian” throughout his career and that he had to first barely survive his scorching from the Introduction before not being able to “put it down for the next 250 pages.” An editor, who prided himself on remaining uninvolved, commented that he had to wear asbestos gloves when he read it. Above all, people long disappointed because of their persisting pain despite numerous attempts to seek help have gratefully praised this book for its practical value in providing real answers and guidelines. They insisted that it must be published to spare others the anguish of being subjected to baseless procedures and unwarranted assaults on their character and mental state when “nothing was found,” and they didn’t improve. Their most poignant anguish is that no one believed them. Their most common insult is that they must be imagining their pains.

Declaring the extent of traditional ignorance about the commonest of pain conditions is not a new

revelation. The literature, even from the White House,¹ is sprinkled with commentaries concerning the failure of American medicine to teach fundamental biomechanics. The failure was laid directly on the medical schools. *That was in 1932!* Yet, nothing improved. In fact, the situation continued to deteriorate. *Editor's Notes* in The March 1999 issue of *The Physician and Sports Medicine*, by editor-in-chief Gordon O. Matheson, MD, PhD, reports "Roughly one quarter of visits to primary care physicians are for musculoskeletal problems, but typically less than 3% of the undergraduate medical school curriculum is spent on musculoskeletal medicine."

All this is only preamble. This story soon gets frighteningly more painful in very practical terms. For example, *News Briefs* had a caption, "Med School Graduates Weak in Musculoskeletal Knowledge." It refers to a recently published paper in an authoritative journal.² With the emphasis now that primary care physicians will be your major provider, the authors administered a validated musculoskeletal knowledge exam to 85 new residents at the University of Pennsylvania School of Medicine in Philadelphia. Seventy of the 85 failed." ***All the questions were culled from the knowledge that is traditionally taught! None of it had anything to do with the fundamentals this book describes!***

An example of the drought in care that this has produced appears as major captions in a pamphlet I received in the mail on August 4, 2000. The colorful front page is titled, *Treatment of Acute Back Pain – An Interdisciplinary Approach*. Six physicians are listed, including a primary care physician associated with a university program. As well, an emergency physician and a neurosurgeon, also university affiliated, are among those whose statements are emphasized in bright colored boxes.

The primary care physician stated, **"Mechanical or primary back pain has been a useful umbrella under which we place the poorly differentiated or poorly defined syndromes of patients who have no demonstrable pathology in the back nor any secondary gains that would cause them to magnify their symptoms."** (Italics mine) *Release From Pain* completely refutes much of this generalization.

Furthermore, the emergency physician contributed, **"Although common in the emergency**

¹ Wilbur, Ray Lyman: *Body Mechanics: Education and Practice*, White House Conference on Child Health and Protection, 1932.

² Freedman KB, Bernstein J: The adequacy of medical school education in musculoskeletal medicine. *J Bone Joint Surg (Am)* 1998;80 (10):1421-1427.

setting, mechanical back pain must be a *diagnosis of exclusion* because of the potential of underlying causes that may be life-threatening.” That statement is a classical non-sequitur. The first paragraphs of the first chapter of this book disprove that statement. Precisely diagnosing a benign condition up-front can abort the need to do anything else!

Finally, the neurosurgeon declared, **“It is important to perform the physical examination, neurologic examination, and appropriate tests to determine that the diagnosis is primary back pain. Only then can you initiate treatment.”** This statement is basically self-evident that the need for its utterance stuns. *No diagnoses can be made without appropriate tests!* Only because of the general tragic lack of *valuable* knowledge about the commonest of pain complaints would any professional feel compelled to make a declaration of such an embarrassing platitude as if it were a pearl of wisdom. This statement’s only merit is to declare the enormity of the confusion in the trenches caused by the medical profession’s never having been trained in even the ABC’s about how to approach primary back pain. **What was so readily published reveals the fruits from generations of teaching that demanded that manipulative thinking be deplored and ignored.**

Another hammer blow reality, published September 5, 2013

Work Habits of the 21st-Century Intern

Abigail Zuger, MD Reviewing Block L et al., *J Gen Intern Med* 2013 Aug 28:1042

A time-motion study showed that medical interns spent far more time with their computers than with their patients.

The limitations placed on house staff work hours during the past decade have required program directors to devise increasingly creative schedules and have raised intense interest in understanding exactly how house staff spend their workdays and nights. Baltimore researchers devised a time-motion study of internal medicine interns that was performed in January 2012. They used specially trained undergraduate observers to shadow a convenience sample of 29 interns in two Baltimore hospitals with different day/night coverage patterns; the observers recorded activities on hand-held devices during both day and night shifts.

Interns spent a mean 12% of their time in direct patient care (i.e., making rounds, talking to patients or family members, or doing procedures). They spent more than 60% of their time in indirect patient care (e.g., talking to other providers, reviewing charts, writing notes). Most of this indirect time (40% of the total) was spent on computers. Educational activities, such as conferences, occupied about 15% of the interns' time; walking around the hospital consumed about 5%; eating, sleeping, and socializing time was negligible ($\leq 2\%$). Mean time spent admitting a patient was 17 minutes (range, 4–54 minutes), and mean time spent daily with each admitted patient was 8 minutes (range, 0–40 minutes).

None of these catastrophes in current medical education change the fundamental rules for effective care!

For five decades, my patients' stories and their tissues taught me more about how I might help them than any other single source. Because it is a basic truth is that each of us is our own most authoritative text.

Release From Pain is obviously not the first book to address the merits of tissue-directed care, but others discussed them so deferentially that their message is lost in their fear of offending, or, heaven forbid, being considered **controversial**. From such authors, their books obscurely gather dust while the casualty list continues to increase as our world still largely has no idea that the battle is raging.

Release From Pain voices the anguish of the myriads afflicted and the legions of practitioners sent out too poorly equipped to aid them. Beneficial change will only begin from the first honest look. *Release From Pain* fulfills that obligation.

It challenges reality to assume that medicine in the United States is superior just because so many seek to emulate it.

(Written in 1992 but still largely relevant.) Why must you need to choose between three distinct professions with contradictory perspectives when you seek care for the most common pain problems? There are medical doctors (M.D.s), osteopathic doctors (D.O.s) and doctors of chiropractic (D.C.s). Each contends to influence according to often vastly different understandings. There is not even agreement among them on a basic vocabulary!

So, who is to be trusted to attempt to relieve your pains? What basic knowledge and skills does the practitioner you choose need to possess? Today, unless you are fundamentally aware about these issues, you are doomed to confusion.

Your goal must not only be pain relief but the correction of its cause(s) and, if possible, assurance that there is no residual "smoldering" that will likely eventually re-erupt as your condition silently degenerates towards chronicity.

Herein, I promise you dedicated guidance for you to be reasonably confident about your care. My primary purpose is to educate you to the fundamentals.

Whether you are in pain or involved in the healing arts, there is something in *Release From Pain* that you need to know. Will Rogers said it well, “We’re all ignorant. We’re just ignorant about different things.” But there are some issues none of us can afford to be ignorant about.

The dam is broke! Our world is inundated in a flood of unnecessary pain! The whole story must be told so the Pain Pandemic will end!

This is where the Preface ended until February 12, 2012 when it was announced that the United States Senate was addressing “Chronic Pain!”

“The US Senate confronted the growing epidemic of chronic pain in a landmark hearing³ held in Washington, DC, on February 14. According to the Institute of Medicine, pain is affecting 116 million Americans, at an annual cost of \$635 billion.

The hearing, called by the Committee on Health, Education, Labor and Pensions, explored disparities in research, education, and patient care. This is the same committee that backed the recent Institute of Medicine⁴ showing that the country has a long way to go to relieve this health problem.”

Two Senators are sponsoring the initiative which the article reports “affects 116 million Americans at an annual cost of \$635 billion.” It reported that “The American Academy of Pain Medicine participated in a public session that lead to the Institute of Medicine’s report and that The American Pain

³ [landmark hearing](#)

⁴ [Institute of Medicine report](#)

Society also backed the report.

The organizations stated above have been active for over thirty years! The “discovery” of the issue by the United States Senate, congressional politicians, looked on favorably by the medical organization mentioned is, frankly, appalling to me. I am obviously not demeaning the problem. I am commenting on my observation that that we are truly in a Kafkaesque Twilight Zone world concerning this issue.

Nowhere in medicine has there been any observable effort to resolve the fundamentals that impact on the entire pain problem. The issues I am committed to are not being attended, but now, as if manna from heaven, Congress is again involved! When,ever, did government, especially the U.S. government, ever accomplish anything cleanly and efficiently?

INTRODUCTION

"In the last analysis we see only what we have been taught to see. We eliminate and ignore everything that is not part of our precedent."

Dr. Jean Marie Charcot

Principia Primum! – (Fundamentals First!)

This story begins from a basic truth: a machine works better when its moving parts are aligned, balanced and operating smoothly. Function is impaired when they aren't. Your body works in much the same way. Its bones, joints and related tissues are fundamental structures of your function. Much of your pain and *dysfunction* are the equivalents of a machine's squeaks and rattles. The science concerning this is called *biomechanics*: mechanics related to living tissues.

Exploring a problem to its source is the best means to efficiently correct it. Otherwise, it may persist and commence a degenerative cascade with long-lasting and far-reaching adverse consequences. Diligence in following the source is also the best way to monitor whether therapy is succeeding. If the originating abnormality in the tissues can be effectively relieved, recurrence will be unlikely. *Any other approach is substitutive, relatively undirected, probably disadvantageous and possibly hazardous.*

The concept of *manipulation* implies the observation of a biomechanical pathologic process and then applying skillful force to restore normal relationships and appropriate motion. It is a pleasure when release from pain is dramatic, but it is not necessary. Residual pain may persist until soft tissue return to normalcy occurs. If resolution of pain and impairment hinges on restoring the alignment of the moving parts, then the logic of manipulation is obvious. And because your body is, in fact, a functional unity, there is much more involved, as well.

The Fundamental Flaw is the absence of manipulative reasoning from the first therapeutic encounter. Nothing compensates for this lack, and a flaw in the foundation adversely affects all that follows.

Manipulation is neither magic nor panacea. Considering the complexity of life processes, it is common sense that no single approach alone could universally make all things right (though it certainly may happen in appropriately selected cases). And even when manipulation is appropriate, it may fail. But the *reasoning* that attends it is virtually universally applicable, and when it can be thoughtfully applied, the possibilities for success, in my experience, are remarkably enhanced. All this is reasonable and achievable by clinicians who habitually think about such basics.

The Pain Pandemic exists because doctors, in general, do not.

My purpose in these pages is to leave no room for doubt, no place to hide.

I will describe to you how common examinations in traditional medicine are so self-defeating that many painful conditions become a morass of misunderstanding. None of this will be remote theory. You will learn this through the lives of real people. I will describe some manipulative procedures in detail so there will be no misunderstanding about them or for their efficacy to be questioned again.

Manipulation cannot accurately be described as the "cracking of joints." Thinking in such generics is crude and inadequate. I will show you how it is much more, and I will discuss other fundamental issues as well, the appropriate role of science, the inappropriate attempted substitution of adjuncts such as x-rays and the benefits of a number of associated therapies. I will not be concerned with "laying on of hands," or of miracles, or suggestibility, or placebo effects. They are all valid subjects for discussion, but not here.

If you one of those who is frustrated in pain, *Release From Pain* is for your understanding and application to your individual needs. It will empower you to make better decisions.

For physicians, I have infuriated several people by straddling - writing to both people in pain and professionals. However, when I tried to accommodate them, I castrated this book, which largely wrote itself once I set myself to the task.

Edith Piaf's theme song was *Je n'regrette rien*, I regret nothing. Regarding what *Release From Pain is*, it is appropriate here, as well.

Acknowledgments

Full many a gem of purest ray serene, the dark unfathomed caves of oceans bear.

*Thomas Gray*⁵

The first people responsible for the predominance of this story antedate recorded history. Time passed and, in different places, hands-on therapies took some form and, if they sometimes helped, were handed down through the millennia, sometimes remaining in a family for generations.

The spirits of all of them are in this book. I can only write this to you by ‘standing on the shoulders of giants’⁶ only a few of whom are known, but assuredly they were well known in their times and honored by their patients.

I most gratefully acknowledge every forbearer of the healing arts who carried these skills through virtually every culture and civilization until now where incredulously, they have been disputed in an age of assumed conquest through science. *Release From Pain* honors all practitioners who first studied their patient's problems through developed senses, who understood the immutable essential that careful observation and trained touch are irreplaceable elementary skills to essential care, and to every physician of my tradition who lays aside today's dictates to dispassionately examine this issue as an individual responsibility.

I am more grateful than I can express for the friendship and respect of Herman J. Flax, M.D. He has had that enviable life in medicine that Sir William Osler, considered the most influential physician of this century, personified: A life of quiet, dedicated, productive and caring service to humankind. That a man of Herman's stature would write a Foreword compliments me beyond measure. In it, Dr. Flax listed his voluminous credentials very reluctantly and only at my insistence. When I was later further honored by

⁵ Elegy Written in a Country Churchyard

⁶ My search for the origins of such an essential phrase went back to the 12th century, to John of Salisbury, then to Peter of Blois, who tried to emulate him. Ronald Reagan made similar reference in his First Inaugural Address in 1989. In truth, virtually every contribution to society is from the shoulders of the past.

the contributions of Dr. Frymann and Dr. Schoenholtz, each internationally renowned in their own professions, I did not make the same demand. There is no disparity between them in professionalism or modesty. The apparent imbalance is my doing.

Dr. Viola Frymann's name is on any authoritative list of the world's great osteopathic physicians. From her vast experience, when she expressed awe at the power of the accumulated cases I present herein (and several more have been added), she validated the uniqueness of this labor and the purpose of the seeming meandering path that has been my career. Her consent to join Dr. Flax is powerful evidence of how vitally important this message is.

Dr. Frank Schoenholtz and I met in a very special way. I was giving a lecture for the first time at Los Angeles Chiropractic College, LACC and was projecting a special slide when he opened the door for just a moment to take a fast look at the M.D. who was in the building. Very few instantly understand its significance, but he did. It bonded us, and he trusted me with his friendship, candor, honesty and integrity. By opening an inner chamber of chiropractic to me, I became wiser in these issues sooner, and this book reflects his trust.

I cannot sufficiently repay the osteopaths who primarily taught me. More than any others, I owe any skills I have with manipulative technique to them, especially to Loren (Bear) Rex, D.O.

After my teachers, I acknowledge with profound gratitude all who over the years trusted me to provide their care. They were my true textbooks because so often I was stumbling on uncharted territory and only through their forbearance could I finally come to answers that helped many of them as they educated me. Through some of them we made new discoveries from which they could be relieved.

I gratefully acknowledge the use of a small book I bought for \$3.00 the year before I started medical school, from which most of the longer quotes came: *The Quiet Art --- A Doctor's Anthology* compiled by Dr. Robert Cope, published E S Livingstone, Ltd., England, 1952.

I express my gratitude to Eiler H. Schiotz, M.D. who particularly contributed to my references regarding the history of manipulation: *Manipulation Past and Present*, William Heinemann Medical Books Ltd., London. Where other quotes were used, I referenced them in context.

I abjectly apologize for any oversight in not quoting a source that I might have discovered but didn't. A person's work must always be acknowledged.

I thank Jeffrey Wade Phillips, D.C. who, hopefully, is representative of a new breed of chiropractors who are anxious to work in accord with like minded medical colleagues. Unselfishly and without request he provided literature that enhanced this purpose.

I began writing this book in 1992. The amount of editing and rewriting throughout can only be appreciated by another author. Many have tried to influence it, and at times I acquiesced, but early on *Release From Pain* (by other titles) demanded a life of its own and eventually rejected influences that sought to disarm it.

Along the course, gifted editors assisted, and they have my ongoing gratitude. Doyle Henderson edited the first manuscript. His incisive comments about my assumptions continuously commanded my respect. Denise Grissom and Katriela Lent enthusiastically edited as the manuscript developed. Then, Pamela, my daughter, provided more valuable pages of commentary.

Jerry Gross, the "Book Doctor," then edited it. When I poured out why I wrote this, he told me his job was not to get emotionally involved so he could do his job properly, but it was he who later told me that he had to wear asbestos gloves when he read it.

If you who are experiencing unappreciated and undiagnosed pain had only one name, it could be Jane Presta. Jane was given a copy of the manuscript that I sent to my dear friend, Peter Edgelow, P.T.,PhD, who has witnessed much of this story as my friend, and who is among the most honored of physical therapists. My acknowledgment to Jane is to all for whom this book is ultimately written. Unsolicited, Jane sent me letters of encouragement to get this published. I am so sorry it has taken this long, but the stories of others, like Alberta's and Diane's would not have been in here then, and they are essential. Jane told me she found herself, her pains and her answers "all over the book." She sent me pages describing how the many physicians she had seen who were unable to help her for lack of knowledge I relate herein.

A few (long) years ago, I was introduced to Joseph C. Keating, Jr., Ph.D., when he was

Professor of Chiropractic History at Los Angeles College of Chiropractic. Joe befriended me and again went over this manuscript with his unique insight. He is the unquestioned authority on chiropractic history.

In the mid-nineties, Laurie Harper (Sebastian Literary Agency) tried to get this published, but it wasn't its time. In retrospect, my Visalia experience with some chiropractors, Diane Gate's story and others had not yet happened. I will always be grateful to her, especially because she introduced me to Nancy Ellis-Bell (LitWest Group) when she couldn't be available to continue with me. Nancy's immediate recognition of this book's importance was joyful, and I happily gave it into her hands, but it still was not its time.

John and Wendy Williams have been my friends for almost twenty years. When they owned the Redlands Print Shop, in Redlands, California, their assistance was invaluable in readying the early manuscripts. John and Wendy have also been my patients. They have experienced what I teach here. When Nancy Ellis needed a new Proposal, Wendy became my dedicated editor. Then she became your representative throughout this book. She challenged every phrase as I reread and reedited it, sometimes appalled at what I had thought was good writing five years before. I am forever grateful.

I will always owe a special debt to Lisa, my youngest daughter. Every little girl needs her Daddy, especially when she is just becoming a young woman. To finish my specialty training, I was compelled to leave the Los Angeles area. All of it has been part of the trial my life required, and in the end it was good, but along the way there was pain, and no one felt it more intensely and at such a critical stage of her development than Lisa. I was in Sacramento most of the time she needed me most. For the first six months, every mail delivered a letter from her. To cover her pain, she imagined that when I returned after the year we would saddle our horses and ride off, but that couldn't happen, and I will always carry that burden. Everyone whom I have been able to help since 1974 has Lisa to thank, as well.

Release From Pain is a tribute to a very special and beloved woman, my mother, whose ongoing prayers brought this book to fruition, who the Holy One, Blessed be His Name, took home before she

could see it published.

Again, for years, this is where my acknowledgment ended. In Israel, in 2012, a patient of mine referred Susie Grama, his mother, who was visiting from Monsey, New York because she was in unrelenting low back pain. She became more than a satisfactory patient. I was preparing *Release From Pain* for iPad, and somehow she saw it on my computer. Susie was a first grade teacher, and she is a writer. She told me that on her second visit, and I told her about this book. I opened it and asked her opinion. That was the beginning that didn't end until the last chapter. She intuitively entered the text and eagle eyed each comma, each phrase, the direction of each thought that I had long ago taken for granted was clear. She patiently, gently insistently worked with me to distill every one of my thoughts that wasn't precisely crystal. She is truly sent and honors this labor. I became grateful to exchange professional services with her as soon as I realized what a gem she is and we continued chapter by chapter after she returned to Monsey. Medically, Susie is doing well.

CHAPTER ONE

FIRST ISSUES: VALUE OF THE MANIPULATIVE

APPROACHES

AND PENALTIES OF IGNORANCE

In the country of the blind, the one-eyed man is king.

Michael Apostolius

“First decide the principle. Then decide what to do about it.”

Anon

- **The essential story. Lessons about chest pain**
- **Distinguishing cardiac from skeletal pain**
- **The manipulative process**
- **The first physician/patient encounter**
- **The time for advantageous technology**
- **The obligations of examination**
- **Penalties of inappropriate examinations**
- **Beginnings of chronic pain**
- **The medical ideal**
- **The Pain Pandemic and its internationality**
- **The responsibility of orthopedic surgery**
- **The need to rethink the problem**

She was a frail, elderly, little lady in severe pain. Her near-frantic children towered closely over her, gaunt ebony saplings arched anxiously high over her like a tremulous cathedral. Near-reverently, they were struggling to support and protect her as they slowly shuffled into the emergency room of the *University of Southern California/Los Angeles County Medical Center*, one of the busiest in the world. She could only take a few short wracked steps

before she froze with a tremor as their frustrated hands trembled to relieve her while sensing that their grasping was aggravating their mama's agonizing spasms.

That night, I was standing the late night watch as Chief Admitting Physician, and I watched them as they came through the door. The stark poignancy of it struck me as they slowly inched towards the admitting desk and were immediately directed to the closest examination cubicle. Standing at the curtain, I heard "heart" mentioned because the pain was in her left anterior chest, but I had observed that her jolts were synchronized to her breathing and to the touching about her rib cage. The tired "moonlighting" resident commenced the usual chest pain work-up as I took one of her children aside.

"Please tell me exactly what your mother was doing when the pain started."

"She was just sitting on the couch, watching TV"

"Is the couch firm, or is it soft?"

"Soft."

"How long had she been sitting?"

"For a long time."

"Exactly what was she doing as the pain started?"

He paused. *"She was turning around to reach for something."*

"I moved close behind her and ran my fingers gently down her upper back.

"Please," I said softly, "lean back against me."

Carefully crossing her arms over her chest, I cupped her elbows into my hand and drew her closer. "Please, just relax completely against me - just open your mouth and lie back and trust me."

I lifted gently, paused and waited, then eased my chest against her mid-spine. There was a barely perceptible release, and it was all over. Immediately, she took a long, deep pain-free breath, then turned slowly and easily to look up into her closest son's anguished face.

"It doesn't hurt any more," she said softly.

In the first minutes of an initial examination, as a safe therapeutic trial, an intensely painful injury was instantly relieved, totally confounding the traditional expectation. It was accomplished with a well-founded suspicion, a focused observation, a directed history and a manipulative maneuver. Not a single laboratory test had been done – not an x-ray or electrocardiogram or blood panel. Virtually all medical expenses had been avoided. No prescriptions were written. And her loved ones were spared the relentless uncertainty that regularly disrupts the lives of so many under such circumstances. In her case, there were no weeks lost, no repeated series of puzzling negative tests while the process possibly persisted and insinuated itself towards chronicity.

What had happened to her? What had I done?

After sitting for a long time on the soft sofa, her vertebral column had developed a focal impairment of its normally coordinate flexibility. Then, the usual glide and slide had "jammed" as she twisted. The spinal reflexes act literally. Any perceived threat to its vital contents instantly results in whatever it takes to prevent any further movement. The ribs can lock in the "jam," so trying to take a full breath can be agonizing, as well.

Lifting her had eased the tension in the vertebral column. Then, the pressure asserted through my chest into the *dysfunction* had manipulated it free. It is all in the timing. Performing it so soon after the injury had prevented the secondary changes of tissue congestion, nerve irritation and major spasm. *Furthermore, if it hadn't worked, from that particular manipulative procedure, nothing would have been lost.*

I left the cubicle and was behind a partition reviewing a chart when one of the daughters approached the resident who happened to be standing on the other side. In an awed voice, she asked, "*What kind of doctor is he - that all he did was put his hands on my mother...and the pain was gone?*" Why should what I had done be so out of the ordinary? (*And why didn't the resident ever ask me about it?*)

Touch is the most fundamental, the most primitive of the senses. Yet traditionalism's denial of its value in applied biomechanics – the essence of manipulative principles - is among the most costly tragedies in Westernized medical history. While the manipulative therapies are essential to competent and efficient care, allopathic doctors (M.D.s) have been denied virtually all education about them for more than a century despite their being at least as essential as a stethoscope.

The Locked-In Syndrome

Could there possibly be a worse nightmare than instantaneous, total, permanent paralysis with all other functions fully preserved? Except for being able to grunt, move one's eyes and wrinkle one's forehead, all other voluntary movements are irretrievably lost; yet full consciousness and sensibility remain intact in unimaginable frustration and helplessness for the remainder of a normal life expectancy. It is called *The Locked -In Syndrome*. It occurs because of a unique anatomic circumstance: there is a minuscule site high in the spinal cord where almost all nerve tracts that transmit the commands for voluntary motion are confluent: they exit from the two sides of the brain and merge and cross to innervate the opposite sides of the body. When a blood clot precisely obstructs the circulation of that remarkably tiny territory of only a few millimeters, it inflicts such total and irrevocable loss.

I was involved for only one afternoon with such a patient when I was requested to examine him during a special court hearing at the world famous Rancho Los Amigos Hospital, in Downey, California. He was a man in his mid-thirties. He had been at work swinging a sledgehammer when he suddenly experienced sharp pain in his upper back radiating into his left anterior chest. Just a glance at his chart revealed all the elements of a probable musculoskeletal

injury, however his doctor didn't pursue it, and there is no charitable explanation for why he promptly scheduled a diagnostic cardiac catheterization. The doctor wasn't skilled in the procedure, and as he fumbled with the catheter for over an hour, a blood clot formed in the man's heart, entered his circulation and did its devastation.

I was asked to examine the patient primarily because of the insurance company's untenable position that a conscious being could not exist in such a condition, from which they contended that their liability was limited. It was a court proceeding. A large group, including the jury and representatives of the involved companies, stood at the foot of the bed.

Just my asking him to blink his eyes a specific number of times easily contradicted the insurance company's contention. I asked him to subtract one seven-digit number from another, and, as I enunciated them, his eyes widened in horror until he realized they were actually only four digits apart, and, with a series of rough grunts, his pitiable equivalent of a laugh, he blinked four times correctly, and the show was over. The remainder of my examination was only for completeness.

In the end, the patient most needed *acknowledgment*. I gave him what I could by dictating my report at his bedside to, at least, let him know that his torment was understood, as his wrenching sobs tragically communicated his appreciation. His case was promptly settled, and he was provided with lifetime assistance.

EPILOGUE

Some twenty years later, in the early cool of a California August evening, I was walking across my daughter's back lawn to the Jacuzzi. As I lay there relaxing in the wonder of what hot water does, however such things happen, in my imaginings I was in Downey again, and I began to reminisce about him and what I might otherwise have dictated:

'By the cruelest of fates, this man was permanently and terribly victimized by the purposeful propagation of ignorance and the cavalier misuse of technology. It was then intended that

his condition be maliciously misrepresented within the system that was supposed to protect him.

The clot that so terribly damaged him didn't need to be of any size at all as one ordinarily thinks of things, but it was sufficient to fully enforce its fateful reality.

This is an otherwise normal man, with normal desires and needs, who will continue to experience them increasingly for their failure to be satisfied in any normal way until some time, prayerfully, when a Higher Grace may relieve him of want of them in some measure.

He will always be totally dependent on others to meet even his most basic needs, and he will have to struggle to receive even a small measure of satisfactions others so naturally take for granted.

For the remainder of his time, which should be a normal span by any normal measures, his primal challenge will be somehow to preserve his sense of purpose of self. And that is how he will spend his life until he dies.'

He will never even be able to sit up, or get out of a bed, or walk to a window, or take anyone into his arms, or talk, or move even a finger. He will have to endure every minute totally helpless for the remainder of his life.

This tragedy would less likely have happened if traditional medical training taught that any joint can dysfunction from a sudden disadvantageous, uncoordinated movement.

Pain from the structures of the body frame - the muscles, joints, ligaments, fascia and associated tissues – is different from pain originating in internal organs like the heart. Pain

from dysfunction is not likely to be vague and oppressive. It is sharper and is altered by movement. Cardiac pain is not!

Gently rotating the torso left or right usually instantly increases dysfunctional vertebral pain, from which the pain may radiate along the course of a nerve to the anterior chest. Deep breathing can do the same as the ribs are increasingly engaged. Cardiac symptoms are not influenced by such challenges. Localized vertebral tenderness in the midline chest area occurs with both conditions.

Those simple tests and a few which examine *segmental movements* easily reveal such dysfunctions. All practitioners involved in chest pain - which is virtually everyone - need to be at least familiar with the possibility of such occurrences. Most are not. So, too many people with precordial (anterior chest) pain are quickly suspected of having cardiac disease, which traditional medicine *is* quite comfortable to investigate.

Over the years, I have instantly relieved fifteen patients - cured their "heart attacks" after they had been hospitalized in intensive care units for as long as five days. During that time, many studies, electrocardiograms and other "grams," serial blood tests and others, had been repeatedly performed while patients and their families were unnecessarily subjected to the anguish of uncertainty. Each episode was the result of a *thoracic dysfunction*. Each was relieved with a single manipulative procedure after an on-the-spot diagnosis was made exactly as I have described. In each, the distinction between musculoskeletal pain and cardiac pain was clear. *And, once more, if the manipulative attempt had been unrewarding, nothing would have been lost!* As I have implied, performed skillfully, this particular manipulative procedure is virtually risk free, *although, **it must be remembered, that any treatment that is sufficiently potent to cure may also afflict.** No manipulative procedure should ever be used casually.*

I once received a surprise visit from a college acquaintance. He was about to be admitted to St. Vincent's Medical Center across the street from my institute because he had been experiencing pain in his high abdomen each time he swallowed. The likely diagnosis is called

cardiospasm (referring to the esophageal sphincter into the stomach, not the heart). It had been persisting for weeks.

As he visited, without really a conscious intent, my fingers moved along his mid thoracic and discovered an area of unsuspected mid-thoracic tenderness and spasm. Surprised, he asked me what I could do about it. I manipulated it, and incredulously to him - and a delight to me - his symptoms completely disappeared in less time than it took to write this. Once again, if it hadn't worked, nothing would have been lost.

Throughout their training, medical students are constantly reminded of Hippocrates' first principle: *Primum non nocere* (Above all, do no harm.) *The manipulative principle asserts the other hand*: sometimes, it is the *not* doing that is harmful – a result of the manipulative procedures being selectively excluded from the medical methodology. Of the higher order to “do no harm” is the implicit obligation to *relieve*, if there is a way. In these cases, there is. Enforced ignorance about them does not carry absolution with it. Any persistence of pain is iatrogenic,⁷ regardless the absence of application of any therapy.

The body's moving parts resemble machinery. Whatever else is the marvel of the living body, it is also coordinate mass of mechanisms. The joints are levers; the muscles are motors. When function is impaired, often the body responds with pain, which is among the commonest of life's complaints.

As manipulation seeks to realign dysfunctional structures, it simultaneously tends to accomplish considerably more because the procedure intrinsically influences numbers of other activities through the body that are predominantly mediated through nerves. There is hardly a discipline in medicine that may not, in some way, be more effective with the knowledgeable application of manipulation.

Again, joint dysfunction implies mechanical impairment. Something interferes with articular relationship and movement that may be relieved by methods similar to those used by a

⁷ Medically caused.

carpenter, machinist, or more apropos, perhaps a watchmaker. Craftsmen know their materials and approach their tasks without preconceptions or assumptions. Ideally, particular interests and attitudes do not fetter their thinking. They accept without emotional interference that what is – *is*.

If a door can't be closed, first logic expects that it be tested to learn if it, or the frame, is warped, or if a hinge is stuck. If machinery malfunctions, it is first observed overall, e.g., are the fuses blown? Then the tests proceed through its particular parts in order, e.g., are the belts adjusted? Is the wiring intact? *Principia Primum!* (Fundamentals First!).

Eyes, hands, and basic skills explore essentials and decide what might be done to relieve the problem. The principles of fundamental investigation are immutable, and physicians need similar mental tools and skills. The examination table is the physician's workbench, the place for fundamental inquiry from which may eventually arise the need for technological assistance to answer reasoned questions.

Appropriately applying technology needs to imply its usefulness to the task at hand, but the reality is, sadly, another face of the Fundamental Flaw tragedy. Too often, the instrument, inherently remote, is not even designed to reveal what it is *hoped* that it will. At such times, data can be worse than irrelevant because it seems to give objective substance to the self-deception. When technology does not demonstrate an abnormality, it can too easily encourage the conclusion that nothing is wrong. On the other hand, "seeing something" too easily satisfies the illusion that the technology is applicable and that a real examination has, after all, been done. While it is true of halitosis, bad breath, is better than none, that does not apply to bad data. Praying to technology is only another form of idolatry.

The *Fundamental Flaw* is clearly revealed in the traditional medical examination for

almost any ache or pain because it ignores exploring the segmental *biomechanics* that may fully reveal the cause of the complaint. But here is where technology is too readily thrown into the gap as a – consciously realized, or not - desperate attempt to compensate for imposed ignorance: the *Fundamental Flaw*. So, x-rays will almost certainly be taken, *often initially, even before any clinical examination*.

While the traditional examination favors a search for serious pathology - threat to life, limb, neurological injury, or for a specific disease, like some form of arthritis or cancer - when such conditions are not found, the examination more likely sputters *despite the physician's obligation to study what is there - and with the same commitment!* But the expectation cannot be honored because allopaths in general do not have the necessary tools. But patients have learned to expect to receive *something*, and the doctor's self-respect has its incessant demands. A pill and/or some therapy may be prescribed. (And it is so expedient to write a prescription.) Possibly an injection into a part will be administered, but even then its effectiveness will likely depend on its accuracy of placement, which largely depends on the knowledge intimately expressed through the hands-on skills. And what was injected? Why? How much? How often? All depend on realistically appreciating what is being treated.

In this battle to protect one's sense of professionalism, as you will eventually see, a doctor's defensive mental gymnastics can become an overwhelming force. In finality, since the potentially effective examination cannot be performed, the possibilities for the patient's receiving relief is greatly impaired. *That is the proverbial bottom line of The Fundamental Flaw*.

Patients do not positively participate in the rituals of professional self-preservation. There are no compensations for the unfortunates. The penalties accrue regardless of good intentions when care is rendered without attending fundamental foundations. *With the incomplete examination, a condition may hide and persist and slip imperceptibly into a chronic state without raising even a suspicion that the culprit may well have been apprehended at the*

first encounter. However unwittingly, the doctor was an accomplice to the crime.

Besides the patients who are being ill-served by the medical profession, the pain of the *Fundamental Flaw* tragedy regularly visits the honest physicians who learn that the hands-on essentials eluded their training. Other practitioners become angrily defensive and vent their frustration in all sorts of ways, including vociferous conviction that the way things are is the way they're supposed to be.

The heralds - the osteopaths - are now mostly so busy emulating allopathy - dissimulating the wealth of their heritage - that they disproportionately curtail attention to these vital issues. They should know better, but succumbing to the "power" is the easier path, and too many of them just want to survive somehow.

And, of course, the additional difficulties that managed care is inflicting can be used as another excuse for the inaction of the medical profession, especially now with obamination "care."

Medicine is supposed to protect what is priceless: human life. It is supposed to cherish and advance each individual's potential. It is supposed to represent the highest aspirations of civilization. But we doctors were not careful with that with which we were entrusted. We are no longer honored as we once were. ***Our loss of knowledgeable hands-on care is one of the reasons.***

Ultimately, the meeting of doctor and patient is one-on-one. Each encounter is an opportunity to preserve life and/or improve its quality. Success happens or fails only in that relationship.

I founded The American Association of Orthopaedic Medicine⁸ in 1980. On October 17, 1982, a small group convened in Dallas, Texas to formalize it. As I entered the hotel, *Peanuts* was looking up at me from the Sunday comics in the hotel lobby.

Linus is looking off into the distance and sees Snoopy jogging towards him.

⁸ See Appendix

“Hi, I thought maybe that was you. I’ve been watching you from way off. You’re looking great.”

Snoopy reflects, “That’s nice to know. *The secret of life is to look good at a distance.*”

Attempting to look good at a distance is the essence of medicine’s blunder. Failure to move in close is the cause of the Pain Pandemic. And it is fed by the predisposition for the sensationalistic at the loss of refining the common, that is good.

While in high school, I worked weekends at Beverly Park, a children’s amusement park in West Los Angeles where Beverly Center now stands. I often loaded and unloaded kids into the Toonerville Trolley next to the merry-go-round. It became so routine that there were times I would see it going around the track while having no recollection when I had loaded it up and started it. There were many afternoons when I would suddenly realize that it had been hours since I had heard the calliope although it had been blasting in my ears all the while. The mind can do the same thing when virtually any reality becomes constant. That is what has happened to all the suffering because of the Fundamental Flaw. The pain is there regardless. We just have to hear the screams again.

Orthopedic Surgery and the Pain Pandemic

In 1992, I was an invited lecturer at The XI World Congress of the International Federation of Physical Medicine and Rehabilitation, in Dresden, Germany. That is where I met Dr. Tomio Yamamoto.

My German colleagues had made the evening banquet sound so casual that I had taken a leisurely stroll from my hotel and arrived in what I thought was good time. To my consternation, the ballroom was packed with hundreds of people dancing who had long settled

at their tables. As I stood there very alone, the flow opened for a moment on the crowded dance floor, and I saw what might be one vacant seat at a table on the far wall. Hopefully, I worked my way to it. To one side of the seat were a few Thai physicians whom I had already met. We greeted each other, and they said that no one in their party was occupying the seat. The distinguished Japanese gentleman on the other side said the same. I gratefully sat down and we began to converse. We exchanged cards. Dr. Yamamoto was Chief of Orthopedic Surgery at Osaka Koseinenkin Hospital, Osaka, Japan.

He told me he really hadn't the foggiest idea why he had traveled so far to come to the meeting. We talked orthopedics, of course, and in a short while he stunned me with one of the most extraordinarily candid and courageous statements I have ever heard. That distinguished orthopedic surgeon, his *bushido* - the distinct Japanese sense of honor – obviously operating deep within him paused and gazed off reflectively, and then, quite slowly and deliberately, he said, "*You have spoken to me about three joints...and I don't know anything about them.*"

I cannot think of an equivalence to emphasize the power of his insight, his integrity and the reality he expressed. Of course, his statement was relative. The joint conditions he was referring to were those I had described but that he had never been exposed to in his *surgical* training. From an orthopaedic⁹ medical perspective, they are common impairments. And most of orthopedics is, in fact, *medical*. He had never realized that his training had so seriously skewed his perspective.

For this very special physician to make such an admission to someone like me, who is not an orthopedic surgeon, in a conversation focused on *joints* - his area of expertise – is testimony to the incalculable incomprehensibility in which the Pain Pandemic exists.

Dr. Yamamoto hit a primary chord. We had traveled approximately equidistantly to Dresden to sit together. From so far to so near, we opened long-ignored doors to begin to resolve the Pandemic by his admission how deeply his specialty is implicated in the

⁹Throughout I will use two spellings for one word: When I am making a distinction, "orthopedic" refers to the orthopedic *surgical* perspective. "Orthopaedic" refers to the medical.

Fundamental Flaw because it filters virtually everything through its *surgical* perspective.

Orthopedic *surgery* dominates all orthopedics for a number of reasons that I will describe later in depth. But because society long ago accepted the surgically-minded version of what is in reality *medical* treatment, and because ignorance about the manipulative arts is general, and because a *medical* specialty does not (yet) exist that effectively balances orthopedic surgery's dominating influence, the limited surgical perspective has prevailed overall.

Orthopedic surgery became imbued with extraordinary privilege and authority that it accepted - *and with it, desired or not, commensurate responsibility for all that followed.* Hopefully, it will now reflect on its participation in 'the law of unanticipated consequences' and assert its influence for the necessary changes.

It seems unthinkable today that medicine is obligated to reconsider the adequacy of its accepted principles of the orthopedic examination - to audit what is so fully taken for granted - to commence from scratch with what engineering calls "systems analysis." *But such an investigation is essential!* The traditional orthopedic examination today begins far beyond where the essential clues first appear. By doing so, orthopedics essentially denies that the signs exist - and with no perception at all that the orderly sequence has been lost. That is the Fundamental Flaw.

Hippocrates wrote, "*The physician's job is to cure. How he does it matters not a wit.*" This implies that, above all, physicians *care* for their patients. While most do, it is that caring that must be acknowledged in action now.

CHAPTER TWO

OZZIE'S NECK

The most inestimable merit is a complete appreciation of the usual.

Henry James

- **The beginning of the mission**

Ozzie was a longshoreman supervisor. The splinter that stuck under his thumbnail wasn't ordinary. Dunnage is the lumber that lies around on wharves to support the loads of ships from around the world. All sorts of contamination accumulate on it, and the splinter went down to the bone. I had removed the nail, cleansed the tissues extensively, and asked him to return the next day because of the potential for serious infection.

Ozzie was on his way back to my office when his car was rear-ended by an Army captain racing back to his base at seventy-miles-an-hour. The crash was so violent, Ozzie's seat was broken, and he was thrown into the rear of his vehicle. He arrived at my office by ambulance, and I sent him straight to the hospital.

There was no gross neurologic deficit, fracture or head injury, but Ozzie's neck was virtually locked with his head thrust forward. The pain was intense and constant and became excruciating from any attempt to move his neck. As the spasm receded, I palpated an obvious and persistent exquisitely tender "walnut" size mass high on the left side of the back of his neck just under the skin. I put him into the traditional Sayre Sling-type cervical traction¹⁰, ice packs, narcotics - the traditional care. Ozzie's injury happened during the first few years of my general practice. I called in an orthopedic surgical consultant.

¹⁰ Much more on this later.

After nine days, his pain barely less, Ozzie insisted on being discharged so he could return to work. I begged him not to, and within hours he was back in the hospital, gray and on the edge of shock. Two more weeks in the hospital barely provided further relief.

The orthopedic surgeon pontificated that "since all soft tissue heals within two weeks, any complaint thereafter must be imaginary or faking." That one ignorant, arrogant sentence totally destroyed Ozzie's legitimate lawsuit. I would hear those words repeated too often over the years. Amazingly, the orthopedic surgeon didn't have the slightest idea what I was talking about when I asked him about the "walnut," and no one else I referred him to did either, yet it never changed. How can someone normal not palpate a walnut just under the skin?

Later, he told Ozzie that if he still "thought he felt pain," he could hang his head in traction at home. So trusting Ozzie suffered sitting up and shivering through many sleepless nights during that unseasonably cold winter.

Shortly after Ozzie's accident, I received an announcement for a twenty-hour course in basic joint manipulation in half-day sessions for a week at a Los Angeles area hospital. Manipulation was ridiculed in medical school, but my former brother-in-law had attended osteopathic school after repeatedly being rejected for admittance to medical school so I'd heard the word ad nauseum. Some of my patients had told me they'd been helped by it, and by then I knew that something basic was missing in my teaching.

I tried the little I'd learned on Ozzie, but he couldn't stand any motion at all. I tried everything I could think of. It was 1962, and a drug called Tubadil® was available. It contained curare, derived from an African hunting potion, the most potent muscle paralyzer known. It was mixed with peanut oil so it could be injected intra-muscularly. Each dose had to be meticulously measured and only increased by 0.1 cc, about 2 drops, from the previous dose while the critical response was watched for: at about 0.4 cc, the eye muscles started to become paralyzed and the eyes would wander. The next increase would paralyze the diaphragm and terminate breathing. Even when Ozzie was administered a maximal dose supplemented with

morphine, any attempt to mobilize his neck was instantly agonizing. Nothing I tried helped except when I purchased a *Neuro-Orthion* traction table that clamps both the head and feet and immobilizes the whole body. It was the only way Ozzie could get some sleep.

Nine months after his injury, Ozzie attempted to return to work although I protested again. On his second day back, he was standing on a ship's deck guiding the winch, and, as he began to look up to direct the hook through a hatch, he blacked out. Ozzie started to fall into the hold toward the steel deck thirty feet below. Another stevedore barely caught him by his sheepskin coat and saved his life. After that he didn't return to work.

Ozzie's case was reviewed by Neuro-Radiology at UCLA because it was suggested he had possibly sustained a small fracture which had been missed. The suspicion was that a bone callous might be compressing his vertebral artery which travels through the vertebrae into the back of the brain, so when he had looked up, he might have crimped it, but none was discovered.

For fifteen months I watched helplessly as Ozzie lost about forty of his once vigorous one hundred seventy pounds. Then, one day he came to my office just to talk. He sat with Loretta, his wife, at his side. Always respectful and quiet despite his pain, he looked at me with an additional sadness in his now gaunt and haggard face. He was near exhausted, and this gentle man of strong Christian faith paused a little longer before he spoke, so I sensed all the more the gravity of what he was about to tell me.

"Doctor, Loretta and I are here to thank you for all you've tried to do for me. You were always there, and we're grateful. We've talked it over. I've decided. I just can't take any more of this pain. If there's nothing else to do, I've come to say good-bye before I take my life." Loretta's eyes hadn't blinked. Ozzie had done all that I'd asked and allowed all I'd offered. I looked at him knowing how truthful he was, and my gut tightened as I sat back in my chair and knew that I had no choice.

"Ozzie", I said finally, "there is only one thing I can think of that I haven't tried." The doctor who had taught the manipulation course had told me a story of a woman who had been disabled with headaches. There had been no injury. He hadn't found anything on examination, no restriction, no signs of localized changes of any sort, but on an unexplainable impulse, he had offered to manipulate her neck under general anesthetic. He claimed that she had accepted, and for reasons unknown she was relieved. It had happened in England.

There was little similarity. Ozzie's neck was virtually stuck. Under any circumstance, manipulating a neck under anesthesia when all protective reflexes are obtunded bears a considerable burden of jeopardy, but, additionally, with Ozzie, the exact nature of the pathology was not known. Any movement beyond established but undetermined boundaries could easily totally paralyze or kill him.

I had been manipulating for about a year. I'd had some dramatic successes that had astounded me even from the most rudimentary procedures that I had learned, but I had never done anything remotely like what I now contemplated; and there wasn't a hospital in the United States that would allow me to do such a procedure. I had never administered a general anesthetic. I offered it and told them the fullness of the risks. I would have to do it in my office, and, if they accepted, I insisted on one stipulation: Loretta had to be in the room. Whatever happened, she had to witness it. They looked at each other and Ozzie nodded to me.

For three days I studied, prepared, and prayed. That morning, everything was surreal. I couldn't speak. I looked at my family and knew I was about to jeopardize their livelihood, my license and my freedom, but I couldn't allow myself to think about it.

I walked out the front of our home and across the lawn into the front door of my office. Ozzie and Loretta were sitting there waiting, seemingly calm, and, without a word, we entered the small room where I'd set out all the medicines and emergency equipment the night before.

Ozzie lay on the examining table along one wall. Loretta sat against the opposite wall only a few feet to his side. I started an intravenous drip, and when he said he was ready, I

slowly injected Brevitol®, an ultra-short acting anesthetic into the tubing. As Ozzie sighed and his chin slumped, I softly placed my hands onto the back of his limp neck, and for the first time since the injury the walnut of segmental spasm wasn't there. Ever so slowly, I began to rotate his neck, first to one side then the other, tucking his chin toward the curvature above his clavicles (collarbones). Surprisingly, after all that time, there was almost no resistance from scarring that I anticipated as the room was immediately filled with the loudest machine gun staccato of popping noises I've ever heard, even till now. Then I gently applied a series of transverse sheer forces at each vertebral level, as the POW! POW! POP! persisted.

Except for her widening eyes, Loretta sat pale and absolutely motionless.

"What's happening?"

"I don't know."

When apparently everything in Ozzie's neck had moved and there was quiet, I began to sag under the dread heaviness of every passing second.

Ozzie's eyelids finally fluttered.

"When are you going to do it?" he whispered.

"It's already done."

"Ozzie. Can you move your toes?"

"Ozzie, can you move your fingers?"

"Ozzie, can you sit up?"

"Ozzie, can you move your neck?"

Sitting and facing Loretta, Ozzie moved his neck painlessly through the full range of motion. Loretta sagged for a moment, and then she came to us where I was already holding Ozzie, my eyes wet, my gratitude limitless. We stood there for a long time our faces together and arms around each other, all tears flowing freely as we praised and thanked the Almighty.

I looked up and raised my arms and thanked Him again as I vowed that I knew He had put my feet on a path that I promised I would never deviate from. And I never have.

Ozzie's neck began to tighten again a week later. There had to have been some contractures after so long. I more confidently repeated the procedure, and Ozzie obtained complete and permanent relief. He promptly returned to unrestricted work for six months when he had a mild heart attack and retired.

I examined Ozzie annually for ten years, when I again x-rayed his neck. We remained in contact through the fifteenth year. Never again did he experience neck restriction, or pain, or headache.

I treasure a letter postmarked September 30, 1976

"Dear Dr. and Mrs. Goodley,

Enclosed is a clipping from Long Beach. If we had known about the party I am sure you know that your names would have been on top of the Guest List. We had a very wonderful day. Our one Granddaughter by marriage said that if Dr. Goodley had walked through the door she would have kissed your feet. Her dad was one of your patients in Wilmington a Mr. Smith and you really helped him and put him back on his feet. He is now in Hawaii in a Travel business. Ozzie is still doing fine.

As ever,

Ozzie and Loretta Hanson

The clipping, dated one day previously, reported their fiftieth wedding anniversary to which more than 150 friends and relatives had attended.

In the following few years, I repeated the procedure over a dozen times studying its applications. Half the patients were markedly improved. There were no complications.

CHAPTER THREE

HOW “TYPICAL” DOCTORS EXAMINE. THE PRICE YOU PAY

What Makes a Great Physician?

I would answer that he is a great physician who, above other men, understands diagnosis. It is not he who promises to cure all maladies, who has a remedy ready for every symptom, or one remedy for all symptoms; who boasts that success never fails him, when his daily history gives the lie to such assertion. It is rather he, who, with just discrimination, looks at a case in all its difficulties; who to habits of correct reasoning, adds the acquirements obtained from study and observation; who is trustworthy in common things for his common sense, and in professional things for his judgment, learning and experience; who forms his opinion positive or approximative, according to the evidence; who looks at the necessary results of inevitable causes; who promptly does what man may do of good, and carefully avoids what he may do of evil.

*Dr. Jacob Bigelow
Nature in Disease, 1852*

- **The origins of trust in your doctor**
- **Who the doctors are**
- **The significance of symptoms and signs**
- **The usual allopathic examination – the essence of the problem**
 - **its possible costs to you**
- **The problems with x-rays**
- **The misuse of psychological tests for pain**
- **How you can begin to resolve the Pain Pandemic**

In high academia, the definition of pain fills a long paragraph, but pain is its own definition. Pain is what hurts. Its essential purpose is to preserve well being, life itself, by warning that something is wrong. If we cannot feel pain, we perish.¹¹ Pain is what drives most people to seek help, and, in a reasonable world, they would readily understand which practitioner might best provide it. My main purpose is to help you resolve that question. Today, the market place is in disarray, and you need to be reasonably perceptive.

¹¹ It is called the *Riley-Day Syndrome*.

Please do not misconstrue my intent. An authentic doctor-patient relationship is priceless and must be preserved. The doctor you trust from experience is your best counselor. I have often been told that I must make a choice: direct this book primarily to you - the patient - or to the members of the healing professions, my M.D. colleagues particularly. For good reason, I resisted and am striving for both, because the failure of knowledge is pervasive. Still, to be consistent to my purpose, I'm writing this first for you because you most need it. You are medicine's purpose. My primary obligation is to you. Only from overwhelming social awareness will reform be driven.¹²

As vitally important, believing in the person you trust for your care can become a near-religiously intense dedication that may not be fruitful. When you are in need, you are vulnerable and exploitable. Stories of ineffectively treated sufferers returning indefinitely for the same repetitively unsuccessful ritual (called treatment) are legion.

While most professionals try to do their best, the dilemma is still compounded by the contradictory methods their different training produces and imposes on their thinking. Though they are licensed professionals, they are historically antagonistic to each other, and in the best of circumstances, with good people involved, I have seen blind ritualism prevail over common sense because doctors are only human. It seems a paradox that people allegedly dedicated to healing could be so hostile among themselves.

The primary participants and competitors are allopaths, osteopaths and chiropractors. Allopaths, as I have described, usually practice traditional medicine. They have an "M.D." (Doctor of Medicine) appended to their names. They are by far the largest and most powerful, and have most influenced society's values. Osteopaths have a "D.O." (Doctor of Osteopathy) appended to theirs, and chiropractors have a "D.C." (Doctor of Chiropractic).

None of the professions are homogeneous or necessarily harmonious, and there are continuing shifts within them. There are no pure "gold standards" for comparison. Each offers

¹² I know I have made this statement elsewhere.

remedies which are theoretically regulated by limits of licensure.

Ideally, an examination by a member of those professions begins with the thoughtful taking of the history and an appropriate physical examination. When I heard that admonition repeatedly in medical school, I began to be appalled that such a self-evident statement had to become almost a nauseating mantra, but it wasn't long before I learned that it cannot be repeated often enough.

The examination has a special vocabulary. *Symptoms* are what clinicians hear patients *say* concerning their complaints. They are called *subjective* because they are thoughts. *Signs* are the *physical findings* that clinicians observe from actual examination. They are called *objective*, which implies that they can be measured in some way and that other professionals, who are similarly skilled, can/will/ should find them also.

Patients likely begin to give their histories the same way to whomever they consult, but the thought patterns those words would generate in each professional's mind could be quite different. How skillfully your complaints are investigated by further questioning, how they are sieved and interpreted, will almost certainly be different. At the same time, the precision of the inquiry is the benchmark of the clinician's intent either to find an accurate answer or to exploit you and dispose of you as expeditiously as possible.

Allopaths, osteopaths and chiropractors still don't even have a common vocabulary. In critical issues, they often are not understandable to each other. So a few questions have to be asked: How can contradictory concepts and methodologies rationally, even reasonably, coexist? Is it reasonable that findings that have meaning to one profession can be categorically denied by another? And is it reasonable that such disparities should raise serious questions? Yes, at least *that* is reasonable.

The taking of the medical history and the physical examination work in tandem.

Between the two, the professional's pursuit of the history is usually considered relatively more important because it suggests the direction of the investigation, and hopefully is evidence for the clinician's understanding of your problem. Then, the examination, with the opportunity to discover relevant *signs*, largely determines the success of the hunt.

Ancillary tests-- for instance, blood test, x-ray - when, – even performed before your examination - how many, of what, in addition to, or instead of, may powerfully influence what the clinician will decide to do, for better or worse. Tests are either thoughtful adjuncts to answer reasoned questions or just "shots in the dark prayers." Ideally, from those approaches - your history, your physical examination, your response to therapy, and subsequent testing, your diagnosis will likely be established.

What is the usual experience patients have with allopaths? Suspicion of the Fundamental Flaw's presence usually arises early. Reflect on what happened when you sought care for a pain somewhere. Consider your attitudes and those of others who you know concerning, as example, the use of x-rays (or x-ray like procedures - MRI or CAT Scan). Their influence is so pervasive that, in four decades of practice, I have yet to hear a patient first tell me about a physical examination or treatment that had been performed. Too frequently, they first tell me that x-rays were taken. One young lady memorably felt compelled to declare it in the first sentence about an incidental old accident not related to why she was seeing me, "A car rear-ended me ten years ago - *and I had x-rays!*" X-ray, in effect, bestows the "Good Doctoring Seal of Approval." It happens almost every day, "everywhere" in some way. We have been exposed to its propaganda as thoroughly and nearly as dangerously as the radiation itself because we are encouraged to welcome more of it.

If anything at all shows on them, there is even some degree of relief! Because, *for lack of a precise physical examination*, any resulting ambiguity about the cause of a complaint has *allegedly* been alleviated. The black and white of it appears to be a diagnosis or, at least, support one. Something *is* there. You can almost hear the angels sing. It implies that you are

validated in an important way. There need be no concern that your pain is "imaginary." X-rays *proved* your condition, didn't they? And the doctor's reasonable need for having provided a professional service may be satisfied, as well. Whether such conclusions are truly valid is what this is about.

Is there any denial of the most common after-medical-visit conversation?

"What did the doctor do?" "He took an (x-ray), and he told me...."

The Los Angeles Times, March 29, 1993, Jack Smith's article:

"Because of a severe back injury, I have spent the past week close to my bed, screaming every time I make an imprudent move. My wife learned to ignore my cries, even though they must sound mortal.

She has made ice packs for me, virtually spoon-fed me and even driven me to Dr. --; the exertions required for that outing were extremely painful, but an X-ray showed no broken bones, and the doctor said the pain would subside in six or eight weeks...."

Such common events well illustrate the considerable problems with the status and the interpretation of x-rays. The temptation is enormous to order such tests too casually and too soon. Too often, they are substitutes - ordered *in place of* an examination that may dispense with their need. That isn't really very "scientific." *X-rays need to be a directed extension of a considered clinical question! That is when they are realistically valuable.*

At the same time, there is a mitigating "other hand," and it is also powerful. *Defensive medicine* refers to any action, or inaction, whose primary purpose is to insulate the doctor from a potential lawsuit. It includes the use of diagnostic tests that reinforce against a possible accusation of being "incomplete." The conspiracy has become a stable part of our societal insanity.

Suppose a physician elected *not* to take an x-ray - or perform any other procedure that, in fact, had no reason other than to cover "tail feathers," and a complication occurs. An

adventurous attorney would be grateful for such an "omission." What might a jury be persuaded to believe? What do doctors do when x-rays have become so accepted as standards of care? That's how stinky thick the soup is. The absence of an x-ray, necessary or not, has settled many, many lawsuits against doctors.

Without equivocation, I have never yielded to that "need" because I have felt confident I could beat any such accusation. I have done it several times when testifying as an expert witness by showing the attorney I could not be intimidated, that I know my medicine, and, from my manipulative perspective, easily convinced the jury that I only take x-rays responsibly. But in the scheme of things, from all those circumstances, and more, the habit for x-rays is so ingrained, and the public has learned to be so expectant, that all sides are culpable of this very seriously draining problem.

Now let's focus on some real prices beyond their immediate financial cost. Let's consider life-threatening conditions first. *You never shed the radiation you receive.* They go with you to the grave, which may be sooner because of them. Studies now seriously suggest that one of the common causes of breast cancer is too much "diagnostic" x-radiation. *The casual misuse of x-ray is among the most influential causes of the Fundamental Flaw because it has contributed so heavily to the loss of hands-on skills in almost all specialties, not only in orthopedics.*

Overheard in an emergency room: "Doctor, the child in the next cubicle has a fever and is coughing. Do you think he might have pneumonia?" *Send him to x-ray and let's see what the film shows.* " What happened to palpation of the chest? To percussion? To auscultation – the use of the stethoscope?

Whatever the musculoskeletal complaint - "Doctor, my wrist hurts." "Doctor, my shoulder hurts." - The reflex response is now our folklore: "Let's take an x-ray to see if something is wrong." Or even worse, "...and see what it *tells us.*" A sheet of film is not an oracle. It doesn't have vocal chords. It can absolutely be relied on to say absolutely nothing.

Nothing automatically jumps off the film. Everything is only an image. Images have to be correlated. Images may, or may not, be relevant. The presence of something on an image cannot just be presumed to apply to a particular case. *The absence of something from an image does not necessarily mean pathology does not exist! But if the doctor doesn't - ("But the doctor didn't even take an x-ray.") ("So if I have to take an x-ray, why don't I just get it over with?") ("But doctor, how could the x-ray not show something? I hurt. Something's got to be there!") on and on and so on....*

On the other hand, when the scribbling of an order only a few decades ago could easily costs a few hundred dollars, today, the same minimal effort costs ten-fold and far more.

I have treated patients who brought x-rays and related studies costing thousands of dollars with them. Possibly to their initial dismay, I did not look at them. I may examine them after my examination, but I have a particular reason for not doing so first: I don't want to chance that they will influence my formative thinking. Sometimes those patients left my office pain free. I hadn't needed the studies. They hadn't been necessary at all. They could never answer the relevant questions that the clinical presentation posed but that an appropriate physical examination did.

While imaging procedures were just specifically indicted, the problem is generic, so a general statement is necessary: *Instrumentation is supposed to make diagnostics easier by providing or enhancing the acquisition of information that is not otherwise available. But it cannot deliver what it is not designed to! Technology never relieves the responsibility to appropriately investigate, regardless how seductively its data may tempt.*

The wise clinician decides what is valuable and whether the limitations, expense, and inconvenience of interposing a machine is worthwhile. *But under no circumstance may the conclusion be entertained that if a machine does not produce some result, that "NO objective signs" are present that may be discovered with appropriate physical examination.*

Instrumented tests are sinister in another way: they may seem to support the

rationalization that an adequate diagnostic effort was, after all, performed. Technology is fire; it is fireworks, sometimes spectacular, but potentially dangerous in the minds of those whose thinking is Fundamentally Flawed because it so easily interferes with reflection. In this, I am not a lone voice crying in the wilderness. This complaint regarding technology is well recognized.

The very same cry appears in a JAMA (Journal of the American Medical Association) article published decades ago:

"In the name of objective science, we have become integrated into the machine rather than the machine integrated into patient care. Although machines are defined as slaves, they have a way of becoming masters of clinical judgement through dependency, diffusion, distraction and most importantly, through fixation, experiencing the machine as an extension of self...Physicians appear blind as to how much the machine interferes between the patient and the doctor, crowds into their psychological space while profoundly complicating physician's ethical behavior.... We need an expanded Hippocratic tradition in all hospitals that deals constructively with the implicit counterproductive costs of pain and arrogance in all medical technology. The medical profession needs to turn again to the bedside to learn about a new disease, in this case, the syndrome of the technical fix.... With each technology, old and new, we need to be witness to our purpose as physicians who value life as a quality, not blindly worship life as a quantity.... *Primum non nocere machinae* (Let us do no harm with our machines)."

A typical musculoskeletal examination that does not involve manipulative reasoning will demonstrate why the practitioner early on is desperate for help from wherever it seems to be available. Sometime during the exam, the painful area is touched to see if it is tender; the patient may be asked to move the involved part; perhaps the *gross* range will be measured or estimated; the body part may be passively ranged, as well (the clinician moves it some distance along its normal course), and a question will likely be asked if and when pain is experienced.

Tests to elicit pain are among the most telling about a clinician's sensitive knowledge of the issues and skills that may relieve. The ability to carefully identify tender structures is consequential, especially in those related areas that are unsuspected by the patient. *Of critical importance is that only sufficient force must be used to elicit the response.* To crudely provoke pain is to blunder.

Among the most potentially barbaric excuses for a "test" is the commonly performed gross compression of the symptomatic neck by the examiner pushing down on the top of the head, especially with the neck in extension. If it is done at all, it must be done with extreme caution, *but you must never allow it!* The experienced examiner has other means to study the problem. For the little information it may add, it can also seriously compound your injury.

Your muscle power may be tested. Tendons may be tapped with a percussion hammer. Some circumferential measurements of the limbs may be taken. Sensation is tested, too often by the rolling of a wheel with sharp points along the patient's skin. In my opinion, the wheel's very presence in the doctor's office is reason for some suspicion, especially if it is rolled too rapidly. The sensory examination will be more fully discussed later, but its essential is: it is totally subjective! The response is totally dependent on what the patient reports. What the patient says, *is!* Time must be spent to develop a language of clear communication *so that the examination becomes a considered diagnostic procedure instead of just a blind ritual.*

Except for special tests to specific structures, those procedures are the usual limits of the clinical examination for musculoskeletal pain - what is traditionally considered a complete general type examination - *along with the x-rays, of course.*

The patient's treatment may include a prescription for medication, likely pain medications, anti-inflammatory medications and/or one of the notoriously popular "muscle relaxants," especially if *spasm* was identified. Quite possibly, an injection is administered, and treatments might be provided which may consist of hot packs, maybe cold, electrical stimulation devices, and massage. Those are the most common.

If the patient's neck is injured, a form of cervical (neck) traction may be provided in the office or for home use: a device hanging from a door with a halter pulling exclusively on the head, likely impacting the jaw. While it may help, the odds are substantial that it will hurt and even complicate the injury. Such devices are frequently discarded and for good reasons. I will relate more about that later.

Hopefully, the pain condition was relieved, but it may not have been as time passes without improvement. If the injury occurred at work, special meaning may be insinuated. If litigation is involved, the patient's problem may deteriorate even more drastically. As symptoms progress, other parts of the patient's world are affected. Ability to perform is increasingly impaired. The family suffers. Work deteriorates, and sleep, appetite, and sex drive are dragged into the impairment. Time irrevocably continues to pass, and life's quality slips towards the abyss.

More special studies may be ordered. More costs. The ante goes up. Studies may show something, in which case, the question arises whether it is relevant. But the clinical examination still doesn't help because of the Fundamental Flaw. *More time. More costs. More loss. Anguish. Despair. More medication. More examinations with larger reports. Conflicting reports from self interested parties. Chronicity.... it doesn't end. It might never end, even under better circumstances, until, finally, the patient's life ends.*

Among my bitterest memories is when it happened to a woman who had been my patient, - one of the sweetest, most gentle women I have ever known. The insurance company refused her further care. Late one night, in final anguish, she went miserably to the side of her swimming pool, tied a heavily weighted rope around her waist and pushed it in. Her name was Robertta ("Two t's please."). Her picture is on my wall now, in frustrated, affectionate memory to her.

Suppose doing everything traditional shows nothing. All investigation, all studies are fruitless. The patient is authoritatively informed that there are no objective findings, nothing that can be seen or measured or *touched*. That might not necessarily have been true, but the

traditionally accepted criteria for objectivity support it.

"No objective findings" more than implies that there is nothing *physically* wrong. "Mental gymnastics" by the patient is implied. Either the patient is accused of consciously lying -malingering- or the patient is imagining, or just plain "nuts." And the system defends itself that everything "scientific" and appropriate was done, and that reasonably, nothing essential was left out. That may be the case, or it may not. Regardless, the patient has become a real "pain in the neck," or elsewhere in the anatomy, to people who just want to get on with *their* lives and who resent that they are being seriously inconvenienced.

With time, there may, or may not be, improvement. If not, the final sentence *"Learn to live with it..."* only adds to the patient's anguish and increasingly deep resentment, which is a very reasonable cause for depression, which *they* then crucify the sufferer with as "proof" that he was a mental case in the first place.

The psychologist-dominated "Pain Clinic 80s" was one of my decades of special battle. The MMPI¹³ reigned. A number of personality indexes were graphically reported. The so-called "W" pattern was considered classical for depression. Many people with long-term pain had it, and the psychologists basked in their domination: the emotional basis for a large segment of the population's pain was "proven!" ***No, it was not!*** Most often, it only proved the inanity of the system that would hysterically leap off the edge to such insanity. But influential professionals said it, and the traditional medical establishment had nothing to fend it off with—*Fundamental Flaw.*

The patients who entered most pain clinics missed the most crucial intake event: *an appropriate physical examination.* Most often, it was presumed that the multiplicity of examinations before they reached that place certainly would have found physical injury -*Fundamental Flaw.*

Again and again, I would almost scream, *"I never found the patient who preferred to*

¹³ Minnesota Multi-Phasic Index (The "I" may mean something else. I couldn't care less.

learn to live with a rock in his shoe if the rock could be taken out of the shoe.” I was not one of the establishment’s favorite people. That’s all part of another story.¹⁴

Another unfathomed problem is that the patient’s symptoms may have spontaneously diminished over time as a dysfunction might only have “accommodated” - become dormant - awaiting its repeat performance again and again - indefinitely and progressively. These are the issues that medicine, now dominated by managed care needs to concern itself with because they are an ongoing drain whose early-on resolution would save astronomic sums. Managed care, which is now virtually synonymous with the insurance companies, have lots of money for many reasons, but they have no budget, no thinking, for studying the fundamentals of what this is all about.

Imagine being asked the most important medical question today concerning overall improvement in efficiency: what is fundamentally lacking in the initial traditional medical examination? And consider that you now have the answer: *The restoration of biomechanical (manipulative) reasoning.*

Imagine that you have the opportunity to participate in the most important foundational undertaking for the medical benefit of humankind for the amelioration of common causes of pain and for improved conceptual harmony in the healing arts - so that the most reasonable combinations of therapy will be applied. That is what assisting in the correction of the Fundamental Flaw offers to you.

No matter how big the system, eventually, health care must focus on providing service to one individual at a time: *To you! (Or from you!) Assert your new knowledge!* By attending to your needs, whoever you are, by expressing yourself where you receive care, or where you give it, you can be among those who will cause the great change to happen.

¹⁴ *Goodley Intentions of a Medical Maverick* (hopefully available soon after *Goodley Stories of a Medical Maverick*)

CHAPTER FOUR

LITTLE STANLEY

*I sent my soul into the invisible.
Some message from that afterthought to spell,
And, by and by, my soul returneth to me,
And answered that I myself, am heaven, and hell.*

Rubaiyat of Omar Khayyam

- **Science can be sad**

Whenever I hear the “non-traditional” indicted as if medicine is scientifically sound by definition, I see Little Stanley. I was in my Thoracic Surgery week in medical school, one of the three toughest, most sleepless rotations, along with General Surgery and Emergency Ward. It was my luck to get them sequentially, and this was the second.

Open-heart surgery heralded the new era of the highest technologic expression of scientific medicine. A heart could be stopped while the patient’s blood was continuously artificially oxygenated as the surgical team impressively demonstrated its wizardry in relative leisure. There was only one problem. All the patients were dying, and no one knew why.

Little Stanley was only five-years old when he arrived with his mother from Hawaii. Little Stanley had a congenital heart defect that, technically, surgery would easily cure. All he had to do was survive the operation. Little Stanley was my patient. I'd worked him up and played with him and told him stories and calmed his mother; all the while, he'd just continued to look at me quietly through his beautiful large brown eyes. I never heard him utter a sound.

Of course everyone hoped that this time the surgery would succeed and that Little Stanley would awaken with his cyanosis (dusky blueness from lack of oxygenation) gone, and he would be able to run and laugh and grow up like other children.

I'd taken him into surgery early in the morning. Then it was the afternoon, and the same disaster was developing as Little Stanley's serum potassium precipitously, dangerously elevated. Potassium is a major electrolyte *inside* blood cells, but when it escapes and massively enters the blood stream, it stops the heart.

The head of the surgical team was one of the full professors. He was a tall, distinguished man who, for all his extra training (which he had ponderously related to my class instead of a lecture) was now groping helplessly with losing again. He'd bent over unconscious Little Stanley who lay comatose among the life support hardware and tubing lying all about his bed, inserted into his little orifices and vessels, and in near panic, suddenly the professor turned around to *me* and asked *me* in a choked, high pitched, anguished pleading, "*What's happening?*" The question only numbed me more. Of course, I didn't know. No one knew. And Little Stanley died.

It was late, and Little Stanley's mother was sitting alone in the empty waiting room. I'd knelt by her feet, and held her hand, and told her that Little Stanley was in heaven. She looked at me so sorrowfully and said she knew. I drove her into Los Angeles, where she was staying. Then I was back at the hospital in the cafeteria, very alone with a cup of coffee as the sun came up.

A few junior students came in and sat down at my table across from me. I looked at them in their bright innocence and spanking white pants and clinic coats, possibly worn for the very first time. Their faces were shining with anticipation, and they looked as if they'd slept forever. Excitedly, they asked me what thoracic surgery was like.

"Well, you don't learn much about post-op care."

"How come?"

"All your patients die."

Their expressions went blank as their mouths gaped. I remember wondering what they might be thinking as my laughter became hysterical, as they rushed away, as my head went

down on the table and I finally cried myself to sleep.

Time passed and it continued, and many more died at all the hospitals wherever the procedure was done. Finally, a pathologist was performing another routine autopsy. As he removed pieces of tissue from each organ and dropped them into the formaldehyde jar, he made that novel fundamental observation of what undoubtedly had been occurring all along that many had seen yet none had *observed*. The lung tissue remained bobbing on the surface of the fluid instead of sinking to the bottom with the rest! It wasn't supposed to. Dead tissue had no inherent buoyancy - *did it? It didn't have - it wasn't supposed to float - how could it? it didn't have --- air! Oh, my G-d - AIR!*

That tiny piece of tissue provided the answer to all the deaths. Air was there, but in the lethal form. *Bubbles --- millions of micro-emboli!*

And so the mystery was solved: the heart pump, that glistening technological wonder, the product of every advantage science *might* offer, was fundamentally flawed. The filter for the oxygen flow was flawed. Instead of allowing oxygen's diffusion physiologically, as the lungs do, so the it could be carried by the hemoglobin *inside* the red blood cells,¹⁵ the pumps were sending forth an invasion of barbarian bubbles that battered and shattered the blood cells' delicate membranes, releasing the fatal potassium.

Science is, indeed, neutral. The discipline of science is foundational, so long as it is remembered that its ideal is always limited by the all too human thinking that attempts to utilize it. Science is only a tool. It was the thoughtful observation of one individual that made the difference, *and then the appropriate application of science that finally stopped the slaughter.*

About twenty years later, Richie Gold asked me to take him flying. As we left the Torrance traffic pattern and flew over the Palos Verdes Peninsula, he began talking about

¹⁵ The Scriptures teach that "the life is in the blood." Red blood cells are the only cells in the entire organism that do not have nuclei, which are supposed to be essential for the survival of any cell. So what is in the red blood cell that keeps it so functional throughout the weeks that it is viable before it is broken down?

something seemingly disconnected until slowly, over the sound of the engines, I realized what he was saying. He was telling me that he had recently visited some professors at my medical school. He had been shown some new kidney dialysis equipment, and he'd asked an elementary question concerning its fluid physics. He turned to me, his expression incredulous, "*Paul, they didn't even understand my question! They didn't have the faintest idea what I was asking!*"

The university's basic science department was only a short walk from the medical center, but apparently, it was still too far. The shadow of the heart pump tragedy was still obscuring the light. *These represented people who wouldn't touch joint manipulative procedures because they were "unscientific."* In their quest for what they perceived as purity, traditional medicine disconnected from its elemental essence.

Science is not at fault! Science doesn't care. Science is immutable. Science is silent. Only people can care. People *use* science. These medical school doctors were among the best and brightest. They had built outstanding reputations in academia, but they, and others about them, had somehow satisfied themselves with machines that weren't safe simply and specifically because of *their* human failings.

Back in 257RR, Richie was continuing on, but I had drifted again and was out there somewhere with Little Stanley.

CHAPTER FIVE

PALPATION: LEARNING THE MESSAGES OF THE TISSUES

"We command nature only by obeying her."

Anon

- **What palpation is about and why you must know about it**

Aborigines do not threaten traditionalism. It doesn't challenge an allopath if a bushman can really follow tracks across concrete or not. Safe crackers, or machinists who know a part is "still a few thousandths too thick" just by feel, don't concern them either. The demonstration of skills of sensitivity by others who are not competitors is rightfully admired and even marveled at. But an allopath, whose competence must be assumed, will easily become actively defensive if it is suggested that he may be missing important findings for lack of a skill that other professionals engaged in the same discipline claim they possess. And it is especially true if it is a skill that seems mundane.

Allopaths have never been taught to train their palpation skills in any area that would logically lead to consider joint manipulation. It isn't emphasized in training; therefore its need is not evident despite that its lack has been well published:

The Journal of The American Medical Association (JAMA) published an article concerning touch in the August 17, 1984 issue: *Teaching Touch at Medical School*, by Jules Older, Ph.D., from the Department of Psychological Medicine, Olago Medical School, Dunedin, New Zealand in which he stated, "The association between touch and healing is ancient and worldwide. Skilled hands are among the physician's most important diagnostic and therapeutic tools. Yet a survey of medical schools in the English-speaking world revealed that most offer no touch training in their curricula. Of 169 medical schools, only 12 give any formal instruction in the uses and meaning of

therapeutic touch in medicine.”

When tissues become abnormal, they frequently change in a palpable way. Their tone alters. There is a change in the ease of passive motion and in the relative position of joints. Patterns of tenderness develop. *The temperatures of related tissues alter; either warmer or colder.* There are other findings, virtually all available to observe and touch. While they may be small, *they are objective and may well be commensurate to the reality of what is happening.* The hunter who *observes* only one broken twig may decide the hunt.

Palpation is a higher order of feeling. Its acquisition requires acknowledging the potential sensitivity of the sensory system. The hands become antennae, perceivers without preconception, "mops" that absorb. Ego disturbs all of it. Preconception destroys it. Authoritarianism insults it. Dogma denies it.

Literally, the hands are given permission to feel whatever is. They must be intentionally relaxed, soft, so as not to lose the sense of the signs. It can be very difficult to discard preconception and apply a heavy hand without realizing it. Before "knowing hands" go onto a part, they "see" it and gently conform to it before contact. When possible, the involved structure is enclosed within the whole mass of the hands to spread the pressure. They must be capable of patience, waiting quietly. The fingers must not twiddle. They cannot be used as pincers, like lobster claws, to grope and incite pain which fires protective reflexes resulting in increased irritation - which incites spasm. Any effort to impose one's will through the hands deafens their alleged purpose. They must be left alone to listen. They must be the alert extensions of the awaiting, undisturbed, focused mind.

This is certainly not a completely foreign philosophy in allopathy. Many disciplines routinely seek small changes, though maybe with other senses. Without the microscope, medicine descends centuries. Palpatory skill has similarities. What was originally undetectable to the mind remarkably expands in consciousness once the engram¹⁶ forms for what the hands

¹⁶ A prime "pattern" that the brain learns in a training that facilitates the develop the skill.

are transmitting.

Palpatory ability is wondrous and akin to the acquiring any skill when the ability to perform it in a relaxed manner finally happens and certifies its absorption into a competence of performance. Like playing a musical instrument, palpation must be learned. It is not conferred with a professional diploma. It is task specific and needs time to develop.

Among those who are trained, there is a high degree of correlation of palpatory findings. *Only after having acquired the skill, may someone consider what another is reporting.* To judge under any other circumstance is, charitably speaking, presumptuous.

Palpatory skill is the first essential for manipulative competence whose first priority is to restore biomechanical efficiency to a moving part

The musculoskeletal clinician's obligation is to restore appropriate motion. All the rest is commentary.

CHAPTER SIX

WHAT HAPPENS WHEN JOINTS DYSFUNCTION

It is time for us all to decide who we are.

Herbert Kretzmer

- **The unity of the body**
- **The wonders of the circulation –a joint is a pump**
- **The construction of the spine**
- **Dysfunction and penalties when the pump fails**
- **Cutaneous Hyperalgesia – Abnormally tender skin**
 - **The usual cure – skin rolling**

The body has no natural divisions. All its parts are dynamically interrelated in virtually infinite complexity. Distinctions by any means, for any purpose - anatomic, such as “shoulder” - or by function, such as “vascular system” – must be considered convenient isolations of focus for temporary purpose. The risk of persisting excessively on a particular part, whether realized or not, impairs truth. Success depends on applying therapies according to how the body *really* works, which is better understood only by constantly reflecting on relationships.

While man-made machines invariably become simpler as they are disassembled, not so the body, which becomes so endlessly more complex in its particulate and sub-particulate parts that science cannot penetrate anywhere near the final matter of a single cell. In all that interrelatedness, a loss of motion where movement is designed to occur cannot remain a purely isolated situation.

Consider a joint: In one of its functions, it is a pump to circulate nutritive fluids and remove wastes to enhance healthy exercised and pliant tissues; ligaments around a joint are straps that protectively align it and limit its motions within its assigned range; special nerves

sense the tissue tone and the relative position of the parts as they monitor muscle action so that abnormal stress may be avoided.

Observe a well-ordered aquarium and consider the intricate interdependency among its elements - the circulation of fluid and oxygen, the foods and plants, the life forms. That should give some hint of the circulatory processes about normally functioning joints.

In the spine, the joints are wondrously coordinated to either stabilize or move while the vertebral column protects the spinal cord it surrounds. *The spine is an intricate series of multifaceted, reflexly-integrated structures. **Movement happens only at joints!** Each one normally contributes a small movement that summates into the **appearance** of a unitary motion, as if a spring were bending.*



But the spine is not a spring! (That seems too obvious. But it isn't in the real world. That is precisely how, however unconsciously, allopaths see and clinically treat the spine – *Fundamental Flaw.*)

Within the marvel of that machinery, it is no wonder that, on occasion, parts can “jam,” - *dysfunction* - as any joint can. When a joint's appropriate motion is lost, its pump action can be disturbed, as well, encouraging a situation similar to driving in a car with the windows up and

the ventilation system off. The circulation soon becomes stagnant as metabolic by-products linger, as the "swamp" starts to accumulate toxins. Restoring the "pump" early on, while the injury is still recent, is obviously the most efficient way to avoid compounding the injury.

The nerves are affected early-on, not only since they carry what can be intense messaging but because they are more needful of nutrition than other tissues. Deprived, they become irritable, and their ability to accurately mediate the physiology becomes further impaired. Whereas normal neural control causes muscles to function along an almost infinite and intricate gradient, hyper-irritability causes dyscoordinate contraction and spasm, which can immobilize a broad area - and even impair function distantly.

The dynamic can become grossly pathologic as the persisting breakdown in local circulation causes toxic buildup. Cells still continue to reproduce in the stasis, but each generation is sicklier. Chronicity is equivalent to the development of too many defective generations with diminished capacity to function normally and resist degeneration.

The body, of course, tries to resist. One protective reaction is called *inflammation*. Blood vessels dilate to deliver more blood-cell defenders, and the battle begins. But battles can become confused, and sometimes the blood vessels constricts, reinforcing the circulatory impairment.

CUTANEOUS HYPERALGESIA; REFLEX NEURITIS

It is easy to take the largest organ in the body, the skin, for granted. Seeing familiarity does that, but truth can begin by reflecting well on the exquisiteness of response to a loving caress. How can that happen except that the intricacy of the skin's structure and its physiology are wondrous. But when those mechanisms are damaged, its afflictions can be as hellish as its pleasures can be heavenly.

When you were newly conceived and barely visible, the cells that would become your

skin were identical to those that became your brain and nerves. The subsequent intimacy of skin, nerves, and brain doesn't diminish however much the obviousness of the relationship fades. Because nerves to the skin drive such special effects, it is helpful to consider the skin an integral part of the nervous system.

One of the neurally influenced effects is that irritated nerves, nerves that originate in an area of pain, cause *vasoconstriction*, constriction of the blood vessels. If it persists, one of its consequences is the likely development of *cutaneous hyperalgesia* (CH), abnormally tender skin. Its occurrence is a consequence of a number of physical changes in the contiguous tissues.

The skin is normally pliant and non-tender and is movable but stays in place because a myriad of delicate connective tissue filaments attach the skin resiliently to the underlying sheets of fascia¹⁷ anchoring it while not interfering with its softness and pliability.

When vasoconstriction persists, nutrition to the area is impaired. The pathologic process becomes a degenerating cascade: the connective tissue filaments react to the malnutrition by thickening and shortening; the space through which body fluids normally continuously circulate to maintain tissue health narrows; some of the proteinaceous materials in the fluid, and the waste products of metabolism that it is trying to dispose of, become trapped. The skin can become so tethered and stuck that it can literally become waxy.

The resultant toxicity becomes a region that directly afflicts the nerves, causing *reflex neuritis*. *A "positive feedback loop" frequently develops: the pathology in the originating tissue fires the messages up to the skin that causes the changes that produce cutaneous hyperalgesia - those changes then fire retrograde down to the originating tissue.* Each feeds and amplifies the other. The vicious loop is closed, like the intensifying screech in a public address system.

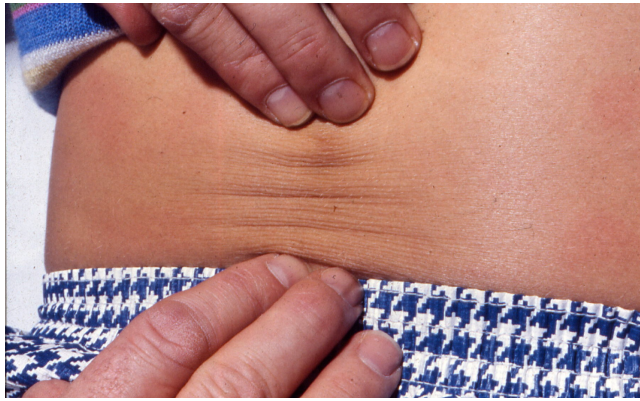
The two semi-independent processes both need treatment for the pain syndrome to be broken.

In cutaneous hyperalgesia, the affected skin becomes intensely tender and blushes to the

¹⁷ The tissue that overlies most structures and supports them.

slightest squeeze. In advanced cases, it exhibits “peau d’orange” (orange peel) changes in which the skin pores visibly “suck in” as can sometimes be seen in breast cancer.

Cutaneous hyperalgesia is diagnosed by *skin rolling*. The therapeutic procedure is identical to the diagnostic procedure.



Normal skin



Cutaneous hyperalgesia (on a scale of 0-10, this is about a six

CH usually occurs about the spine but is sometimes found on the limbs and rarely in my experience on the face, as well. I have never found it on the hands or feet. *Unattended, CH can persist indefinitely, and, if it is not specifically addressed, it alone can perpetuate the full expression of the injury.*

Wherever I have lectured concerning CH - in the United States and abroad - whether among medical, osteopathic, chiropractic or physical therapy practitioners – amazingly, nowhere was its importance already commonly recognized! I was uniformly surprised that it was new information to virtually all of them. I don’t know why because it is so fundamental, as you will become increasingly aware.

Most particularly in back injuries, the presence of CH needs to be suspected in every case.

The procedure:

Skin rolling is performed by picking up the skin using the thumb and index/middle fingers of one hand to form a “wave,” and then rolling it onto the thumb so that the wave moves superiorly up the back. The other hand then grasps the “wave” at its peak and continues to roll - sequentially - one hand, then the other. The procedure is repeated four times, twice on each side, parallel to but not over the spine itself. *There must be no “skip areas.” The skin must be lifted from the underlying fascia as much as possible.* Despite the initial pain, the resistance must be confronted with commensurate force or CH will not likely be relieved. *This is not the time to be too timid.* It is more easily shown than described, but it is an easy technique to learn.

DEMO

When CH is intense and established, an audible “snap” may even be heard across a room as the fibers break, as if a thin piece of wood was broken. If the condition is so chronic that the skin simply cannot be lifted, or it is too painful, *all the more, the skin must be mobilized, if possible! To some degree, the neuritis of it has to be actively, continuously, increasingly contributing to the underlying abnormal dynamics that caused it.* The process can begin by using the flat of both hands moving towards each other, slowly covering the entire affected area. You may view CH as a closed fireplace flue with the house full of smoke. Whatever it takes, the flue must be opened.

Specifically for the back: the roll is performed in four parallel rows, two on each side of the spine, the most medial about an inch lateral to it. The roll is started at the junction of the top of the buttocks and the back, and continued up over the shoulders. **MOVE STATEMENT UP**

Skin rolling is a screening test for underlying dysfunction anywhere along the spine. It is not perfect. People may not develop CH, but its segmental presence is categorically

reliable and, in my experience, denotes that an abnormality exists in tissues from which that nerve emanates. This can lead the examiner to the dysfunction if it has not already identified. It is essential to note the *location, width* and qualities of any abnormal segment— *tender, stuck, blushing, waxy*. Observing the changes is an excellent way to evaluate the success of treatment.

If the entire back is involved instead of segmental change (even a large segment within otherwise normal skin), then general conditions, such as thyroid disease and diabetes, need to be considered. Gross obesity can cause it.

Skin Rolling is usually best performed twice daily. Less can limit its effectiveness. More can irritate. It takes only a few minutes. I always warn my patient up front how painful it can be initially, but I promise (almost) that, if it is done properly, the pain of it will be gone in less than ten days.

I repeatedly tell them that the rolling must continue on the daily basis for a long time after the pain stops and normal skin texture is restored - and when the decision is made to discontinue it, it should be done slowly, over weeks, but I emphasize that the reflex is wily and wisdom dictates persistent diligence. *As long as the underlying condition is not fully resolved, cutaneous hyperalgesia will likely recur, however insidiously - even over months! Then one day, the back pain suddenly flares because everyone forgot about the simple procedure that had been so helpful.*

Sometimes, the treatment must be continued indefinitely, especially if the underlying condition is not completely correctable. I teach someone who will conveniently be available to my patient to do it. I see no problems with liability for such a “massage” procedure, and it is often the only way it can reliably be done.

A number of reasons are offered for skin rolling’s effectiveness. The obvious one is that adhesions are broken so the circulation immediately improves, like the opening of the “flue.” In only a short time, the skin texture usually normalizes and no longer reddens from the pinch.

I emphasize that CH is among the most easily performed, most reliable and useful of

manual therapies. It is an excellent initial lesson in developing palpatory sensitivity. It is part of the rule that damaged soft tissues around a dysfunctional joint need to be treated first. By restoring soft tissue resilience, any manipulation is much easier and certain.

CH alone may be a considerable portion of the pain picture. I have seen people many years after an injury who were still symptomatic only because CH had not been diagnosed and treated. Even then, teaching a family member to roll the skin cleared the residuals.

CHAPTER SEVEN

A SURVEY OF TECHNIQUES

There are many paths to the top of the mountain, but the view is just the same.

Chinese Proverb

- **Demystifying manipulation**
- **What manipulation is**
- **How the force must be asserted**
- **Hazardous force**
- **The precious “pop”**
- **Descriptions of some techniques and illustrative cases**
- **Frequency and effect**
- **Chiropractic commentary**
- **My recommendations about manipulation’s use**
- **Warnings**
- **Some general recommendations for the candidate**
- **Why pain can be a liar**
- **“Trigger Points”**
- **Spasm**
- **A few cervical techniques**
- **A brief lesson in good posture**
- **A block on the floor for back pain**

Joint manipulation is neither a generic term like “cottage cheese” nor is it mysterious. It implies the application of force to relieve abnormal relationships of tissues, usually relating to joints, in order to restore physiological function.

There are a number of explanations for manipulation’s effectiveness when it works, the most obvious being that gapping a joint may release entrapped tissue. That would be consistent with a number of my experiences, but the actual frequency of such circumstances cannot be known. My impression is that it is not a common occurrence. Many other factors are involved as a complex of neurological/muscular responses are invoked, and not all manipulative

procedures gap a joint.

HIGH-VELOCITY LOW-AMPLITUDE THRUST (HVLA)

High-Velocity Low-Amplitude thrust is the granddaddy of manipulation. It is the classical, commonly used maneuver osteopathically coined as “the million dollar roll.” It remains popular with both osteopaths and chiropractors, and often provides the audible “release” that is so dear to the novice. There are a number of variations within HVLA, and most joints can be manipulated utilizing them.

The patient remains passive as the clinician dominates. For spinal manipulation, the body is positioned to develop a “locking” on each side of the joint to be manipulated. It takes a fairly well developed palpatory sense to “take up the slack.” In essence, two “levers” are created above and below the anticipated manipulation site so that a rapid thrust will gap it. If the force is not precise, of sufficiently high velocity and *unexpected*, the patient will have time to reflexly tighten as the force is exerted. Then, the effect can then be more irritating than helpful, especially if performed before the soft tissues have first been adequately prepared. The manipulation’s *low amplitude* is intended to keep the excursion within the limit of joint's safe range of movement so that soft tissues are not injured.

The spinal joints move three-dimensionally through flexion-extension, side flexion (right and left), and rotation (right and left). *Rotation - especially over-rotation - is the movement into hazard.* (That is how my back was injured twice). The range available in any joint at a particular instant is a product of the interactions of those combinations of movements; moving a joint into one direction progressively leaves less range available in the others. By engaging flexion (or extension) and then side bending, little of the potentially troublesome rotation is available before the levers tighten to facilitate the “release.”

Concerning the “pop,” some patients like it while others can't stand it. In any case, its therapeutic value is uncertain. If no benefit is derived from HVLA, continued attempts can cause problems, and the unscrupulous have been known to injure with it to “require” the

ongoing need for "treatment." In good hands, its effectiveness can be dramatic.

I was finishing my specialty training in Physical Medicine and Rehabilitation (PM&R), in 1974 at the University of California at Davis Sacramento Medical Center. Dr. William Fowler headed the department, and he had learned to trust me. I manipulated patients regularly, and the results were often satisfactory - sometimes spectacular so my activities became well known within the hospital. During the summer, I taught other residents some of the procedures, as well as some acupuncture. (The year before, I had been Co-Chairman of Acupuncture Research at The University of Southern California (USC), where the story that opens this book occurred.)

One of the physical therapists asked me to treat her. She'd been athletic over the weekend, had twisted and her spine had "glitched." Her circumstance was one of those sweet pure cases of a single intervertebral segment restriction with no other abnormal findings. The injury was recent, so the soft tissue consequences of inflammation, edema, and spasm were still limited. As often happens, her spinal *gross* range of motion was normal because the spine is like a chain, so the links around a restriction can compensate for a one-level loss. Also, much of the motion in bending at the waist occurs at the hips. (I will have much more to say about the notorious test of bending to touch the fingers to the floor.)

To demonstrate individual lumbar segmental movement to the others, I had her side-lye on the exam table facing me. Fully flexing her hips and knees, I placed her forelegs across my abdomen and mildly flexed and extended her spine by rhythmically rocking her knees toward and away from her chest while serially palpating the intervertebral spaces. One segment didn't move at all.

I positioned her for the "roll" by fully straightening her lower leg as a stabilizer and then flexed her upper leg until my fingers palpated the beginning of tension at the spinal interspace just below the restriction. Then I palpated the segment just above the restriction while slowly pulling her lower shoulder towards me with her arm reaching for her upside hip, which rotated

her upper torso until I palpated the beginning of tension in the segment above. The “levers” on both sides of the restriction were set.

Bending close over her to completely control and impart the force, I sensed when the tension was right and delivered a sudden, short thrust through the restriction, producing a satisfying, audible release. Immediate retest confirmed restored segment movement normalcy, and she got off the table pain-free, fully functional, and very grateful.

One of the physicians who had observed had been a neurosurgeon before changing his specialty to train with me in PM&R. His expression was one of “skeptical moralism” as he spoke with a voice consistent with his reserve, “*Kind of intimate, wasn’t it?*” It surprised me, but I responded in an instant. “*You bet it was!*” explaining that it was only by her trusting me that she could so completely relax that I was able to be so precise.

Yes, manipulative therapy can be intimate of the most cherished and professional kind. Manipulation offers the essence of the clinician’s greatest privilege, to be so trusted to be able to provide such directed relief, *the only therapy I know that offers the opportunity for instant cure.*

FUNCTIONAL TECHNIQUES

At one time, the definition of manipulation was limited to HVLA. In contrast, mobilization was considered the slow, sometimes rhythmic delivery of force that always remains under the patient’s final control. The distinction blurred with the osteopathic advent of what they call *Functional Techniques*. Instead of thrusting at the passive tissues, dynamic realignment is attempted by the application of gentle leverage in cooperation with the patient.

MUSCLE ENERGY (ME)

Muscle Energy, a powerful technique, was developed by Doctor Fred Mitchell, Sr., an osteopath. It conceptualizes that joint dysfunction is associated with localized muscle tone imbalance and is corrected through exploiting muscle physiology. The patient is precisely

positioned and then performs a gentle *isometric* contraction of the involved muscles: during the contraction, the examiner prevents the part from moving. Then the patient relaxes, and during the brief “refractory” phase of about four seconds during which the involved muscles are quiescent, the joint is gently levered towards normalcy.

The manipulation is precise, gentle, slow, and has a number of advantages. It often works well and may provide segmental "training" so the involved muscles have less tendency to return to the former abnormal state. It is ultimately under patient control, and only unusually is it followed by increased pain. There is no thrust, so there is little danger of irritating the tissues. Importantly, it is an excellent technique for clinicians to improve their hands-on skills.

The procedure directly addresses tissue from which spasm originates: special fibers interspersed in muscle tissues sense and set the tone for a particular planned task whether it is brushing one's teeth, scratching one's nose in the dark, tensing for a precise leap (as is so beautifully seen in cats), or lifting a heavy object. The physiology, while normally consciously directed by an anticipated activity, can also act automatically as a protective reflex that fires whether a threat is real, or only seems to be. Once the alarm goes off, the resultant spasm may persist indefinitely. It may not be gross, but sufficient muscle fibers can remain abnormally tense to painfully restrict normal motion.

The reflex is potent and can be abused. An old "strong man" trick required its intentional "short circuiting." The stunt was to lift the end of a car. The performer would grasp it by its bumper (when cars actually had bumpers), lean back a little while maximally contracting his arm flexors and then suddenly engage the muscles of his back to thrust his body into extension, thus lifting the car. The sudden overload against the tensile strength of the biceps tendon could snap it. Tricking someone by inducing him to be convinced an object is very light, or very heavy (when the opposite is true), can cause severe harm.

The ME procedure's intent is to carefully position the patient in a posture so the restricted joint is in its most unrestricted “loose-packed” position in all three planes, for which I

coined the term *The Interbarrier Zone (IBZ)*. The clinician then restricts motion (isometric contraction) while the patient contracts the involved muscles which produces the isometric contraction as I already described. After about least six seconds, all the elements of the muscle tend to come into balanced contraction. The final phase of the manipulation occurs when the patient then *fully* relaxes. The muscles that had been in spasm are stretched back to their normal resting length by the clinician moving the part in a specific way to hopefully restore articular normalcy. The maneuver is usually performed three times, with increasing movement against the barrier each time. It is an excellent technique that nicely challenges the clinician.

Vendyl Jones was an archaeologist, reputedly the namesake for Indiana Jones. He was an extraordinary individual who devoted his life to the “big dig” for the Temple treasures in Israel. He became a treasured friend.¹⁸ Anthony, an acquaintance, told me that Vendyl would be in Southern California in February 1995 to raise funds for his next excavation later that year that would take place near Qumran, the site where the Dead Sea Scrolls were discovered. I wanted to meet him, but I kept missing him the entire week.

When I learned that he would be lecturing just one more time at a small church in Orange County before returning to Texas, I determined to be there. The church was about fifty miles from my home and close to Anthony’s. He asked me if he could go, and, fortunately, I picked him up on the way.

Vendyl and I hit it off. I was sitting across from him at lunch at the Claim Jumper as he was consuming a large plate of ribs when suddenly he became pale and started to sweat. Of course, I was concerned.

“It’s just the pain.”

“What pain?”

¹⁸ Vendyl passed on December 27, 2010. I was one of those privileged to be with him when he entered the soil of Israel in a plot reserved for Bnai Noach in a cemetery on the north shore of the Kinneret (The Sea of Galilee). Vendyl was a leader in the Bnai Noach movement.

He told me he had been injured in an auto accident twenty-two years before. He'd had a lot of treatment, but the pain had never been relieved, and sometimes it would suddenly increase.

I had no preconceptions about his condition, but he had a few hours before his flight back to Texas, and I asked him if he'd allow me to examine him. He responded that he'd be grateful. Anthony's bed was firm and made a perfect workbench.

There were multiple dysfunctions and accommodations throughout Vendyl's spine, with the primary problem about his sacro-iliac joints. I systematically corrected them primarily with muscle energy techniques until everything was "back in place" and moving normally. It took about an hour. Vendyl got off the bed smiling and began moving about the room stretching and lifting his legs in all sorts of directions, doing things he hadn't been able to do for those twenty-two years. I told him that his ligaments were damaged; that the pain would recur, and he would need a series of prolotherapy injections (which I will later discuss in detail). Vendyl invited me to be the physician for the dig, where I could inject him at the same time, as well, which became the prelude to the beginning of a new life for me. I showed his secretary, Anita, later his wife, a few maneuvers to use when the pain would begin to recur until we were together in Israel.

COUNTERSTRAIN

CounterStrain, another osteopathic discovery, provides profound manipulation through precise *motionlessness*, which even further expands the manipulation's definition. It appears remarkably simple and is the singular work of Lawrence Jones, D.O., who practices in a small town in Eastern Washington. He had examined a young man who had strained his groin. The pain had been unremitting, and no one had been able to help him. As Dr. Jones related, he had worked assiduously, as well, without success. After months of frustration, he said that, at least, he wanted to give the young man some rest by perhaps finding a temporary position of comfort for him. He said that he had spent about twenty-five minutes continuing to re-adjust pillows

about the young man's leg until, by trial and error, he eventually found a pain-free position that required a precise combination of flexion and rotation of the hip. He was grateful he had at least accomplished something, and told the young man to just relax and that he would be back. When he returned about twenty minutes later, he found the patient joyously walking about - cured!

To his great credit, Dr. Jones spent the next twenty-five years pursuing the applications of that day's serendipity across the body's entire landscape as he continued to develop his understanding of what had happened. He combined his clinical experience with the research of Irvin M. Korr, PhD, a physiologist, who spent his career studying muscle physiology in osteopathic institutions.

Dr. Korr learned that the *gamma reflex* that sets muscle fiber tone and protects joints (which I discussed), can fire “as an emergency,” even if a muscle or a joint has not been overstretched, *if its acceleration is unexpected*. Once the muscle fibers contract to attempt to prevent a perceived injury, the “alarm” can persist indefinitely because those special muscle fibers then remain relatively too short and “overstretched” since their points of origin and insertion remained the same: there is nowhere in their normal functional range for them to rest and release the reflex. Most movements, especially stretching, tend to further aggravate the condition, resulting in an indefinitely painful dysfunction.

The technique works by finding a joint position in which the muscle origins and insertions are brought sufficiently close so the involved fibers may relax. Then, the alarm can stop and the tissues return to equilibrium.

Therapeutic technique

While a muscle in spasm may not be noticeably painful, it is discretely tense and tender. The patient must remain completely relaxed overall while the clinician palpates to elicit the tense tenderness and monitor its response as the involved joint is slowly, sensitively, *passively* moved in the appropriate direction(s) to allow the involved fibers to relax. I tell my patients that

it is necessary for them to feel the moderate discomfort at that time and not to react to it.

The technique requires precision of positioning, often within a 1-2° range. When it is located, there is a sudden diminution of the tenderness under the finger as the tenseness “melts like butter.” While the patient continues to remain *completely relaxed*, the clinician carefully maintains that exact position for *ninety seconds*, which, according to Jones, is infinity for that reflex.¹⁹ Then *slowly*, the part is passively stretched out, and, if the manipulation is successful, the entire pathologic process aborts as the previously contracted fibers return to their normal resting length. While there are guidelines that work most of the time, the principle is the ultimate authority.

When I first learned CounterStrain, for more than a year, I repeatedly asked one of my instructors if it really worked. Each time, he only smiled and replied, "Try it." It seemed so simple that I was literally too embarrassed to actually charge for it.

While I was practicing in Phoenix for a few years, I treated a young woman whose back was injured in an auto accident. She couldn't afford to lose work, but sitting aggravated her pain. I unsuccessfully tried almost everything I could think of as I continued to insist she needed to be hospitalized for a special type of traction. After several weeks, she tearfully succumbed, but after two days, she was still unimproved. With nothing to lose, I asked her to turn over and performed a CounterStrain maneuver, whereupon she arose on her elbow and asked me what she was doing in the hospital. She'd been cured in ninety seconds, and, totally chastised, I began to use it, but it would take and a remarkable series of cases to appreciate its versatility.

Early on, while I was practicing in Big Bear Lake, California, a woman was ice-skating with her children. She was an experienced skater, but she had fallen back violently onto the ice with her arms fully extended straight out behind her. She sustained the full force of the fall onto her hands. Both her elbows violently hyperextended.

¹⁹ Some modifiers of Dr. Jones' work claim they accomplish the “release” in less time. I think I have, as well, but my gratitude to Dr. Jones is unending. I'll take the time and remain content.

She came to my office, her arms limp, totally unable to flex her elbows. Every attempt was prohibitively painful although I could fully, painlessly flex them for her. There were no fractures. I had to splint them straight to diminish her pain. Nothing I tried helped. She had to be fed and dressed and washed by her seven-year-old daughter, who also had to care for the other children including an infant. She remained helpless for almost two weeks before I finally thought of CounterStrain. Only one treatment to each elbow broke the reflex and she was functional. Incredibly, within a week she was normal.

Again, when practicing in Big Bear Lake, I was having lunch at one of the sandwich houses when the owner came over to me almost in tears. She held out her hand and told me she'd just inexplicably begun to experience intense pain in it. Her palm was scarred from an old injury that was of uncertain relationship to her complaint. I found an exquisitely tender spot close to her wrist, asked her to sit down with her elbow on the table, her forearm vertical. While continuing to keep some pressure on the tenderness, I fully flexed her wrist and moved it about slowly until the tenderness under my finger disappeared and the tissue tenseness softened. I held it there with one hand on top of hers while I continued eating my soup with the other. When I released it, the pain was gone, and her hand was fully functional. Her expression was priceless, and the lunch was free. Bad business, a bowl of soup for a consultation but great fun.

Each technique has patients who seem specifically designed for it. One patient had a long history of unsuccessful cervical treatments despite many therapies. Her problem seemed complex. She had been referred from hundreds of miles away. The first CounterStrain remarkably relieved her. She returned about once every four months for a year, each time receiving remarkable and progressive improvement until she was cured.

I will have much to say about controlled studies, their "science" and applicability to the manipulative procedures, but, in her case, her having experienced numerous therapy failures before CounterStrain was used, she was clearly her own controlled study.

MYOFASCIAL RELEASE TECHNIQUE (MFR)

Myofascial Release Techniques (MFR) are directed to conditions in the muscles and the fascia - the connective tissue - which, like a near-infinite spider web, covers, invests, and supports all the structures of the body.

The therapeutic force is a gentle stretch that awaits the tissues to release, like what happens to salt-water taffy when it is gently pulled.²⁰ MFR is also a type of massage. The techniques are often applicable as an adjunct to other techniques. They are valuable when tissue tenderness, bodily asymmetry from fascial pull, and spasm are observed. If these conditions are not relieved by another method, they can fire “retrograde” as residual irritable foci - back down the nerve – and sustain an underlying dysfunction. Untreated, the pain that results from such conditions can persist for life.

MFR’s have special value in the treatment of pain from internal scars, whether the scars are realized or not. The treatment is not benign. It can be as painful as pain can be, but for only a few minutes. The result can be magnificently rewarding.

When I was in Israel, Vendyl asked me if I might be able to help Sarah, his forty-five year-old daughter, who lives there. He was aware only of the problem that involved her left arm, which I will discuss in Chapter Eight. Her other problem was also constantly painful and far more pervasive in its affects.

There are times that an in-depth history is not all that important. Scars that extend into the interior are paths of pain along the entire extent of their adhesions. They may be relieved only by following them manually down wherever they go. Sometimes the fingers seem to take on a consciousness of their own as they bond with the tissues and do something of which the intellect may only ask, “Why did you do that?” But sometimes, something good can happen - and it happened that night.

²⁰ It’s a sadness that many don’t know what I’m referring to. It’s a children’s game to hold the block of taffy candy in the fingers and exert a gentle spreading force. “Nothing immediately happens.” Soon the “gel” state becomes “sol” (solution-like), and the taffy pulls apart into a long string.

Sarah had experienced all sorts of abdominal and pelvic problems for many years. She hurt continuously. The area about her umbilicus and lower abdomen was always intensely tender. She couldn't tolerate any pressure on it, and she could only wear loose garments. She had severe chronic constipation, which she often measured in weeks. Her intimate life with her husband was a distant memory.

Sarah is gutsy. At that time, she worked cleaning houses, and would get through her day as she went on with her life, the personification of a lifetime fighting pain and depression.

Our camp had been the location of an old Turkish fort, just outside Mitzpah Jericho, on the road to the Dead Sea. Sarah arrived at my "caravan" at 6:00 p.m., and I related what I was about to do. I explained that when tissues tighten and scar, the resultant distortion usually impairs function. Besides the abnormal tension, there surely must be a neurological component to it. I told her how painful MFR can be, and that the path of her pain would be my hand's primary guide. The MFR technique I used begins by finding the most tender spot with a fingertip, then increasingly palpating deeply into the abdominal tissues with the finger pads, wherever "it" goes, until there is no more of "it."

It can be amazing to watch how the fingertips can change direction as they descend; the patient must remain totally committed to relaxed acceptance no matter what, even with only open-mouthed groans emanating from somewhere deep near where the fingers are following, - if sound can be uttered at all. I followed the devil down to near her spine, and finally it was over.

When she again relaxed, I treated the full course of the attachments of her colon, the large bowel. The procedure has a considerably more distinct end point, the "dissolving" of encountered tissue resistance. While there is usually some discomfort, it is far more easily tolerated than scar treatment. DEMO

The technique commences in the abdominal right lower quadrant, where the large bowel begins. The fingers of both my hands, joined in a line, slowly descended at the edge of the

abdominal cavity just lateral to the bowel. My fingers stopped when they encountered resistance - and held - and waited - relinquishing nothing. In time, the tissues “melted,” and I then moved my fingers superiorly adjacent, and repeated - up, across, and down. Throughout, each maneuver encountered hard resistance, and finally her abdomen was soft, and all the tenderness was gone.

The pelvic diaphragm

Then I examined the movement of Sarah’s *pelvic* diaphragm, one of four in the body. In a woman, both the vagina and rectum pass through it. The well-known respiratory diaphragm, of course, is located between the thoracic and abdominal cavities. In contrast to its large movement, the pelvic diaphragm’s excursion is relatively small, but it is essential - and palpable.

For health, all the diaphragms need to move synchronously. Lymphatic flow depends on it. Lymph is part of the “extra-vascular, extra-cellular” fluid, which, in fact, is most of the fluid volume of the body. It seeps out of the capillaries, bathes and nourishes the tissues, converting it into a “wetlands.” It then flows through tributaries back to the main vascular stream, which it re-enters in the *subclavian vein*, high in the chest.

The pelvic diaphragm is palpated with the patient supine and relaxed. To facilitate the placement of the examiner’s hand, the patient’s hips and knees can initially be flexed. The examiner moves a hand up the inner thigh into the tissues of the buttock. The “sitting bone” (the ischial tuberosity) is palpated, and the hand ascends along its medial border. There is no excuse for a social blunder.

The hand is kept reasonably soft. The patient takes a deep breath in, then out. As the *respiratory* diaphragm ascends, the *pelvic* diaphragm should ascend, as well, and the clinician’s hand advances. If the area remains soft and there is no pain, the advance is progressively repeated a few times. Then the hand waits and “listens” as the patient continues to breathe normally. If the diaphragm is moving properly, a gentle pressure will be felt against the tips of

the fingers with each respiratory inspiration (the pelvic diaphragm moving down), symmetric with the other side which, of course, is examined separately. But if several cycles pass and no pressure is sensed, it is likely that the pelvic diaphragm's movement is impaired.

The therapy usually works, as it did for Vendyl's daughter. Both sides of her diaphragm weren't moving at all, and the resultant stasis was likely a major cause of the chronic edema and irritability of her pelvic organs. Her legs would swell; her abdomen bloat impairing her digestion and elimination.

Therapeutic Technique

With the hand in place, the patient takes a few deep breaths and then *exhales completely*. The clinician's fingertips move superiorly as far as comfortably possible against the diaphragm while the patient continues to hold his breath. ("Respiratory assist" can be the essential adjunct in many techniques.) I ask my patients to visualize that they are deep underwater and fighting to reach the surface for that one critical life-saving breath. I want that first inspiration to "explode" into the lungs. The longer the breath is held, the better. At the inhalation, the clinician instantly withdraws the hand, thus releasing the pelvic diaphragm to the reflex influence of the descending respiratory diaphragm. The restoration of pelvic diaphragmatic movement implies that its "paralysis" was more a matter of its having been in "shock" than from an organic condition.

It was 9:00 p.m. As Sarah got up from the examination table, her eyes could have been headlights. Her face was radiant. Her whole circulation had opened up. In fact, everything opened, and she had her first happy, massive bowel movement in years. She went home and enjoyed her husband again. When I saw her the next day, she was a happy, happy woman. A few more touch up treatments, and the injections to her arm - which I will discuss in Chapter Eight - and her pains were history.

Muscle “lock”

The term “myofascial” inseparably binds the relationship of muscle and fascia, yet sometimes muscle alone can be involved. While I was teaching at USC in the Department of Emergency Medicine, one evening, the most powerfully built man I have ever examined walked in. With a big smile, he gave his history: He worked at a wrecking yard picking up engine blocks and throwing them onto a truck - one-handed, that is - either hand. His body was one mass of magnificently sculptured muscle.

He wasn't having any pain at all. He explained that while he was playing with his “toys,” his right arm suddenly wouldn't elevate higher than horizontally. There was absolutely no impairment other than that absolute restriction to 90°. Something just “ran out” halfway up. I don't exaggerate his strength. I could literally do a chin-up on his outstretched arm. With his arm totally relaxed, I was able to completely elevate it through its full range of motion without difficulty, and the entire remainder of his examination was normal. His problem was a remarkable expression of what this entire theme is about - not manipulation, but *manipulative reasoning – hands-on familiarity*.

Muscle contraction results from a series of electrical, chemical, and mechanical actions. Basically, microscopic-size rods slide among, and in and out of each other, which results in the shortening and lengthening of the muscle fibers. The chemical process depends on calcium transfer in and out of the cells.

Anatomically, while the arm's initial approximately 90° lateral upward movement results from its swinging on the scapula²¹, it is the swing *of the scapula on the chest wall* that provides the remainder of full elevation. I reasoned that something had to have happened to the upper *trapezius* muscle,²² the muscle that forms the prominence at the top of the shoulder - the primary rotator that swings the scapula to the top of its arc.

21 shoulder blade

22 There is an upper, middle and lower trapezius.

DEMO

I stood behind him and palpated deep into the upper “trap’s” immense mass and eventually sensed a tense rod. As he had been strolling along and tossing the engine blocks over his shoulder onto the truck, the calcium flow into and out of those myelin sheaths apparently blocked. Regardless, his muscle had been trapped shortened so there was insufficient contractility to complete scapular rotation.

I was repeatedly encountering skeptical orthopedic surgical residents during that time. It’s always the ‘I’m a surgeon and your not syndrome.’ Many of them had come from other training centers for a few months of experience. As they watched, I stood behind him, hooked the index and middle fingers of both my hands around the front of the muscle, leaned back and waited. Slowly over a few minutes, the superficial fibers started their “myofascial release” taffy-like stretch out, and my fingers began to get down to the rod, which also eventually “went.”

The procedure must be a “timeless” time! Whatever it takes! You must just wait till the relaxation happens.

Then, as I felt the “give,” I put my thumbs that were along the back of the muscle together and pushed forward while continuing to pull back with my other fingers, making the muscle into a big “W” for maximum stretch.²³ I’d never seen it done that way, but it was logical, and that was all that was necessary. The block was over. He happily elevated his “tree trunk” straight up and went back to his engine blocks laughing. That was the night the staff named me the *Musculoskeletal Wizard*. Cute.

Essentially the same thing happened to an acquaintance who lived up the street from my house in the ’70’s. He ran the Emergency Department at San Pedro Community Hospital. His daughter was horse jumping, and they had gone to a ranch to see about buying her a horse.

²³ I wouldn’t learn about CounterStrain technique for another decade. If I had known it, I might have considered using it except that there was absolutely no pain involved with what I was doing.

Someone offered him a “tame” one to ride. It was their practical joke, and as his seat hit the saddle, the bronc hit back and kept right on pounding him until he departed in a pained trajectory. Not funny - and for weeks, he would awaken having to walk for hours like a ruptured duck before he could finally arrive at some comfort. After a few weeks, he came over to the house on a Sunday morning, told me the story and asked if I could help.

The *gracilis* is a long, cord-like muscle that runs down the medial side of the thigh from the pelvis to the knee. His were as tense as guitar strings. As he lay there, I asked him to relax and accept a bit of pain for a few minutes. I hooked each muscle in turn, waited for the “give,” did the “W” for good measure - and it was all over.

You will realize that MFR treats shortened muscle fibers opposite from CounterStrain’s principle, which, as I just footnoted, I didn’t know then. The *gracilis* is not easily amenable to that technique, regardless. Both have their place. Whatever works.

Sub-occipital decompression, reflex and reciprocal inhibition, and transverse glide of the cervical vertebrae PPPP

Release From Pain must not be considered a clinical instruction manual in the traditional sense. I describe various techniques to demystify these approaches and demonstrate their common sense. At the same time, as I discuss elsewhere, there are a few techniques of pervasive value that can be learned from reading (and in iPad format, by a demo) - *if the reader pays attention*. These few techniques can be assets whose rewards are immediate.

Sub-occipital decompression DEMO

The short muscles that originate on the skull and insert into the upper vertebrae are frequently affected by stress, both physical and emotional. Palpating the tissues while the patient is supine can reveal soft tissue that is hard, boggy, and sometimes edematous. This osteopathic technique is one of the two I do that hurts *me*. It is worth it, however, if the patient

derives any degree of improvement that this method offers.

The patient's total obligation is the *relax*. I keep my fingers straight and flexed at the metacarpo phalangeal joints (the knuckle joints). Resting my hands on the table, the tips of my fingers are on the patient's head, just inferior to the *external occipital protuberance*, which is the site immediately inferior to the balance point. I wait. The patient's head is free in space except for that one contact - *don't get careless and let the back of the head rest on the table*.

Eventually, there is a softening of the thickened tissues, and the fingers start to move deeper into the neck, along the occipital bone. Visualize "scraping" something off an undersurface.

You must assure the patient's neck is fully relaxed! Gently moving the finger pads of both hands "up and down" in relation to each other, to determine if the head rotates back and forth effortlessly, is an excellent way to test for the relaxation. The "ideal" is for the neck to end up fully extended, the patient's face looking at you.

When you get as far as you can, or your fingers are giving out, it's time for the second phase.

The middle fingers of each hand contact the occipital bone along its sides. The index fingers slide down the neck to contact the first resistance: the transverse process of C2, the second cervical vertebra. Then, gently exert effort to "open up the spaces," releasing the tension in the muscles between the fingers. You wait. And wait. Then, suddenly, slowly, hesitantly, teasingly, or otherwise, the space opens with the feeling that taffy candy is slowly stretching. That's it. Let the patient rest motionless at least three minutes.

Cervical transverse glide DEMO

This is a diagnostic technique. I mention it here because, as much as I have discussed neck injuries, I have not described specific techniques for good reason. They have to be done carefully, and crafts are safer when passed from the hands of one to the hands of another. Still,

for someone who seriously desires to learn these approaches, practicing the examination procedure that I describe here is an excellent way to begin developing tissue sense and skill.

A prime “need to know” if there is segmental restriction in the cervical architecture. While restriction of active motion may or may not be present, the neck’s ability to accommodate to limited but pain-producing loss of motion at specific segments can still allow full active range of motion! The need to assess individual segments by imparting force into the resting neck to determine normal “give,” - normal “joint play” - is essential. Testing *transverse glide* at each joint sequentially is a superior method to accomplish this. All the joints can be examined in this manner except C1 and, likely, C2.

The patient lies supine. The examiner stands behind comfortably. Remember, the hands are *soft*, and dorsi-flexed. The major contact with the neck is made with the proximal index fingers. The forearms are near right angles to the surface of the neck, the elbows are away. The intent of the gentle force imparted to the segment is to glide it laterally and compare what happens to the same segment moved in the opposite direction and to all the other joints.

The force descends into the feeling hands from the shoulders, even from the shifting of the hips: left to right, then right to left, noting the “give.” Normally, there is a soft “end feel.” There is a relative softness of the tissues, an absence of spasm, no tenderness. Encounter with any rigidity is a sign of abnormality. The exam is never hurried. Studying anatomy will give the examiner the beginning of ability to localize.

I initially learned to test the neck’s segmental passive range by a different method, with the patient upright. I much prefer what I just described, but my point here is to encourage you. Your head has to establish a connection with your senses and establish an engram, a place to accumulate new knowledge. Be patient! For almost the first fifty times I practiced, I felt *nothing* - because there was essentially nothing to feel except normal tissues that were accommodating to my effort by flexing around my finger. The next examination could have made my heart skip a beat! There was *restriction*! The tissues didn’t bend, they *resisted*! The

joint was “*stuck*.” By then, my engram had been so well established that I recognized the abnormality immediately. Don’t get discouraged! If you learn techniques such as this, your skills will jump, and you will be on the way to becoming far more perceptive of the human condition in health and disease.

Reciprocal and reflex inhibition DEMO

Muscles move joints in wondrous coordination. When a muscle flexes a joint, the extender relaxes *reciprocally*. For instance, the biceps flexes the elbow while the triceps is *commensurately inhibited* and relinquishes its force in a manner that maintains appropriate tension. There is no slack. In normalcy, the balanced give and take is a constant.

Reciprocal inhibition can be a therapeutic technique: Muscle enters a “refractory period” for about four seconds after an isometric contraction of approximately seven seconds.²⁴ During that refractory time, the muscle is maximally relaxed and most easily susceptible to being stretched. Again, as example: to treat a “tight” triceps: after the biceps has isometrically contracted and the triceps reflexly relaxed - the clinician gently *flexes* the joint to stretch the triceps. When skilled, the clinician may palpate a “barrier,” a slight resistance to further stretch. That is where the procedure is repeated and again, usually a total of three times.

Reflex inhibition occurs in the action of just one muscle. The therapy is to gently stretch that muscle after it has contracted. After the biceps has contracted, *it* is stretched.

MAITLAND TECHNIQUE

G.D. Maitland, an Australian physiotherapist far removed from the rest of the world where the manipulative techniques were developing, devised a unique method that bears his name. It predominantly employs a graded series of oscillations delivered onto the joints with

²⁴ I describe this physiology a number of times. In isometric contraction, the patient contracts the muscles while the clinician holds the part and doesn’t allow movement. It is not a wrestling match! The force must be enough, but never a challenge to the clinician’s ability to comfortably restrain movement.

the thumbs. It is another approach that has had its successes. While I obtained basic training in his technique and have used it occasionally, I found that my familiarity with other techniques was sufficient for my purposes.

“COUGH MANIPULATION”

Nothing is static. Certainly, the manipulative procedures are not. They continue to evolve.

On a Sunday some years ago, Jim McKinney's wife, Cheryl, called. Jim had to be seen as an emergency. I had last seen him seven months previously when he had needed several months of treatment that had included prolotherapy, which I will discuss later. His problem had resolved nicely. Then, for no apparent reason, Jim was suddenly in more pain than he could remember. It began as he awakened two days earlier. He had already been seen in an emergency room, and he hadn't been helped. When I heard his voice on the phone, I knew he was in real trouble and told him to come to my home. I opened a portable examining table in my dining room. Jim was contorted in marked pain. He could barely walk. A full breath, or a cough, shot sharp pain into his mid back.

Jim told me that when the pain first began, it was intense across the left side of his low back, and his entire left leg had gone numb. If he didn't walk with his left knee consciously stiff, it repeatedly buckled. The pain diminished as he rested that night, but it shifted to his right side the next morning and then involved his right leg.

I noted a few minor alterations on his physical examination, including an apparent discrepancy in his leg lengths, and some loss of sensation along the inside of his left thigh and calf and the outside of his instep.

As he lay supine, I don't know why, but I asked him to cough again. He did, and it was as painful as before. I don't know why, because I'd never seen it or done it before, but I placed my hands firmly on the front of his hips, held him firmly on the table, and asked him to cough

again. *It was painless!* I relaxed my hold, and asked him to cough again. I don't know why. It still hurt, but much less. I again fixed him to the table and asked him to cough once more. Again, it didn't hurt.

Jim's leg lengths balanced, and the sensory loss about his left leg completely cleared. He got off the table easily, completely pain free and fairly danced around the room.

I cannot give a rational reason for my treating him that way. It is so simple and novel. Just fixing his pelvis to the table caused his cough to effectively reduce a dysfunction I had not yet diagnosed.

I have no idea what the significance of this maneuver is in the scheme of things. I've performed it a few more times without effect, too short a series from which to draw any conclusions. I don't know if its success would be repeatable, but it obviously is remarkably simple to do. Frankly, I realize that I had eventually forgotten about it and not followed it up. It appears harmless. It is certainly amenable to a controlled study. It might even start a whole new system, "*Cough Manipulation*" (by Goodley). Jim's pain didn't recur.

Osteopathy in the Cranial Field is in a class by itself and I will describe it separately.

A BRIEF COMMENTARY

While I have described some approaches that I am comfortable with, there are many other types of manipulation. They have different effects, and why one or another may be successful is not always clear and may only be realized in retrospect. The important lesson is that there are, indeed, different strokes for different folks - and having only one technique for all patients is distinctly disadvantageous.

HOW OFTEN? CAUSE AND EFFECT

One of the major criticisms of chiropractors is their too frequent tendency to be highly

repetitive with manipulation, and even build entire practices on “regular maintenance.” I have discussed this issue with many of them. Since manipulating is what they must do (although some insist on attempting to further distinguish their craft by calling them “adjustments”), it isn't surprising that they attempt to justify their practices by describing a wide variety of influences that they claim direct their decision-making.

Some offered precise guidelines concerning how many manipulations they would perform and when they would stop. I will not make this a general statement, but, unfortunately, I found little correlation with what they said they did and what they actually did. Criticism of such tendencies is necessary, but I can't leave this paragraph without balancing the scale with the proverbial story of some ear, nose and throat specialists who might even categorically lecture medical students on the limited indications for tonsillectomy only to then to enter the operating room and yank out a dozen or so in a morning. Every profession has its exploiters.

Since their inception, insurance companies pay more for instrumented procedures than for hands-on care, such as manipulation. This practice remains a disadvantage to chiropractors since they cannot perform instrumented procedures. So, many of them manipulate the system by performing many, many manipulations, *yet I have been repeatedly surprised by how rarely they state that they had ever witnessed an episode of dramatic and lasting relief from a single manipulation, as I have!*

A few questions need to be asked (although satisfactory answers may not be forthcoming): When a patient does not improve, when should manipulation be abandoned? If the patient does improve but only after a long time, did manipulation have anything to do with it?

My general practice is to limit the number of manipulations I will perform without observable results. Every time I treat a patient, I want to promptly find some objective evidence of response. The initial response may be only temporary, and the manipulation then needs to be repeated to determine if stability may be achieved through repetition. But how many? I have

only rarely extended my treatments to ten during, perhaps, three or four weeks before discontinuing unless I have special reasons for persisting. There are just so many "silver bullets" - the number of times a treatment should be attempted before its effectiveness diminishes, if it had any.

Any treatment that can relieve can also afflict! And its misuse is a search for misadventure! Manipulation must never be considered benign therapy!

I have witnessed catastrophes, and I will discuss them. However justification may be attempted, cavalier manipulating is far more an exploitation for the cash register than the provision of professional care. Bad stories of patients who have been victimized by years of relentlessly unsuccessful manipulation are unfortunately true. I have occasionally seen them.

I examined a man with persistent shoulder tendinitis who had been persuaded by his chiropractor to return repeatedly for almost two years of manipulation. I cured it with one injection of cortisone. Such cases are remembered. But the other side of the ledger is also loaded - people who have endured numbers of unsuccessful surgeries and who were cured with manipulation. I've done that, as well.

The need for manipulative effort exists along a spectrum, and sometimes it is only the response that can justify the attempt. A major medical aphorism is: common conditions are, in fact, common, and rare conditions are, in fact, rare. While that sounds obvious, it is essential it asserts an easily forgettable basic truth: rarities do happen and that individual is 100% involvement! Each potential case for manipulation needs to be considered on its own merits because there are always patients who require exceptional individualization, the Ozzie Hansens.

An exact line can hardly be drawn that excludes manipulative procedures despite the presence of other conditions that complicate the consideration. Rheumatoid arthritis of the cervical spine is supposed to be an absolute contra-indication to the use of manipulation, but it is also a question of what technique is used: what specific joints may benefit, and what are their

relationships to where there is jeopardy? I have sometimes manipulated with dramatic success when such “contra-indications” existed.

A member of the U.C. Davis paraplegic basketball team was injured during a game when he spun aggressively and dysfunctioned his mid-thoracic spine in like manner to my little lady in Chapter One. He came off the court in pain. I performed a similar maneuver as he sat in his wheelchair, and in less than a minute he was pain-free and back out on the court.

JOINT HYPERMOBILITY

Joint *hypermobility* is another serious problem. Continually "slapping" it back in place may be useless, or harmful, like trying to balance ice cubes, or repeatedly closing a drawer that insists on re-opening. *Manipulation that predictably provides only a few minutes, or hours, of relief is not only unwarranted, it is exploitive.* Rational therapy seeks to correct the looseness and end the “Las Vegas prayer” – just one more pull of the handle... one more roll of the dice... I will later discuss prolotherapy, an injection procedure that regenerates loose ligaments and restores normal joint mobility.

“PAIN IS A LIAR”

Often, the site of the pain is not the site of the instigating dysfunction. While all doctors are familiar with the concept of *referred* pain - pain emanating from one place but being experienced at another, as when a heart attack is felt in the arm or the jaw - it is not what I am referring to here.

A joint that is pathologically locked may be silent. Then, another joint (or joints), perhaps its mate across the midline (like the paired sacro-iliac joints), has to overwork in an attempt to compensate. To be exact, it has to attempt to *overcompensate*. That is a major mechanical disadvantage. A twin-engine plane with an engine out doesn’t become a single engine plane. It’s a crippled twin. The same applies to the body. It is the otherwise normal *but*

overworked joint that often becomes painful, so the uninitiated give it all their attention, and the problem persists. *The most urgent need is to recognize the restricted, injured joint and then to restore balanced movement - hence the need for manipulative understanding.*

TRIGGER POINTS AND SO-CALLED...

A classical trigger point is a benign appearing area that, when pressed, produces pain at a *distal* site. That is why it is called a trigger. The entire concept became a major problem in medicine when its pure definition was discarded and the term applied to any tender area which was then commonly treated by injection. Decades ago, the so-called trigger points became expediently fashionable, and exponentially so, when the term was finally “validated” with an official reimbursement code number. That made injections appear universally justifiable. After all, if it isn’t acceptable practice, then why was it coded? Doesn’t that confirm an injection’s efficaciousness? And doesn’t that support the doctor’s professional judgment?

No! Not necessarily at all!

Injecting can too easily be a professionally appearing practice, but, in reality, is a profitable evasion of medicine that takes minimal time to administer. Injecting does not intrinsically require concern for the patient’s welfare, fathoming the origins of the clinical problem, or seeking to terminate it at its source. Shoot the patient. Get paid for it, and move on to the next.

“Trigger point” became so popular, it is now a buzzword categorically lacking definition. Still, practices have been built on “having to” inject such sites again and again. After all, if the “trigger point” recurs, isn’t it chronic? So doesn’t it need ongoing treatment? While there are genuine trigger points that sometimes do respond to injection, in my experience, many of them are often associated with dysfunction that respond to manipulative techniques at the *source*, which treats the site of the incitement. But injecting has no regard for manipulative reasoning, is faster, and pays better.

Monitoring how tenderness responds to treatment is similar to the wisdom in observing how a patient's fever responds to treatment. *Unless it gets out of hand, fever is friend, not foe!* It "burns up the bugs" and its course is the best single gauge to judge whether a therapy is effective. *In other words, don't lower fever with aspirin, etc as a reflex.* Tissue tenderness and fever are signs of the body's defense, the course of each being trustworthy guides in the patient's treatment.

Tragically, today, treating dysfunction assiduously in order to most assure long-term relief is increasingly becoming an act of nobility because it requires some thoughtfulness and skill, takes more time initially than an injection and, again, isn't as well compensated financially. All it has going for it is truth, professionalism, and avoiding the risks of injection.

Incidentally, among many knowledgeable investigators, the concept of trigger points as specific entities remains controversial. As an example, one study²⁵ concludes, "This study suggests the usefulness of examining for the presence of trigger points in patients with LBP (Low Back Pain) should be questioned."

SPASM

The general use of the word "spasm" and how it is treated can fall into the same confusion as trigger points, and is among the most misunderstood, misdiagnosed, and mistreated of musculoskeletal conditions. Muscle is the virtual obedient slave of its master, the motor nerve. When the nerve is irritated, spasm naturally results. It is a result, not a cause. It can involve the musculature of an entire back, or it can be exceedingly small and limited to only a single segmental dysfunction, *yet it is still consequential and commensurate to the problem.* Spasm's treatment as the primary pathology flourishes in the world of the Fundamental Flaw.

The drug companies predictably follow the market, so enter exploitation second only to the brilliance of the Vikings who sailed west and planted maps that labeled an ice-forsaken

²⁵ "Intertester Reliability of Judgments of the Presence of Trigger Points in Patients With Low Back Pain" multiple authors, Archives of Physical Medicine and Rehabilitation, October 1992.

island *Greenland* and a near-paradise *Iceland*, thereby protecting themselves from tourists for five hundred years. The drug companies marketed “muscle relaxants” that became among the biggest sellers in history. *Got a pain? Blame the muscles! Pop a pill!*

Because traditionalism does not attend the machinery of the body hands-on, does not check the "hinges," does not appreciate manipulation, it seems that a "muscle relaxant" or injection is considered treatment. Thus, as some chiropractors can be accused of "cracking everything that moves," allopaths (and osteopaths who seek to emulate them) are also guilty of their own predilection expediency - habitually injecting and dispensing of the patient with a prescription.

MY BLUE BALLOON

Maintaining good posture, which I define as standing relaxed and as tall as nature intends one to, is obviously essential to minimize stresses that impair therapeutic success. Otherwise, they can accumulate and cause dynamic breakdown. There are many variations of the theme on how to develop good posture - from the severe military brace (chin in, stomach in, rear tucked under) to other multiples - all of them difficult, especially when not obligatorily done within a social system.

One of the most valuable lessons I teach my patients is extraordinarily simple and requires only one focus. It works well, and to whoever taught it to me, I extend my and many patients' ongoing gratitude.

Consider the posture of a ballet dancer in repose. Everything appears relaxed. The arms hang from the upright torso; there are no considerations about where the abdomen is. In fact, everything just “hangs out.” There is just one vital focus - the position of the chest.

I ask my patients what their favorite color is. (If they happen to say “blue,” I “give them mine.) Then I ask them to visualize a balloon of that color that has been blown up with the most buoyant helium. I hold my hands out in front of me as if I were restraining it. I ask them

to visualize a string a little longer than a foot in length tied to it. I ask permission to touch them at the lower part of their sternum²⁶. Then, holding one hand on top of the balloon, I “attach” the end of the string there, remove my hand from the balloon and ask them to feel the pull of it lifting the sternum.

That’s it. Just the elevation of the sternum, and the entire posture is immediately improved, providing an unstressed foundation for the neck. Respiration improves as the diaphragm is unburdened. Instantly, the individual looks better. It is so easy to do that there can be a tendency to do more, such as tightening the neck or making the shoulders rigid, so I stand there and coach until the simplicity sinks in. If there is difficulty grasping the concept, I have the patient put one hand on my chest and the other at my back so they can feel the physical lift. All that has to be remembered is the balloon.

A BLOCK ON THE FLOOR

I have another basic to offer for back pain that is present with standing - standing at the sink to wash dishes, standing at the sink to shave...The simple trick of standing with one foot slightly elevated can make a big difference. It is the reason saloons usually have long brass rails along the bar. In the Old West, they had to be hauled from far away places, but the rail was usually there, and not for esthetics. It was because cowboys’ backs hurt, and the longer they stood there, the more they drank.

I recommend a block about the size of a Kleenex box. It should be sturdy so that it doesn’t collapse, yet light enough so it won’t be tripped over. It’s worth a try. If it works, you’re welcome.

²⁶ The breast bone.

CHAPTER EIGHT

THE PRODUCTIVE EXAMINATION –

SIGNS FOR THE HUNTER

Maybe we can eventually make language a complete impediment to understanding.

Calvin & Hobbes

Education is a progressive discovery of our own ignorance.

Will Durant

- **A valuable history**
- **A pain scale**
- **Hard and soft signs**
- **The traditional examination for hard signs**
- **Testing your back with forward flexing – *Gotcha!***
- **A realistic back examination**
- **Injection techniques**
- **Totally disabling pain from skin injury**
- **Illustrative cases of persisting pain from lack of fundamentals**
- **Intradermal Vitamin B12 injections**

In the classic movie *Treasure of Sierra Madre*, Walter Houston plays a grizzled old-timer gold prospector, the only one who is experienced among the four men. One of them was Humphrey Bogart in one of his major roles . They are walking along a dry creek bed in the blazing Mexican heat when Houston suddenly goes ballistic, jumping, and hollering uncontrollably. The others haven't the slightest idea what he's so excited about. Only he understands the specks among the pebbles at their feet. Houston knew the fundamentals. He *knew* what to look for. However, in medicine, *the Fundamental Flaw is among the commonest of sad happenings in practices in every city, every day, because doctors lack the appreciation to*

track the clues that are immediately available to them from eyes-on, hands-on examination.

A valuable history:

First, I do not examine for an injury until I can “see” it happening. I persist in my questioning until I do. I want to understand, to visualize the *biomechanics* of what may have happened. If you were my patient, I would hinge many questions around any subsequent changes in your *function*.

- I would want to know about the specificity of the *onset* – if the change(s) occurred from only one event, or from several over time.
- I would want to know the *character* of the pain and its *severity*. When do the symptoms and impairments occur?
- What produces or reproduces the pain?
- Under what circumstances does it happen?
- How much effort does it take to cause it?

All of the inquiry requires committed attention from both of us in a circumstance that must encourage clear answers.

A pain scale:

I use a 0 – 10 scale ,with mutual agreement that “10” represents the worst pain my patient can imagine, such as crucifixion or burning alive. It is critically important, because we may be using the scale for a long time, and I must be as knowledgeable as possible about the results of any therapy. All the numbers above “0” represent pain. So, on that scale, a “4” is beginning to get into the deep stuff, but the way it is too generally used, it’s useless. I have routinely seen “8’s” and “9’s” from people who normally walked into other offices. By my definition, people with such pain were hospitalized, but in those offices, nobody seemed to care. The patients weren’t questioned about it. An unattended questionnaire allegedly inquiring about

someone's pain is deadly. As soon as pain patients conclude that they are (just) part of an impersonal process - that the questionnaire is just another piece of paper, the spirit of relationship – *trust* – unravels. Whatever has been written, I make certain to discuss it. *Communicating* honestly is essential to sustain trust through the trials of such sometimes crisis relationships. Yes, I truly and sadly understand that too many sincere patients feel the need to exaggerate such numbers, attempting to convince that they are really having problems.

HARD AND SOFT SIGNS:

Signs of abnormality occur all along the almost infinite spectrum along which tissues function. There are what I term **hard signs**, the more obvious, the gross ones *that usually occur relatively far along the course of a pathologic process*, distinctly beyond complaints of “aches and pains,” and into territory where x-rays may be abnormal and nerve injury may be confirmable. The term, “hard” is relative. Each test has its subtleties where its truth may lie. The junction where they meld with the *soft signs*, that I begin to discuss next, is also soft.

It is among the examination for the hard signs where, tragically, much of the traditional standard was set in stone: muscle testing, tendon reflexes, and the sensory examination.

What I call the **soft signs** are the “specks of gold.” Their discovery is often the difference between early success and failure. *Each is realistic and commensurate with the patient's complaints! The involved structures may not be actually damaged, but dysfunction may still be so profoundly active that they can totally disable.* In such cases, clinicians need to *seek*. That means knowing how to search with appropriate diligence, appreciating that successful hunters and detectives observe what *is* – *without preconception*, knowing that the body reveals its hurts, so long as it is approached respectfully, and on *its* terms. “*We command nature by obeying her.*”

There is nothing mysterious about soft signs. The beginning of wisdom, as I stated, is that “hard and soft” is often a relative difference - no dichotomies. It doesn't have to be an

either/or. Every test has its nuances and extractable subtleties. All “hunts” need to be performed attentively for their maximal values, beyond what is ordinary in the traditional examination.

THE TRADITIONAL EXAMINATION FOR HARD SIGNS

Muscle Testing:

The prime reasons for muscle testing are to determine the strength and reliability of a specific muscle group - and whether its contraction causes the *pain the patient is complaining of*. The first important instruction preliminary to a physical examination for pain is for the patient to promptly inform the clinician whenever pain is experienced as the examination proceeds. The necessary follow-up question is so self-evidently elementary that it is rarely active in thought: “*Is it the pain you are complaining of?*” Many more than a few examinations have descended to oblivion because the clinician followed the patient’s initial response when the pain was only a novel, transient discomfort that had nothing to do with why s/he was requesting treatment. Every step of the diagnostic effort must be a time of full attention, a time of concentrated, pervasive thoughtfulness. Appreciating such apparently small distinctions can be essential to successful pain diagnostics!²⁷

The examination for *gross* strength would seem to be one of the *hard* signs, yet it is, and it isn’t. It is a hard sign because the test is the traditional technique to grade strength. It is measurable. It is easily a soft sign, as well, because of its subtleties.

It is usually performed by asking the patient to push or pull against the examiner's resistance in a specific way. It is designed not to be a wrestling match. Fairly done, it is an excellent test, although it gives little information about endurance or what happens with the “wear and tear” of repetition. More completeness may require that it be performed a few times

²⁷ Read the Sherlock Holmes stories.

along a range, rather than in one posture. In other words, every test needs to be individualized, if necessary, to amplify the patient's history about his pain and impairment.

Muscle testing offers the opportunity for extraordinarily more information. It requires that the patient mentally process the request and respond without hesitation. So it evaluates intent, "connectiveness," energy, *volition*. All the questions revolve around *consistency*: are the responses compliant with the complaint or not? And if not, why not?

DEMO

An attorney I was not familiar with once referred a woman to me because she had allegedly suffered a severe injury to her arm. She walked into my office, sat down, filled out the forms, and entered my examination room as casually as if she were shopping for sandals. When I began the muscle testing, every muscle "melted" to my touch. Her extremity just dropped away as she passively looked at me. I looked back and told she had two choices. She could walk out, return, and cooperate in a good examination, or she could tell me to go to hell. She said, "Go to hell" and walked out. In a way, I respected her for that. She had fully intended to deceive, and use me to "validate," her "complaint." She was straight about her intent to be crooked. I submitted my report. The attorney didn't refer me any more cases.

When you are a patient, you are expected to provide an honest examination. Reciprocally, you wish any doctor examining you also to be honest - and knowledgeable. However, there are areas in medicine where, unfortunately, such an expectation is not regularly satisfied, and if you are involved in workers' compensation (WC) litigation, you likely know what I am referring to. It is a highly polarized, often unscrupulous business, in which many doctors make a good living prostituting themselves to those who hire them.²⁸

In my WC practice, in the end, about half the patients I saw were referred by "applicant attorneys" – the other side - who theoretically represent workers against their employers. Any

²⁸ Of course, laws vary from state to state, but, in my experience, equity is not the major factor in the equation.

referral to me was a compliment to its source because my reports didn't change to accommodate either side, and I have the "dents" to prove it. So I fed a lot of insecurity into the system. I often heard complaints that I couldn't be used because "they" never knew what my report would state - and didn't I realize how much money I was losing? As a matter of fact, I also never knew what my reports would state until I examined the patient.

Working in such a cynical system, where fees are micro-managed and routinely reduced, encourages the routine rapid passage of bodies through doctors' offices with protocols primarily designed to increase the bill. In that world, procedures that may take time and attention are undesirable and discouraged - and that neglect can kill. A procedure as "simple" as muscle testing can give evidence of deadly disease. Missing the obvious is unforgivable tragedy.

A driver for the Southern California Rapid Transit District (SCRTD) came in with his wife. He didn't look well. He had no pain. He just couldn't turn the wheel of the bus. The company's doctors had seen him for months, passing him through with clinic-mill-variety examinations. The x-rays had been normal, so he'd been put on report for failing to perform his work. He was in real trouble, but the poor man and his wife had no idea how much.

On my examination, his muscle testing was "consistently inconsistent." I was convinced he was trying, but he just couldn't bring it all together in power and coordination. Right there, I did a few more eyes-on tests, sent him directly to the hospital for a confirmatory CT scan, and had the burden of telling him and his wife that he had end-stage brain cancer. The poor man died within a few weeks. I feel a great sadness remembering that story. Only a few more minutes of considerate attention from his doctors might have made the difference that would have impelled them to study further and diagnose his illness when it might have made some difference.

Tendon Reflexes

The "knee jerk," the patellar tendon reflex, is so well known that it is a figure of speech.

Testing the tendon reflexes examines the integrity of a *single* nerve reflex arc from the tendon being tested, through its muscle, along its associated nerve, to the spinal cord, and back. Its prime purpose is to evaluate the transmission of nerve impulse into and out of the spinal cord. When the tendon is properly tapped - and that is a critical fundamental - the normal response is a reliable, indefinitely repeatable, moderate muscle contraction that moves *only* the joint the tendon crosses.

Testing tendon reflexes helps to answer one of the fundamental questions: is there substantial nerve damage or not? The test is a hard sign when it answers that question. It can also be a relatively soft sign in its nuances. There are many variations from the indisputable normal, and when they occur, they need to be further evaluated. However it may appear, tendon reflex testing is not just the eliciting of some response:

- Is the reflex bilaterally equal - *on careful analysis*?
- Reliability of repetitive response must be assured. Normal is indefatigable uniformity.
- Or does the elicited reflex “*sputter*”?
- *Does the correct muscle contract?* For instance, if the biceps tendon is being tested, does *only* the elbow flex, which is normal, or is there a response elsewhere, like the fingers flexing or the forearm pronating? They are called *inversions* of the reflex. It is not normal. It means the impulse traveled to the spine, got confused, and exited the spine through the wrong “door.” Something’s not right in the spine. If you turn on the switch in the kitchen, but the lights in the bedroom go on, there is obviously a problem. Inversion of a reflex is a powerful clue, and ignoring it is a mistake.
- Is the reflex producible in more than one body position? For instance, when there is a question about an Achilles tendon normalcy, it can be tested with the patient in different positions, like kneeling on a chair with the feet extended off it. It can even be played like a xylophone, all along the tendon’ length and the bilateral results compared.

Nothing is set in stone. Every examination has its nuance. During an examination a few

years ago, I elicited a reflex I had never seen before: I tapped a woman's mid forearm along its outer edge²⁹ that should have caused her wrist to jump. Instead, it contracted muscles to her shoulder blade so that her whole arm rotated away from her body. Yes, there was a response. But it certainly was not normal. It was an expression of cryptic neck pathology that had to be evaluated - and that was an essential clue.

Usually, a normal tendon reflex reliably responds to the first, and every, tap. However, if a tendon reflex is not present, an attempt needs to be made to restore it: the lack of response may only be from a temporary interference “in the line.” Employing a “disinhibiting maneuver” usually resolves the issue of whether the reflex is truly absent or it is only temporarily suppressed: clamping the jaws, or flexing the interlocked fingers of both hands, and pulling one hand against the other in front of the chest while the tendon is being tapped, may release the reflex. If it does, the need for the maneuver needs to be noted. Also, is the inhibition bilateral? Incidentally, the bilateral absence of tendon reflexes is not necessarily abnormal. They may not be present in well-conditioned athletes.

In the lower extremity, reflex interruptions commonly seen with lumbar disc herniation may be observed at:

- the patellar [knee jerk] reflex, which is part of the 4th lumbar nerve root arc
- the achilles tendon reflex, primarily tests the 1st sacral nerve root arc
- the 5th lumbar, one of the most important, *doesn't have a reliable tendon to test*, which leaves a gap that has to be compensated for

DEMO

Sensory Testing:

Here is where the shift to the “soft” side begins to dominate because the entire test is

²⁹ Brachioradialis reflex.

subjective: what the patient says - *is*. Since s/he is unaware of the technicalities inherent in the testing, this is also one of the easier tests to be glossed over without arousing suspicion.

Since examining sensation depends on the patient's report, s/he must clearly understand what will be done. Establishing clear and logical ground rules, sensitivity, diligence, and mutual cooperation are essential. I assure my patients that under no circumstances will I try to fool them.

Obtaining an accurate result takes time.

When we lived in Palos Verdes, California, we had a large addition put on our home. I arrived home early one day while a workman was installing the sliding mirror doors to the wardrobe in our bedroom. As I watched him working rapidly and inserting the screws into the top rail against the ceiling, he looked down from his ladder and gave me a broad smile while rapidly twiddling his screwdriver. In retrospect, I should have reacted to what I sensed. I should have told him to get off the ladder and ascertained why the screws were going in so easily. I didn't. Some months later, the rail began to twist and loosen from the ceiling. Then I confirmed that he had conned me. He had just been pushing the screws only into plaster. Not one of them was into wood. Like the sensory examination can be, he had exploited the invisibility inherent in what he was doing. Patients are not usually aware of the essential subtleties of the sensory examination that makes it so potentially valuable. In contrast to sloppily installed doors that might have crashed and injured someone, they were still only doors. The consequences of a cursory sensory examination can seriously affect a life.

The sensory examination I refer to studies *superficial* (protopathic) pain perception (there is also deep pain perception). This test is for the "*ouch*" response. The nerves being tested are completely different from those for "*epicritic*" perception – precise sensory discrimination where the appropriate response relates to fine perception, temperature, sharpness and dullness.

The test is best performed with a pin, like a safety pin. A hypodermic needle is too sharp.

The success of this essential depends on reliable, clear communication. My patient has to completely understand what i need. I develop a scale, a "currency" with my patients. We find a body site where there is agreement that the pinprick is “normal” and give it a standard value, like a \$1.00.

Areas corresponding to nerve “territories” on one involved side of the body are then compared to the other. A few pricks are often necessary because nerve endings enter the skin like petals on a flower around an “empty” middle, so a pinhead may happenstance touch a site with no nerve ending or another normal site right on the tip of a “petal” where the sensation may be exaggerated.

The patient responds to one, or a few *gentle* pin pricks in same areas of skin on each side of the body, for instance, lateral thigh on the right, lateral thigh on the left. The patient is not asked only if the pin prick was felt. Again, I emphasize the report of the *ouch* quality. I don’t want my patient pondering. No one does that if they step on broken glass in their bare feet. I want the patient’s response in that same sense of immediacy.

If it is clearly communicated that each side is normal, the test proceeds. But if one side is reliably considerably different from the other, it needs to be decided which is the abnormal side. Is one side too painful, or is the other side less responsive? Sometimes the question has to be asked if both sides are abnormal. A difference in perception needs to be rechecked to be refined. A significant difference exceeds about 10%.

Specifically, *hyperalgesia – abnormally increased sensitivity - is more than \$1.00*. If there is an increase - which is very important to note - the “normal” side may then appear “less than normal” when it really isn’t. So the test must, as I stated, be conducted as more than just a choice between one side and the other. It may take time. The *study* may be completed in a few minutes if all is near normal, but it can never be properly done in a rush, as it sometimes is with the use of a *Whartenberg Wheel*. This device looks like a dressmaker's wheel with sharp points around it that is rolled over the skin, but if it is done too rapidly, the sensations summate into an

intimidating, overloaded barrage of confusing stimuli, and the value of the test is more than lost.

As a general rule, changes in findings, especially if they are subtle, may only be appreciated by comparing examinations at different times. *In fact, every test is a point in time.* Each is an opportunity to *observe* and document a record that may later have valuable implications. Nothing in a directed examination can be casual.

While the patient is sitting in front of me, I palpate the skin to evaluate temperature balance. It's a soft sign I will discuss shortly.

Measuring

Descartes could have been considering medical measurements when he said, *"The truth lies in small distinctions."* With all the variability in the body - particularly of limb circumferences and comparative grip strengths - it is incredible to me how measurements are so frequently recorded in medical record as *exactly the same, or ending in "0" or "5."*

The circumference of a dominant limb should be greater, if only by a fraction. This is one place, when there is need to establish an unequivocal baseline, that it is essential to measure accurately, because it may be a valuable tool to follow progress. Being able to measure something is an opportunity to be completely objective *if the measurement is accurate!* Because limbs are not geometric cylinders, circumferential measurements cannot be accurately compared *unless they are taken at identical sites*, a specific distance from a landmark, such as the crease in the skin where a joint flexes (flexion crease). Only then are they meaningful. Yet, it is rare to find such a site stated in medical reports.

Regarding grip strength, a dominant hand should always be stronger. Equal grip strengths is a sign that something may be abnormal. *Every test of muscle power exposes volition!* Is the person exerting maximally or not. With maximum exertion, the results are uniformly within a narrow range. However, if someone consciously tries to tamper with the

test, the result is almost always widely spread. Any deviation needs explanation. Attempting to cheat the test is one possibility. Pain produced by the test is another, as is a brain lesion, and other abnormalities.

The standing flexion test (SFT)

When the low back is examined, the patient will almost certainly be requested to bend and try to touch his toes with the knees straight. Except to demonstrate gross impairment from major injury, that bare maneuver is only a basic beginning of the test's potential. In general practice, the test is not only limited, it can easily mislead; yet it is routinely, unsubstantially elevated in importance for lack of the broader understanding. Fundamental Flaw.

Measuring only how far the fingertips can reach to the floor, which is a requirement of many formal governmental, insurance, and other examinations, ignores the nuances that give the test its value, however limited. When the back is not skillfully examined, as I will soon describe, and the SFT stands alone and is considered diagnostic, its crudity causes enormous mischief, and worse. Basically, most bending of the trunk occurs at the hip joints, not through the spinal structures, but flexion is certainly restricted if a low back injury is severe enough.

Regardless, any active motion is influenced by volition, as I have stated. It can easily be a subjective, not an objective test. Some people bend as far as they can despite pain because they are asked to. Others decide not to, whatever their reasons may be. *Therefore, the test does have a special value, but the traditionalist too often reverses its logic!* Those who do their best *despite* pain, which includes most people, are demonstrating their honesty and honoring their relationship with their doctor by accepting some pain to prove it. But too often doctors don't reciprocate. They can almost gratefully jump to the erroneous conclusion that the patient is faking! "You told me you had pain, but you bent all the way! **Gotcha!**"

Such a patient, in fact, *passed* the test. The doctor *failed*. The patient who bends, who doesn't exaggerate, and who reports pain somewhere in the range, deserves instead an "**Atta**

boy.” It is, in its essence, a credibility test that so often is not appreciated. *From any sensible point of view, how many people are so stupid that they would voluntarily bend over all the way if they intended to deceive?* Deceivers are primed for that test because it’s so common. But some forget.

I cannot forget the young woman who, in response to my request, bent right down spontaneously and gracefully. Her vertebral column was almost an uninterrupted, beautiful curve - demonstrating good articular motion at all joints - when she remembered. Suddenly, she stopped, stiffened while twisting her flexed torso and extending her neck so fully that she could look up at me as she “furiously” accused *me* of hurting *her!* She remained there marvelously, athletically contorted, impossible for anyone with any back injury at all, before slowly, laboriously feigning injury as she returned to pathetic erectness. It was comical. With her, it really was a “*Gotcha.*” She did it to herself.

Incidentally, I never ask my patients to perform any activity beyond their pain limitations. I want to know whenever patients encounters pain, but I don’t want them continuing into it. I want to know where the pain is - and isn’t. I urge them to give me feedback to everything I am doing to them or asking them to do. The “gotcha doctor” doesn’t likely do that. His rush to judgment almost assuredly terminates any attempt to professionally analyze as he too easily slips into his nest of self-justification: *If someone’s trying to deceive me, why bother?*

Basic truth: *Very few allopathic doctors are comfortable with treating back pain. Deep inside, in the quiet of the night, when no one else is looking or listening, they know they have inadequate understanding unless imaging studies really do show something of major significance, or the hard signs are so established that they have good reason to feel safe.*

Now, let’s consider what else might be observed as the patient bends forward (and back and to the sides).

- The “*way of going*” is important: is flexion a smooth down and up, or is there a “glitch” that the back has to work its way around?
- What can be observed at the spinal segments? Is each linkage contributing to the development of a progressive curvature where it is supposed to occur? Or does a large segment of the spine move “en bloc,” as if it were one piece?

Complete examination requires that the patient’s back be fully exposed and that the examiner is (sitting) directly behind the patient to observe the totality of movement.

YYY

Leg length

Evaluating relative leg length is critical because the healthy, symmetric back arises from the balanced foundation of a level pelvis. The question confronts another trap in the traditional back examination. Some people do, in fact, appear to have legs of different length. If it is symptomatic, some call it the “*short leg syndrome*.” It may be documented by taking comparative measurements from the umbilicus (belly button) to the bottom slope of the inside of the ankles, and again from the front of the hip bones down to the same site. There is another factor to be considered: the legs articulate with the “hip bones³⁰” in sockets³¹ that are situated below the ilium’s axis of rotation with the sacrum. The positioning results in the sockets’ motion along an arc – like a cam action. So, sacro-iliac dysfunction can displace the leg with it, causing the *appearance* of leg leg imbalance, which corrects when the dysfunction is corrected.

Observing the level of hands placed on the crests of the ilia can be reliable. There are technicalities here, but of critical importance is that “length discrepancy” may not be real.

Another way to assess real or apparent leg length is with the patient supine.³² The assessment can be done by virtually anyone who can follow simple instructions, but be aware

³⁰ ilia. Singular - ilium

³¹ acetabuli. Singular - acetabulum

³² Face up

that the test has its subtleties and is relative to other effects. The patient lies with hips and knees flexed. The patient elevates his buttocks slightly up from the table and then “plops” it back down. Consciously lowering the buttocks allows the body to “accommodate” around a possible dysfunction and negates the test. Before straightening the legs on the table, the relative heights of the knees can be observed. They should be equal. The legs are then straightened out onto the table. The examiner places his thumbs at the same sites on the lower edge of the medial ankle prominences (the medial malleoli) and observes the level. It is another gratifying aspect of manipulative care that the finding can appear “abnormal” and instantly revert after a successful manipulation.

If there is a (real) difference in lengths, the examiner may conclude that one leg is shorter, which could be confirmed with x-ray, now CT scan. If so, how much “difference” makes a practical difference? The lore is that it must be more than “one-half inch” to be a possible reason for back pain. Because each individual is unique, such convenient numbers are cause for suspicion, a number trapped in dogma. Elgin Baylor, one of the great basketball players, reputedly had only a one-fourth inch difference in his leg length, yet his back pain cleared only when a heel lift was added to his shoe. I’ve seen similar cases in my practice.

Because of the “short leg,” an industry of “heel lifts” developed. If the lift helped, then it “proved” the condition exists. If it didn’t, it was removed. There is some merit to such expediency, but it is also too often too easy a “cop out” because heel lifts are not necessarily the remedy for “short leg.”

UNEQUIVOCAL SOFT SIGNS

Soft signs are the same for the game hunter the clinician hunter, the declarative flecks of gold on the ground, reliable guide for those who appreciate them. Familiarity with many of them requires experienced observation, usually palpatory skill. Performing these tests with an open mind and gentle hands is an excellent way to develop it. Most of them are focused on

understanding what happens around individual joint articulations, which is almost synonymous with diagnosing dysfunctions.

Virtually any joint can dysfunction. It can “jam” - partially or completely, or become *hypermobile* - or intermittently, both. It is well worth repeating that, if untreated, dysfunction associated with looseness can begin a degenerative cascade that distorts the local architecture and disseminates symptoms distantly as other joints attempt to accommodate and are adversely affected. One dysfunction can incite an entire series of disabling events, as I will describe several times. Dysfunctions were involved in almost every case I will describe. They are *common*.

The joint may be as large as the sacro-iliac or virtually toothpick-sized. *The inability to identify dysfunctional joints and relieve them is at the core of the Fundamental Flaw. Learning to identify them is the first step towards its resolution.*

A REALISTIC BACK EXAMINATION

You consult an eyes-on, hands-on clinician. I’ll make this personal and try to step into your doctor’s shoes. I make no presumption of what I would consider expertise, but these are my basics and some of the tests that I might perform, which I will sometimes describe in detail.

You are wearing a gown that exposes your entire back. I am initially seated behind you and observe your *symmetry*. The catalog of tests for this is too extensive for here, and would interfere with my overall flow, but the basics are:

- Overall view of the general posture.
- Is your back fairly aligned or shifted? If I drop a plumb line from the first thoracic vertebra, does it pass down the middle of the buttocks?
- Is there obvious spasm? When I slowly run my index and middle fingers down on each side of the spine, is the palpation symmetric?

Pelvic level:

I sit on a stool directly behind and I observe how you preferentially place your feet. I then request symmetrical “squared” alignment about the width of my foot apart. I place my foot between yours to assure it. I instruct you to be sure that your knees are not bent.

I place the sides of the proximal digits of my index fingers just below your iliac crests, the top of the curvature of your hip bones. I then move my hands superiorly “milking” away as much soft tissue as possible so that I am palpating the bone itself. Then I let my thumbs fall naturally onto your back, and from observing my index fingers and thumbs, I determine if your pelvis is level. Then I examine for pelvic rotation.

DEMO**Pelvic Rotation:**

With low lumbar dysfunction, the pelvis can be abnormally rotated. While your head, shoulders and feet are aligned directly straight ahead with your knees straight, your pelvis may be relatively turned right or left, a few, or, infrequently, several degrees. I reach around your hips with both my hands and place my middle fingers gently on the prominences of your hip bones in front, the *anterior superior iliac spines*, the “hip points” of football injuries. As an anatomical reference, from there, the tops of the iliac bones curve in a gentle arc posteriorly where another set of prominences is easily palpable at about the same level. They are at the upper parts of the buttocks about two inches from the midline, the *posterior superior iliac spines*. We will discuss them shortly. I allow my hands to rest on the sides of your hips and then observe and sense whether my hands are symmetrical, or if one hand is more anterior than the other. If it is, unless there is an anatomic variant, the pelvis is rotated. One of the great advantages of these biomechanical tests, as I have stated, is that they are totally objective and can be reassessed immediately after a therapy.

During this examination, I do not concentrate on where you are experiencing your pain! As I discussed, that information may be deceptive. My focus is on restoring biomechanical balance and then considering what effect it may have on the pain and impairment. Beginning the examination from your biomechanical fundamentals is the only reasonable way I know to assure as much thoroughness in the search as possible.

Considering having your back exposed, I have never seen a chiropractor do that, which may be a reflection about why cutaneous hyperalgesia is not well known to them.

Repetitive Bilateral Lateral Bending (RBLB) – A soft sign from just observing

An old osteopath taught me to look for “flicks” in the muscles. It is pure physiology. One of the marvels of body action is how muscle masses contract *as if* they were one piece, while the reality is that movement results from a coordinated convergence of countless, individually innervated, microscopic muscle fibers under the control of hosts of spinal computers that integrate them into the *appearance* of singleness. Dysfunction, however, can cause irritable “misfires,” and when they happen, small fascicles - the initial groupings of muscle fibers - may fire out of sequence and become visible as transient “flicks” under the skin. I call them *action fasciculations*.

This and a few other tests can be especially valuable when the pathology is “hiding.” In the beginning, there is no discernible abnormality. The dysfunction is irritable but dormant. The tissues are challenged. Repeatedly moving the segment, or “strumming” it with the fingers, incites and flushes the culprit right before the eyes (or within the hands), and the hunter is rewarded.

I developed *Repetitive Bilateral Lateral Bending* (RBLB), and usually study it after assessing pelvic rotation with the patient in the same feet-squared posture. It is a hands-off test, one of the many soft signs that are *observed*. As Yogi Bera said, “You see a lot just by looking.”



The patient remains erect while “tick-tocking” laterally like a metronome, side to side, as I remain attentive to what I have the patient to tell me - what he is experiencing as he moves. I specifically request that the patient report like a compute – as little affect as possible – as much observation as possible - as the patient continues to move in one direction, then the other, reaching down one thigh with a hand, then the other, *the head going with the motion*. Back and forth, no rush, no jerk, no pause, no rotating. I try to provide some side lighting to enhance shadowing, which helps me spot the “flicks.” Once an examiner becomes accustomed to the normal, the deviations become obvious. Nothing must be assumed. Nothing is casual.

Normally, the lateral curving of the spine develops gradually and is bilaterally symmetrical. *The site of the apex of the arc doesn't vary and is never a distinct angle*. The muscles along the spine work with the appearance of a single unit, as I described. Tick-tock, tick-tock. Several times. Always the same.

Abnormally, even with only a one-segment dysfunction, the picture is entirely different as the symmetry breaks down. The curvature to each side is clearly different. A distinct angulation is often seen because intervertebral motion is locked at one, or several sites, so “semi-rigid rods” develop. The site of the angle may dramatically move up and down the back as the “pendulum” shifts side to side. From the disturbed coordination, “misfires” - *action fasciculations* - may be seen. They are never normal. They can never be manufactured voluntarily. They are pure objective soft signs. If the condition is severe, action fasciculations might be seen even as the patient stands motionless. If they are hiding, RBLB might provoke

them, which is the reason I prolong the test, if necessary, through about six cycles. The presence of action fasciculations obviously raises the ante from a “simple” joint dysfunction towards nerve involvement.

DEMO

The Hip Drop Test:

While the patient keeps both heels flat on the floor, one knee, then the other, is partially flexed, “dropping” each hip, causing the hips to sway one way, then the other - like dancing - as I observe the low lumbar vertebrae and compare the symmetry of motion to each side.

Normally, the curvature to each side is balanced, and virtually all the body motion is laterally directed and fluid.

Abnormally, dysfunction disorganizes and stiffens the flow, and can even cause the patient to have to flex forward, or even grossly rotate the pelvis in an attempt to accomplish the movement.

DEMO

The Standing Sacro-Iliac Flexion Test

While the patient stands in the same position, I place my thumbs firmly against the undersurface of the prominences at the posterior end of each iliac crest, the *posterior superior iliac spines* that I previously described. Maintaining my thumbs there, which takes a fair amount of pressure, I ask the patient to keep the knees straight and slowly bend forward (flex), commencing with the head.

I begin by looking up at the head to assure that the flexion commences there – *and I will assure that the return to the erect posture is accomplished by the patient extending the neck last.*

That is important. If the head is lifted while the patient is still flexed, the “erector spinae” reflex fires and could compound the injury.

As the patient continues down as far as possible, or until pain onset, I follow the curvature of the spine from the top, observing for any interruptions in the flow, segments where a whole section will move at once, the “en bloc” I previously discussed. At the same time, I continue to monitor for any movement in my thumbs. After the patient has flexed about thirty-degrees, I shift my center of attention to my thumbs, or as soon as I sense one of the them drifting superiorly, or the tissues tensing.

Normally, my thumbs move little and remain symmetric, with essentially no increase in the underlying tissue tension as the “hip bones stay back,” while the sacrum slides forward along its sacro-iliac joints.

What does it mean if one of my thumbs moves up as the patient flexes? The innocent conclusion is that since it is “moving,” it is normal and the other, therefore, is “stuck.” The reverse is the case.

Abnormally, the side that is “moving” is stuck. Its *apparent* motion is from its being dragged *along by the sacrum* as it moves forward and down. The stationary side is staying where it should as its articulating with the sacrum is operating normally.

DEMO

Palpating vertebral dysfunctional rotation:

A sine qua non³³ of soft signs is palpating vertebral *segmental dysfunctional rotation*. In one technique, I place my thumbs on both sides of the spine over the sites of lumbar “transverse processes” a little more than an inch to the side of the midline. After I observe the symmetry of my thumbs – whether one is more anterior than the other – and the tone of the tissues under each thumb, I ask the patient to slowly extend, bend “rearward,” and then flex, bend forward.

³³ An essential ingredient. “Without which there is none.”

Normally: I palpate no relative rotation. As the patient flexes and extends, my thumbs symmetrically move in and return as the normal tissue tension remains essentially unchanged.

Abnormally: a rotational component of dysfunction is confirmed as, during the movement, one thumb moves frontwards or backwards to become symmetric to the other. Abnormal rotation denotes dysfunction in other planes, as well: all of a joint's motions are intrinsically coupled: if it is "jammed" side-bent, or flexed, it will be abnormally rotated, as well. Palpating the relationships with the movements also designates what restorative maneuver to apply.

DEMO

Palpating intervertebral motion side-lying:YYYY

A very simple test I learned very early became specially impressed into my memory because of what happened when it was shown to an orthopedic surgeon. As he performed it for the first time, he paled and began to sweat as he uttered, *"I've operated on backs for thirty-five years, and this is the first time I've felt it move."*

You lay on your side on the examining table facing me. I fully flex your hips and knees and place your forelegs against my abdomen. Then, as I rock back and forth along the table, I cause your hips to flex and extend and transfer the motion to the vertebrae where my fingers sequentially palpate the midline spaces between them – the intervertebral spaces - and assess their relative motions as they "open" and "close." With dysfunction, one or more may be "locked" while adjacent ones move appropriately.

DEMO

Skin temperature:

The skin temperature should not have to be considered a soft sign. What could be more a hard sign than taking a child's temperature? But when it comes to what needs to be hands-on medicine, it isn't thought about. The inclusion of such palpation derived data is hardly seen in reports, however it is essential. Observing the lack of normal isothermia, essentially, bilateral symmetry of the heat pattern, is important because it is a proof that an abnormality exists. Persistent variance objectively demonstrates imbalance of neurological influence into an area. In some back injuries, the heat can literally be felt from inches away, while in others, there is a clear relative coolness.

Appreciating whether the skin temperature of similar parts is similar, *isothermic*, or dissimilar, *anisothermic*, is one of the oldest clinical tests known to medicine. I will discuss its significance more in the chapter on the fate of neuro-musculoskeletal thermography, invaluable instrumentation for observing and recording the fullness of the sometimes exquisite gradations that can be seen, so I will discuss only a few essentials here.

The exam is done with a warm, quiet hand first feeling one area, like the medial thigh, until the sense of its temperature is comfortably accepted by the examiner. Then the other side is examined. The testing proceeds throughout the part under examination, whether it is a leg or the abdomen.

Hippocrates used it. He would cover an area of pain with slip, the material pottery is made of. The area that dried first was the site of increased heat within. You will read that one of A.T. Still's formative observations as he reluctantly originated the osteopathic profession was observing differences in skin temperature in a child he was holding.

Gluteus Medius Spasm:

The gluteus medius lies in the postero-lateral aspect of the buttock, roughly running down from the hipbone just posterior to where your arms normally rest at the side while you stand, and it inserts into the "greater trochanter" of the femur, the large leg bone. *In my*

experience, persistent gluteus medius spasm may be the last repository of an otherwise completely resolved low back injury and the sole cause for unremitting pain and impairment. The muscle is tender and characterized by "ropey" spasm - thick distinct coarse bands in its mass. It is more easily palpated with the patient lying prone.

I hold my fingers firmly like the tines of a rake and move them *transverse (across)* the muscle fibers as if I were strumming the strings of a deep guitar. Normally, the "strings" shouldn't be there, and the area shouldn't be tender. Patty-cake-type massage is pleasant and for all sorts of needs, but here, it is useless. *Deep transverse massage* is necessary (as well as a few other techniques).³⁴ I *strum*. Just a few times. Too much irritates. I often teach an appropriate person how to do it so that it can conveniently be done a few times a day at home. In less than a week, the procedure usually becomes painless. When the fibers are "tough," the treatment may have to persist for many months, but eventually it is likely to be replaced with tissue of normal tone.

A woman was referred to me who had suffered unremitting low back pain for twenty-five years. This was her only finding. Treating it only with deep transverse massage and a stretching technique completely relieved the totality of her pain in only a few weeks.

Please do not miss an important significance of what I just related. I confidently stated that, "This was her only finding." The thoroughness of my examination removed from my consideration virtually all other possible sources of her pain. I listened to the tissues. In her case, there were no abnormal biomechanics to treat.

I treated another patient who had fallen backwards down a full flight of stairs. She sustained a number of injuries including to her low back. There were no neurological abnormalities, but her low back pain was often disabling. Examination of the right gluteus medius revealed remarkably tender deep thick "ropey" bands. As they responded to treatment, the discomfort commensurately diminished as smaller bands continued to be diffusely palpated

³⁴ CounterStrain can help here adjunctly or of itself.

during the two months of treatment. She became asymptomatic with the resolution of the last strand.

The Oscillation Response

I discovered the Oscillation Response, and while it remains only a clinical impression until a controlled study is done, in my experience can be the most sensitive clinical evidence of lumbar injury associated with nerve root damage (radiculopathy), commonly called sciatica, that I have encountered. It is one more application of pure physiology.

The paired muscles that cross a joint, front and back, normally act in balanced tension accomplished through the *myotactic* reflexes that originate in a specialized mechanism in the muscle mass and in its tendon. Their usual activity is to maintain the muscle's resting tone and prepare appropriate tension for an anticipated task. Watching a cat tense to make a precise leap demonstrates its action well. In my experience, a back injury with nerve involvement can disturb the reflex very early on in. Similar to what happens when there is a slackening of wires whose normal tension is intended to support a high pole, a relative floppiness of the joint develops. *The involved muscles become relatively hypotonic, as well.*

The relative atrophy and joint laxity are evaluated by comparatively palpating the muscles for tone and then shaking the joints in a prescribed manner. The test is most valuably performed on the ankles, which, of course, need to have not been otherwise injured.

The muscle palpation is performed with the patient lying supine and relaxed. The front muscle of the foreleg, the *tibialis anterior*, runs along the lateral side of the large bone, the *tibia*. I evaluate the tone by observing its contour and by gently pushing down on its mass.

Normally, with experience, the curve of the muscle is noted and, like any other normal muscle, its tone is characteristic.

Abnormally, the bulk of the muscle is flattened and the tone is distinctly less, even distinctly soft. Comparison to the other side may emphasize the difference, but, *of course, there*

is the possibility of bilateral pathology in virtually all conditions.

Palpating the calf muscle, the *gastrocnemius*, is more interesting. I stand at the patient's side and lift each foreleg from the table with both my hands, with the fullness of the calf resting on my partially curled fingers so they push into the tissue mass. I gently jostle it up and down, using my shoulder muscles, even my hips, so my hands are left free to palpate. Imagine holding some small weights in your hands and moving them up and down to determine their relative heaviness.

Normally, the muscle tone doesn't displace for my fingers.

Abnormally, my fingers sink further into the mass of the hypotonic side.

I perform the *oscillation* by firmly grasping the lower foreleg in both my hands and impart a forceful downward and medial shake along a line directly through the ankle joint. I repeat a few times to get a good sense of the joint's "looseness" – its comparative floppiness.

Normally, there is minimal movement as if moderately hard rubber were stretching some, and it is symmetric with the opposite side.

Abnormally, there is an unmistakable floppiness of the joint.

Sacro-Iliac Glide:

Every joint, like every hinge, must have some "play" in it. It is abnormal if it is totally rigid. Testing the "play" of all joints related to a problem is fundamental.

I examined a retired Navy Seal Lieutenant Commander. Bill is not a man to be taken lightly. He had arisen from his chair about five days before and developed diffuse, unremitting, right-sided low back pain. His examination was entirely negative except that his right sacro-iliac joint was stuck.

I performed the test with Bill supine. I stood at his right side and bent directly over his pelvis, placing my hands on his anterior superior iliac spines, my elbows "out" so that he and I formed the semblance of a circle. Then, one side at a time, I directed

force from my hips and shoulders - *not my arms* - through an imaginary line through each joint as if I were “sanding” one side of it with the other. My moderate thrust *down and towards his midline* delivered a slow “urging” motion as I sensed the response.

Normally, the joint “gives” a little, like the stretch of a thick piece of rubber. The procedure is painless.

Abnormally, there is a fixation. The lack of a buffer transmits the force through to the opposite side, into the other hand. Bill’s right SI joint was locked and the effort caused pain. The Standing Flexion Test confirmed, as well.

As soon as the joint was manipulated free, Bill immediately arose from the table, totally functional and pain free. The disturbed mechanics of that single joint had caused the entire pain syndrome and provided all the answers. No x-rays could have. No pills would have relieved the dysfunction although, unquestionably, time and serendipitous circumstance might be therapeutic, like an “advantageous” fall or kicking an engine that won’t turn over – and sometimes it happens.

While I was teaching at USC, a neurology resident asked me to see a young soldier who had requested care because of recent low back pain. After I examined him, I was concerned about the possibility of serious disease and told the resident that I’d prefer to have him admitted and further tests done.

He didn’t call me back concerning the studies. When I saw him in the hall a few days later, I asked him what happened. His face twisted into perplexity. He told me the young man had gone to move his car before being admitted. It had a flat tire. He’d kicked it. There was a “pop” in his back, and all the pain instantly disappeared.

I received a letter from Vendyl Jones. He had injured his back again and was told that his x-rays revealed “remarkable sacral rotation.” He related that he had subsequently been in a boat and fallen into the river. The current was swift and had bounced him painfully over the underlying rocks, but when he managed to get out his pain was gone. I suggest the manipulative

approach is less risky and more reliable. YYYY

Sacro-iliac self-mobilization

If you have restricted sacro-iliac motion, a self-care exercise might help loosen it up. To perform it, lie supine. Extend your arm on the same side as the involved SI joint at a right angle to your body. Your elbow, where it is, becomes your target. Then flex your hip and knee, grasp the knee with both your hands and gently rock it back and forth, *toward and away* from your elbow. Gently rock. *Don't thrust. Don't force. Be patient.* Start slowly. Perform the exercise once, or a few times a day and see what happens. *But the attempt will not likely replace the need for competent care.*

DEMO

Another face of cutaneous hyperalgesia (CH)

Cutaneous hyperalgesia, which I previously discussed, is arguably the most easily discernible of the soft signs. When it occurs as a reflex from dysfunction, it is silent and must be elicited. When it results from *direct* trauma, *it can be the sole cause of unremitting, totally disabling pain.* Direct trauma CH is among most easily diagnosed of conditions and is virtually instantly curable.

Direct trauma CH is not usually associated with other signs of injury, such as deformity, swelling, limited joint range, or atrophy. The area may be anisothermic (warm), but CH must be suspected from its circumstance – the result of a contusion associated with overbearing persisting pain with exquisite tenderness in the overlying skin. It is among the most unknown of the soft signs, although it is specifically and easily diagnosed with just the gentle scratching of a pin over the area to demonstrate it and delineate its sharply demarcated border.

The condition is a close cousin of *reflex sympathetic dystrophy (RSD)*, which, in its full expression, is among the most dreaded complications of any injury. RSD was first diagnosed in the Civil War by Dr. Weir Mitchell, a Union Army physician. He described soldiers who had been shot in the shoulder and sustained nerve injuries that included the autonomic nerves, which mediate automatic functions, such as blood flow and sweat. The unbearable pain of it is unending, and even a waft of air sends sufferers into wails of unspeakable agony. If the injury didn't kill them, the only escape was suicide, and all the unfortunates eventually took it.

THE INJECTION TECHNIQUE TO RELIEVE DIRECT TRAUMA CUTANEOUS HYPERALGESIA

Direct trauma RSD comes in all sizes. It is diagnosed by gently scratching the skin with a needle. The border of the area of discretely exquisite tenderness is marked. The *universally* successful treatment, in my experience, is an injection that is so simple that a cynic will more easily scoff than try it. Its giant bonus is the virtual absence of complications.

I was taught to use Vitamin B12 (cyanocobalamine), 1000 mcg diluted 1 cc. in about 30 cc. (1 ounce) of injectable saline. People have asked me if other solutions, such as local anesthetics, might work. I respond that dilute Vitamin B12 works so well that I have no interest in performing a fairly painful series of injections just to find out. And, there are good academic reasons for Vitamin B12's usage here. It is an essential for nerve repair.

The solution is injected *intra-dermally*, *into* the skin, not under it. A very small-bore needle, not larger than 25 gauge, is used. A series of wheals, like skin tests, or mosquito bites, are raised to completely cover the involved area. Almost immediately, the skin becomes temporarily numb to pin scratch, *and the pain syndrome is terminated*. Occasionally, a few more wheals are necessary in the periphery. Again, it is one of the very few remarkable treatments that is safe and has no contra-indications.

I learned about the techniques while studying *Neural Therapy*, a technique that

originated in Austria. They teach that, because of the skin's complexity, any scar anywhere should be considered as a possible source of problems anywhere else. It is excellent specifically for the treatment of tender scars, but I have had a few failures here and some only partial successes. The injection of a scar must leave no "skip areas." The entire scar must be raised as one confluence. I was startled by some of neural therapy's techniques, but will be forever grateful for learning about these.

PHOTOS

A few cases

I was in the New York area and happened to drop in at the Nassau County Medical Center. They were again treating a young woman had fallen and struck her right knee directly onto concrete some weeks before. The knee itself had not been damaged, but she continued to experience intense, unremitting, totally disabling pain that intensely flared with any weight-bearing, and had failed to respond to their previous therapies.

The specific site of injury, about a centimeter in diameter, was so exquisitely tender that she couldn't tolerate even the lightest touch to it. The young resident physician, in fact, the staff present were unaware of this condition. As he squeezed her leg attempting to mobilize the joint, she responded as if he'd stuck her toe into an electric socket.

Looking closely, the point of contact had a warm, shiny redness to it. It was especially difficult to see because she was a maximally pigmented black woman, but the "shininess" is distinctive and unforgettable when it is present and its significance is appreciated.

I took a pin and started to scratch towards the site. As soon as the hyperalgesia was encountered, which is instantly obvious, I marked the spot, gave the pen to the resident and had him complete the circle. I gave the syringe to the resident after I had raised a few wheals, and as he filled the demarcated area, I left. I had no doubts as to the outcome. I didn't need to be there. Only a few minutes later, and to the gratified amazement of all assembled, she bounded off the examination table and very happily strutted out, cured.

I was consulting at Sheba Medical Center Tel Hashomer in Israel. The patient was a young Arab from Gaza. There was a wedding, they were firing their weapons all over the place. One of the bullets hit a young woman in the neck and killed her. He was struck in his thoracic spine will be paraplegic for the rest of his life. He couldn't rest because of intense pain in his back just above the level of the paralysis anesthesia. I questioned him in English through an interpreter who spoke English/Hebrew through another who spoke Hebrew/Arabic. Yes, he remembered that when he fell his back struck a rock. I demarcated, injected, and he left the hospital the next day pain-free and able to rest. We smilingly wondered what he might have been thinking about Israelis.

PHOTO

Intra-dermal Vitamin B12 was also curative for a woman who had been totally disabled, about whom I had consulted in the Palm Springs area some years before. She was a worker in the vineyards. She was reaching up to prune a plant when her feet began sinking in the soft soil. She lost her balance, fell backwards, and the outcrop of a tree struck her high on the left side of her back.

Imagine having to lift something of maximum weight because of an emergency and beginning to lose your balance. Imagine taking a final deep breath and struggling so hard to keep from falling that you feel as if your insides will burst. That was what she did, and that is what happened. The increase in her intra-abdominal pressure blew out a hernia and sent her to surgery.

As she convalesced, she realized that any attempt to elevate her left arm towards horizontal progressively caused increasingly severe pain in her back. It didn't clear. Cold

weather made it worse, and the area in her back became so tender that she couldn't even tolerate a bra strap. Then, over the following months, she developed dull, constant headaches and "pins and needles" sensations in both her upper extremities. She had several unsuccessful consultations. She was eventually finalized in the California workers' compensation system with the permanent restriction from doing any work that required her arms to be elevated away from her sides for any period of time.

I examined her for the first time on August 25, 1992. On examination, there was a 2x3 inch elliptical area of exquisitely painful cutaneous hyperalgesia where the tree branch had struck her back. *Otherwise, her entire examination was normal! There were no dysfunctions, no rib restrictions, scapular restrictions- no spasm - nothing!*

I precisely demarcated the site and injected it with lots of wheals. In her case, she had an unusual reaction, the only such occurrence of which I am aware. She told me later that she had immediately been pain free for three days. Then, all her pain recurred even worse than previously, subsequently diminishing over the course of a week, when it completely and permanently cleared. One series of injections. Full recovery. No restrictions. Full return to work. An orthopaedic medical procedure any physician can perform with impunity. (I hardly ever say that.)

This is the injection I used to relieve Sarah, Vendyl Jones' daughter, whose case I partially discussed previously. When she was two, her left arm had been crushed up to her armpit in a washing machine wringer. In a panic, her mother pulled the reverse lever instead of the release, so it was crushed again. The pain never diminished. The affected skin was always so exquisitely tender that nothing could touch it. Her elbow became dysfunctional and didn't move normally. Her arm became weak. CH involved the entire inside of her left upper arm, from her armpit to just below her elbow.

I delineated the hyperalgesia and injected while spraying the skin with coolant to partially relieve her pain. It took about eighty wheals to fill the area. Sarah lay there laughing,

with tears streaming. I paused occasionally to give her some rest. When I finished, she said something extraordinary. The palm of her hand felt as if it were on fire. It persisted into the evening, but the tenderness and pain were gone. The next morning, she was almost pain-free except for a small residue of pain about the medial elbow, which cleared with just a few more wheals. The appearance of her elbow was *normal*. *The power in her arm was fully restored*. After forty-three years.

Sarah emailed me on October 25, 1999:

Shalom Dr. Goodley!

Long time no talk...First of all you must know (I told Dad to tell you that you were welcome to use my case for anything you need for your book which I hope is out by now. If so, I hope you did use it and it sells out over and over.

My arm has been amazing. It has more strength than the one I used my whole life. No kidding, I put all my weights on that arm to carry and how long has it been? Three years, I guess. Wonderful treatment!

My lower diaphragm adjustment has held pretty good until now. I feel pinched but keep trying to hold out till you get back over here. I still long for your back adjustments as no one has ever given an alignment so painlessly...

Please let me know what's up with you and when you plan to come over again.

All the best,

Sarah

These are only a few stories of people I have treated with Vitamin B12 injections. Before this book is ended, you will learn about Diane Gates, and you will never forget her. Clearly, there must be many others for whom this remarkable therapy is specific and essential.

Home in Israel, I was asked to consult concerning a young man who had been involved in a head-on auto accident. He was crushed against the steering wheel, where he remained unconscious for over half an hour. His other injuries healed, but he continued to experience severe left anterior chest pain several times a day. He'd had a cardiac workup, and coronary vessel occlusions were diagnosed. He underwent heart surgery, but the pain persisted. Despite repeated normal cardiac function testing, he was scheduled for another heart surgery.

During the consultation, he said something extraordinary. When the pain would occur, which was at least two times a day, he would have the urge to smash at his chest with his fist, and sometimes the pain would be temporarily relieved.

The significance of his anterior chest wall being crushed and held against the steering wheel hadn't been considered during his diagnostic examination. He had the characteristic area of cutaneous hyperalgesia almost three inches in diameter. When I explained what I wanted to do, he was skeptical but game. From the time he left my office, he hasn't had another chest pain.

Those are only a few examples of soft signs. There are more, and more to be discovered.

“No objective findings” days

What would happen to you if you could no longer be productive because of the ongoing residuals of injury? What would happen if you have to work, but can't? And you seek care, but nobody knows what's wrong with you. Come with me and see these issues in the lives of real people. Many of you will find yourselves here.

She was a 27-year-old woman who cleaned rooms at one of the Palm Springs area resorts. She first consulted me on November 11, 1992, because of injuries she sustained on September 25, 1990, two years previously. She had not been treated well. When she requested medical attention the same day, her examination “showed no objective findings,” and she was told to return to work. She tried, but she couldn't because the pain was too intense, so she

requested care again. X-rays were taken. They were normal. Pain medications didn't help. She was fired. Workers compensation authorized physical therapy for two months, which consisted of the same routine: hot packs and electrical stimulation. She was released unrelieved in December 1990. She was then referred to another doctor, from whom she received the same type ritualistic physical therapy for six weeks more. Then, she was told she was well enough to return to work. Her pain persisted, regardless. From approximately February 1991 until approximately six weeks before I examined her, she remained disabled without compensation, and she was finally forced to attempt work because she needed to eat. She had good reason to be sullen and untrusting when she first arrived at my office.

She had been injured while kneeling and cleaning a bathtub. She had put one of her arms inside and was supporting her weight on it when it had suddenly slipped on the wet surface, causing her to forcefully strike the side of her chest on the edge of the tub. Besides the local injury of direct trauma, the spine is not constructed to tolerate such a lateral force.

As she hit, she felt a "pop" in her low back and immediately felt intense pain, as if something was "pulled apart." Her pain progressively intensified and spread. She had headaches three to four times a week. She became unable to bend in any direction. Coughing and sneezing jolted her with stabs of pain. She couldn't sit for more than half an hour or stand for more than fifteen minutes without the pain intensifying. Pain radiated down both legs to her feet.

On my initial examination, I found gross abnormal pelvic rotation, marked global restriction of lumbar movements, abnormal repetitive bilateral lateral bending, severe cutaneous hyperalgesia, and distinct segmental dysfunction at precisely one mid-lumbar level. Neurologically, she was normal. The fixation reinforced the probability of what her history had suggested: the lateral force into her vertebral column had "jammed" (at least) one of the spinal segments.

She was *immediately "50%" relieved by one manipulation performed as part of that*

first examination! Within minutes, she was able to flex so that her fingers came to within fourteen inches of the floor and to bend backwards to 30 degrees. The abnormal rotation of her pelvis was corrected, and her RBLB was normal.

In such a clear, single-segment dysfunction case, what justification could there possibly be for over two years of pain, lost job and wages, and the undeniable possibility of some degree of chronicity having been inflicted on her, as well? I saw her once more. Her pain remained at least 50% reduced. She still had soft tissue contractures that a physical therapist was treating.

Another woman worked for one of the sheriff's departments in the Southern California desert. Her husband is a deputy sheriff. A few months before, during one of the heavy rains, one of the offices had been flooded. They'd asked her to help mop. As she did, she felt a "pop" between her shoulder blades, followed shortly by persisting pain. She reported it. The bureaucracy sputtered and stuttered. Neither her employer nor the insurance company could "decide" if her injury was work related.

What started as a dysfunctional thoracic strain compounded. Her spine lost its normal curvature and straightened as the spasm became fibrous. A major dysreflexia started: cutaneous hyperalgesia spread over her back like a plague, with her skin thickening and becoming exquisitely tender from her shoulders to her low back. It was so "stuck," it developed "peau d'orange" (orange peel) puckering from my slightest attempt to tent it up, as is seen in advanced breast cancer patients. In that brief time, she had developed one of the most advanced cases of CH I have ever seen. Then it spread to her neck. She told me of a frightening episode she experienced when she had walked into a drugstore and realized she was lost and didn't know why she was there. She thought she'd had a stroke. A reasonable explanation for such an unsettling event is that she had developed so much reflexive constriction of the muscles and connective tissue from her posterior thorax to her neck that the blood flowing through that area to her brain had become restricted.

As an emergency procedure, I showed her husband how to do the skin rolling. As I demonstrated it, the snapping of fibrous strands could be heard across the room. One manipulation broke the "log jam" in her thoracic spine, and, for the first time, her pain was moderately relieved. She urgently needed further care, but the delay in appreciating the cause of her stampeding symptoms had exacted its price.

If all those we have victimized by subjecting them to this misery were placed end to end...

What started in medical schools can begin to change in medical schools. If enough medical students become familiar with what is related here and begin insisting on answers, there may be change.

While still a student, I once asked one of my orthopedic surgery professors about manipulation. His only response, as he continued to gaze out the window, was a silent semblance of a forced self-satisfied smile. I didn't pursue it. I didn't know any better. (But if I had known, I wouldn't have had to ask the question.)

A commentary on the first portion of Deuteronomy, by Rabbi Zelig Pliskin, elegantly expresses the essence of the desirable qualities of the clinician, as well:

Every case is different from any other, and each case should be viewed as entirely new and every detail considered. This applies whenever you become involved in settling quarrels between people. Of course, there are patterns that anyone with experience will recognize, but there will always be factors that make each situation unique. Do not jump to conclusions.

Rather, listen carefully to both sides. Just because one solution worked in a past situation does not mean that it will automatically be effective in a situation that is quite similar though a little bit different. One needs to be creative and flexible.

Whenever you try to help people settle quarrels, give the matter your full attention to see what needs to be said and done in this specific situation. By doing this, you will have the merit of bringing peace to many more people than if you rigidly try the exact the same approach each time.

CHAPTER NINE

LESSONS ABOUT EXTREMITY JOINTS –

THE WRIST, ELBOW AND ANKLE

I ought. Therefore I can.

Emmanuel Kant

- **The wrist – an essential manipulation you can do correctly the first time**
- **The elbow**
- **The ankle**
- **Explanations for why manipulation works**
- **Directions of force**
- **Traction**

Most manipulation cannot safely be learned from a book, especially those involving the spine. On the other hand, there are some you can be comfortable with virtually from the reading and a little practice. A few are *simple*. One in particular is while its effect is profound, and the person who needs it is very grateful, indeed.

The wrist:

Some years ago, a Canadian physician referred a patient to me who was involved in a major legal case, but the reasons for his symptoms had not been diagnosed. His physician had heard me lecture, and so the man came to me. It was a pure Fundamental Flaw situation that involved his upper neck, and I sent my report. He received a deserved settlement, and the attorneys around Winnipeg didn't forget. One day, in the mid-eighties, they sent Alan Couch to me.

Alan was handsome, highly athletic, and could have won any Tarzan contest. Over time, he was involved in an incredible series of accidents that would likely have killed someone else, almost

invariably because he was in the wrong place at the wrong time, and so he would return to me again from wherever he was. I learned to know him well. Alan is stoic. He habitually described his symptoms with reluctant understatement, so when he called to tell me how much pain he was experiencing in his right wrist, his inflection immediately alerted me that he was in real trouble.

On August 5, 1990, while back in Canada, he was driving a borrowed pickup truck that had been having intermittent mechanical problems. It had stalled on several occasions because of a computer failure, and Alan's accident happened before repairs were made. As he exited the highway, the vehicle suddenly shut down and locked the wheel. The car spun and rolled several times ending up on its right side as it burst into flames. Alan couldn't immediately extricate himself from the seat belt because of his weight against the release. When he finally did, he fell onto his right shoulder, injuring it, as well, so he couldn't climb out the driver's side. The fire spread across the windshield and made it too soft to break. He said he was giving up when a passerby broke through the rear window and pulled him out just as the truck was consumed. Just another Alan Couch story.

When he arrived in my office, then in Big Bear Lake, California, he'd already been unsuccessfully treated for three months. He said he could only describe the unremitting pain as "incredible." He'd never said that before. They had x-rayed it, casted it, tried various therapies and medications, and injected it. Nothing had helped at all. He sat down on the examining table, his face etched from the toll the pain had taken. I was sitting on a low stool in front of him. As he painfully extended his right arm in front of him with a look of helpless frustration as he began to try to explain what he was experiencing, I casually reached up to his with my right hand.

I placed the side of my flexed index finger on the top of the knob at the end of his forearm on the little finger side (the *ulnar styloid*), my thumb under the small wrist bone just distal to it (the *pisiform*) and exerted a slight compressive force to slide one past the other. Between the bones is a cartilage that acts much like a meniscus in the knee. It is relatively loose and primarily acts to facilitate glide. A sudden wrong movement can turn and trap it. Manipulating the *ulno-menisco-*

triquetral joint (also referred to as the triangular fibrocartilage [TFC]) is a one-handed, essentially two-fingered, maneuver.

The initial effort is a test to determine if the “lock” is present. There was a little resistance which I countered by persistent graded force. I then asserted a sudden thrust to glide my points of contact towards each other. The entrapped cartilage suddenly released with an audible “pop,” and Alan was cured before his complaint was fully out of his mouth - *within his first few minutes in my office!*

Alan’s jaw dropped, his eyes glazed, blinking uncomprehendingly in shades of super-comical incredulity at the instantaneous relief after months of unremitting near-agony. I couldn’t stop laughing. It was likely my most glorious instant therapeutic experience, one of those dream triumphs that seems to sometimes make magic of manipulation, a priceless, magnificent matter of seconds when a perfectly designed tool perfectly fulfills its need. If you want to get some idea of what Alan had endured for three months, clamp your teeth down on the inside of your cheek and don’t let go - for three months.

Alan’s relief was a prime proof that manipulation sometimes offers the only solution.

In all the armamentarium of medicine, only manipulation offers the clinician the occasional opportunity for providing instant cure of an injury.

Only one such experience is necessary to irrevocably make the total case and destroy the pillars of the black prejudicial fortress that has been obstructing the passage of medicine for over a century.

I didn’t know the condition could be a pediatric problem until August 16, 1999, when it happened to Darcee, one of my darling little (then) granddaughters. She looked more like Goldie Hawn at four-years old than Goldie Hawn did. Earlier in the day, "Tarzanita" was climbing on a wall by herself where she, Davis Paul, her older brother, and I took our “awenture” walks when I visited. She had told her mother that she had fallen and twisted her left arm as it struck the ground. Darcee is a tough kid. She’s had her bumps, but she knew this was different., and her expression

showed it.

Diane, my daughter, Darcee's mother, had undergone spinal surgery less than a week before, and I was visiting and writing in the next room. Diane sent her to me, and she came to me supporting her injured arm with the other and frowning, showing me how pain wouldn't let her move her wrist. Her ulnar styloid was unusually prominent, but there was no tenderness or thickening in the other wrist joints or about her distal forearm where fractures frequently occur. For me, that clinical exam alone was sufficient. The same as Alan, I palpated the resistance that shouldn't be there and thrust through. The release was a sudden noisy grinding considerably louder and coarser than Alan's, or anyone else's I'd manipulated, and it was all over.

Darcee looked down blankly, at first gingerly testing her wrist's motion. Her little mouth opened slightly as her expression passed through puzzlement to a grand wondrous smile as she realized everything was back to normal. I cannot remember ever getting a bigger hug and kiss from her, a near infinite reward. Repeating the maneuver revealed total pain-free normalcy, and she left the room delighted with me. The others said that her look of wonder as she walked about and continued to move her wrist was indescribably unforgettable. When I called the next day, she came onto the phone just to tell me her wrist didn't hurt. She talked about it for a long time. Priceless memory. My own grandchild.

Consider what happens somewhere every day when someone knowledgeable isn't there for such happenings. Darcee would likely have been subjected to what Alan had to endure. She certainly would have been x-rayed. No fracture would have been seen, but it is idiomatic and right to treat as a fracture what *may* be. So Darcee would likely have had a long-arm cast for weeks in the August heat, but nothing good would have happened, and when the cast would have come off, the pain and dysfunction would still have been there.

This technique is among the easiest, most successful and understandable of all manipulative techniques. *The condition needs to be suspected from a history that the wrist was suddenly supinated (turned palm up), followed by pain, and inability of the wrist especially to supinate and*

dorsiflex (bend upward) without the pain becoming excruciating. Yet, the manipulation is a new experience to virtually every osteopath, chiropractor, and all orthopedic surgeons I have shown it to, even hand surgeons.

A few more examples: A friend of mine annually entered the national arm wrestling championships in Northern California. Toi's opponent had asked him to loosen his grip so he could adjust his. The contest has few rules, and that isn't one of them, but Toi is a gentleman. As he complied, his arm was violently thrown onto the table, twisting as it went down, and he sustained the same injury. Toi was an electrical contractor, and trying to use a screwdriver was unbearably painful, even for a tough Finn. He tried to Finn it out for about a week before he shyly told me about it. As he was talking, I performed the same maneuver, and it was all over in the middle of his sentence, as well, leaving him almost as befuddled as Alan was.

Another such injury occurred when a sixty-five-year-old former patient returned with a new complaint. He was a school crossing guard, and when I asked him what he did that might stress it, all he could think of was moving the red Stop sign up and down to attract motorists' attention. When I remarked that the sign must be quite light, he replied, "Not when a real gust of wind hits it!" He had the same condition. His release was as dramatic, and so loud, it was heard across the room.

The elbow:

I have had a few needs for manipulation, for the good and otherwise. This episode, more accurately, a repetitive mobilization, was by far the most rewarding.

When we lived in Palos Verdes, California, I was walking across the corral carrying a ten-foot long 2x12 plank near vertically when I slipped in wet sand and lost control of it. As it fell to the side, it became trapped in my glove, and I couldn't get my right forearm out of the way. My elbow twisted violently, and I immediately knew something bad had happened. I was able to move it, but the next time I started to manipulate a patient's neck, the instantaneous sharp pain left me in

no doubt that my elbow was in serious trouble. Every time I tried, the pain struck and intensified over the ensuing months.

During that time, I was flying to Edmonds, Washington, to study manipulation with Loren Rex, D.O., an excellent teacher to whom I am forever grateful. "Bear" is a confirmed osteopath, as they all should be. He worked with my elbow during subsequent training sessions over several months, each time giving me a little temporary relief though the tension inside persisted. No question, my arm function was deteriorating as the pain intensified, and I had good reason to begin to worry. It continued for almost a year, when, as he was mobilizing it one more time, something "just right" suddenly happened, and instantly there was a little "click." Whatever it was, the tension dissipated as rapidly, and my trial was over in that instant. I have never had another problem with it.

In the early '70's, while taking my specialty training, I worked in several emergency rooms in the Los Angeles area. My first night at a hospital in Gardena, I was walking past the x-ray room when I saw something inconsistent. A young girl was talking happily to her friend while she was seated with her acutely flexed elbow resting on the the x-ray table, with her forearm vertical, as she awaited the technician. What was a happy young girl doing in Emergency? She said she'd been to a movie, and when she stood up to leave, she had immediately experienced intense, localized pain in her elbow as soon as she began to straighten it. As long as she held it bent, she was pain free. She'd come to the hospital and been taken directly to x-ray. It was one of those times when I just looked at what my hands were doing. I stabilized her elbow on the table with one hand while my other hand held hers and began making small circles with it. They weren't painful, so I continued with increasingly wider circles until her elbow was painlessly fully extended and all normal motion was restored. As her mouth gaped, I quietly left the room. When I returned to work the next night, I was told I was fired. She was one of a series of cases that eventually helped me understand one of the reasons that some manipulations are so efficiently effective.

I examined a senior student from The Los Angeles Chiropractic College (LACC).

Something had happened while he was manipulating a patient, and he developed pain in his right wrist, which intensified when he attempted to use it. Unless he completed a prescribed number of manipulative procedures, he wouldn't be able to graduate. He'd been seen by all of his instructors and given the gamut of chiropractic care, but nothing had helped.

I fared no better. I performed what I thought was a full examination, found some localized tenderness, considered that if it wasn't dysfunction, that it might be reactive inflammation and offered a short series of cortisone injections. Chiropractors can't inject. If my diagnosis was right, it might help, but it didn't because it wasn't. I casted his arm for a few weeks, but in the end, as I stated, I failed.

Some weeks later, he returned, smiling broadly, to tell me the rest of the story. He'd been outside his school carrying his x-rays and tearfully saying goodbye to his classmates. An "old timer" was visiting, overheard the conversation, asked for the x-rays, held them up to the sky, offhandedly told him it wasn't his wrist, deftly manipulated his elbow and instantly cured him on the spot. *The knowing, the eye, and the touch of a master.* In such cases, those who try to insinuate something "psychological" about manipulative relief should have their mouths washed out with soap.

In 1973, I lectured about manipulation to a regional physical therapy meeting, at Stanford University. I boarded the plane back to Los Angeles coincidentally with the USC track team, my undergraduate alma mater. The coach "just happened" to have the seat next to me. We both were on a high, and we immediately struck off a conversation about the day we'd had. He winked at me and confidentially confessed that when one of his "boys" was injured and the team orthopedic surgeon couldn't help, he'd quietly put him in his car and take him to his chiropractor friend in Santa Monica.

The ankle:

I was still in general practice when my manipulative successes started to become known,

and occasionally one of the insurance companies would send me a consultation. For a GP, that was high praise.

I examined a man who had been totally disabled for two years. He was in his thirties and athletically built. He winced as he walked into my examination room with a broad based, painful gait. He had fallen from a scaffold about ten feet, landing full on his feet. Thereafter, he persistently experienced intense pain in both of them whenever he attempted to stand for more than a few minutes. He'd been unsuccessfully referred to some of the most reputable orthopedic surgeons in Southern California, but no abnormalities were found.

As part of my examination, which had been normal in all respects, I applied traction to the *joints* of his ankle to test their *individual ranges*, and they were all normal, as well. I was returning to my desk across the room to write my notes when I was startled by a sudden heavy stomping behind me and whirled to see him excitedly jumping up and down on the floor as kept shouting, "*The pain's gone! The pain's gone!*" He returned to work the next day and never had another symptom.

A few years later, my associate walked into the office in intense pain asking me to x-ray his foot. When I asked him why, he said he couldn't understand how, but he thought he'd fractured it just getting out of his car. As part of my exam, I did the same procedure, found nothing and told him I'd meet him in the x-ray room. When he didn't arrive, I went looking for him only to find him walking normally. He gave me a quizzical laugh and said sheepishly that whatever I'd done, the pain was gone.

Explanation: Why some manipulation works - synovial tags and "jamming:"

What had I done in the elbow and ankle cases? And what had been done to my elbow? I suspected essentially the same thing, and subsequent experiences convinced me. My elbow, the young girl in the emergency room with the "locked" elbow from no trauma at all, the foot stomping patient, my associate's foot - all had a tag of *entrapped synovial tissue* - much as Alan's, Darcee's

and Toi's wrists had entrapped cartilage.

Synovium is a nerve laden, fringed tissue within joints that secretes the lubricating fluid. When they are painfully pinched and trapped, the reflex response causes spasm in the local muscles that, in effect, only makes the situation worse. Gapping the joint allows the synovium to be released. Of course, joints do not gap as part of their normal motions. (you will read about Lisa and see the cinearthrogram demonstrating the condition in the hip.)

Still, the most common cause of dysfunctions happen from disadvantageous movements. One explanation is that the reflexes that normally coordinate normal movement can't in a particular circumstance. The movement may be too hasty, too clumsy, or too stressful from overload. As soon as the body's protective reflexes sense danger, they lock everything up. There might not be danger, but the reflexes are literal, not interpretive. *Their job is to protect.* The pain is the alarm bell.

Directions of force:

Therapeutic force may be asserted into any direction the joint allows that is pain free. Attempting to range a restricted joint only in its natural way of moving, even forcing it because it seems the right thing to do, may be the worst thing that can be done to it.

In the jaw joints (the temporomandibular joints – the TMJs), for instance, permanent damage can be done by insisting on forcing it open against unremitting resistance. Without very good reasons for concluding otherwise, a clinician must always be aware of the jeopardy inherent in challenging Mother Nature.

However, moving a restricted joint gently against its restrictions *at a tangent* to its surfaces, a movement that the body cannot do by itself, can have dramatically beneficial effects.

DEMO

Traction

Traction is one of the vital therapeutic forces. Because it has similarities to myofascial release and mobilization, a few remarks here will introduce it. Considerably more will be related later.

Traction does not imply that visible distraction must occur. Thinking so is one of the most gross and damaging of the errors resulting from denying fundamental principle and then attempting to muddle through regardless! Traction force most often needs to be just enough to apply mild tension onto the soft tissues!

Too many professionals have been taught that various forms of traction are not helpful, and even counterproductive, when they are, in fact, essential. They believe their decision is a rational response to experience instead of, in reality, its being an unsophisticated reaction to traction's misuse. When erroneous concept causes complications, reflexively blaming traction generically is the common response. That sin is one of the tragedies of traditionalistic in-the-box thinking. The fact is, that like many other treatments related to the manual therapies, traction's meritorious history, for good reason, emanates from the proverbial mists of antiquity.

During the discussion time after a paper had been presented at an orthopedic surgical meeting in Palm Springs, I commented about the safety and specificity of my cervical traction. Dr. Mason Hohl, one of my orthopedic surgical teachers when I was a medical student, who years later served as president of the American Academy of Orthopaedic Surgery, was sitting behind me. When I finished he stood and said, "*Since we don't do traction on ankles, I see no reason why we should do traction on necks.*" His candor was a memorable expression of the Fundamental Flaw. The fact is that traction is not usually used on ankles because of imposed traditionalistic restriction and the same in the treatment of knees, hips and elsewhere on the lower extremities.³⁵ The exclusion of ankles is a face of orthopedic apartheid. As I have illustrated, distracting the ankle joints - traction - may be essential. As the years have passed, the memory of my encounter with

³⁵ For instance, Buck's traction.

Dr. Hohl recurs. I should have related the case of the man who fell from the scaffold. I had a large audience. It was a set-up for a dramatic attack against the bastion. I continue to live with regret. I didn't exploit it.

CHAPTER TEN

LESSONS ABOUT THE KNEE

You must remember this: a kiss is just a kiss, a sigh is just a sigh, the fundamental things apply....³⁶

Herman Hupfeld

- **An injury that mimics torn meniscus**
 - ***The likely cure – transverse massage and self-care**
- **The lost joint of the knee that can disable all of it**
 - ***Treatment including self-care**

More than any other joint of the body, the knee is engineered with such exquisite complexity that it seems designed for injury. It is one of orthopedic surgery's favorite joints and the site of some of its most remarkable successes. The knee, as well, dramatically demonstrates the penalties of the orthopedic surgical/medical imbalance.

A meniscus is a wedge of cartilage in some joints that buffers and guides its motion, facilitates "frictionlessness" and, importantly, transfers heat from the joint. You became acquainted with meniscus problems through Alan's, Darcee's and Toi's wrist experiences.

In the knee, it can get caught "in the grinder" of two of the largest weight bearing bones in the body, which most often happens from athletic stresses. When it is crushed and tears, *meniscectomy*, its removal - complete or partial - has been a standard procedure for decades.

When I injured mine, I first consulted Dr. Bob Watanabe, an orthopedic surgeon and Olympic class runner who was a few years ahead of me at UCLA. Bob advised that I avoid the surgery if I could, as he had. With all his knowledge and understanding of the importance of the meniscus in the active individual, he just kept running until his problem resolved. Mine continued to lock my knee, and I would occasionally, unpredictably be disabled by it, so I

³⁶ Song from the classic movie Casablanca.

eventually had a partial arthroscopic³⁷ procedure.

Some may remember Glenn Davis of the Blanchard-Davis duo of West Point's famous football team during World War II. He later played for a time with the Los Angeles Rams. He had a meniscectomy, yet continued his career because his examiners concluded that his knee was normal afterwards. Years later, he confided that his knee had never been as good as before, but his superb athletic ability had enabled him to conceal his impairment when he was being examined. While he well may have needed the surgery, the popular solution then was that if it's torn, take it out.

THE "LOST" JOINT OF THE KNEE

The treatment of the knee *mechanism* embodies orthopedic surgery's dedication and is the full expression of its failure to appreciate the manipulative perspective. Besides the major knee joint, that offers so many possibilities for surgery, there is another joint.

Its dysfunction – of itself - causes serious, persisting residuals that impair the entire knee. But not only is it not regularly tested, even for tenderness, it is not considered at all. It is one of the joints Dr. Yamamoto referred to (Chapter One).

How can such a vital structure seem to just disappear from concern when it is large, palpable, certainly functions and is (obviously) clinically significant? Why would orthopedic surgery intentionally disregard it?

(It is not the so-called joint between the kneecap (patella) and the underlying bone - the so-called "patello-femoral "joint.")

One certain reason for its lack of attention is that it is not considered a surgical candidate. Another is that its motions are small while the major knee joint moves so much more and seems to dominate the knee's action.

There is no technicality here. It is a true joint. It has all the anatomic requirements:

³⁷ Performed through a small incision with a scope.

cartilaginous surfaces, a capsule which seals it, synovium, and ligaments that restrict motion to the joint's normal range. Therefore, it has important functions; therefore, it can dysfunction (which can persist indefinitely); therefore, it needs to be considered, especially because it can be the exclusive cause of diffuse and disabling knee impairment.

*It would never have been removed from scrutiny if all joints provoked the same dispassionate, essential, intuitive, fundamental questions: **It is; then it has a function; what is it?***

How do we determine when it dysfunctions, and, when it does, what can we do to restore it?

The joint is the **proximal tibio-fibular joint (PTFJ)**, the joint of the upper end of the two parallel bones of the foreleg just below the knee joint proper. The larger bone is the *tibia*, the thinner, the *fibula*. The head of the fibula may be palpated as a little knob under the skin slightly lower than the patella on the lateral (outside) of the leg. The other end of the fibula is part of the main joint of the ankle. *Each end affects the other, and, for normal function, both must move as the leg does..*

PHOTO

I have never seen the pain localize to the PTFJ when it dysfunctions,. It diffuses about the knee, and the tenderness of it is never suspected unless specifically tested for. Normally, the joint is completely non-tender, and its range, though relatively small, is easily palpable as a sliding “fore and aft” when it is held between the thumb and flexed forefinger and the motion is

imparted toward the posterior midline of the body, not directly backwards.

A major muscle, the *biceps femoris*, one of the hamstring muscles, originates on the pelvis and descends to insert onto the top of it. When the PTFJ dysfunctions, the biceps femoris can act as a wick to transfer the irritability into the pelvis, then up the spine.

In my GP days, one of my patients was likely the most unusual headache case I have ever treated. Her headaches were clearly of muscular origin. I had first treated her neck dysfunction, but it promptly recurred along with her headaches, so I continued searching down the linkage and failing with each recurrence until I finally discovered the source. *I was only able to cure her by relieving her PTFJ dysfunction.* In principle, there was nothing strange about that. The overbearing principle cannot be stated sufficiently: the body is a *unity*.

I have been consulted concerning many patients who continued to experience knee pain and impairment after an injury, or after arthroscopy, despite receiving rehabilitation. The only abnormality was residual PTFJ dysfunction. Each patient was completely relieved when the joint's function was restored.

Guillermo Rosales, a Los Angeles Police Officer, a sergeant when we last communicated years ago, first consulted me in the late '70's because of persisting knee pain that was threatening his career. He was a training officer at the Police Academy and had been assigned to run with the female cadets. Since he couldn't run at his own pace, he tried to maximize his exercise by jogging with a high-knee fast step, pounding his legs onto the ground.

He developed diffuse and progressive left knee pain that persisted for months. Several orthopedic surgical consultations were unsuccessful. On my examination, everything was also normal except for the single finding: his PTFJ was markedly tender and totally locked.

When I told him, he made no effort to disguise his street-wise skepticism. He'd been examined by *surgical specialists* and *all the x-rays* were negative. I asked him to lie on his right side. I fully flexed his left hip and knee. Then, while one hand continued to hold his knee down, my other hand elevated his ankle as I proceeded to attempted to straighten his leg. I had never

seen that particular maneuver before. It was another time of watching what my hands were doing, and when Guillermo came back down from ballistic, I had his attention. I don't think I've examined it quite that way again, but in Guillermo's case, it served its purpose. Certainly the diagnosis was clearly established. The locked joint just couldn't "get out of the way" as the extension "tightened the vise."

Persistent mobilization over a few visits slowly stretched the capsular contracture, and the joint began to move. I then taught his diminutive wife how to do it while they were on vacation. Guillermo lay supine with his knee flexed. She grasped the knob of his joint between her thumb and flexed index finger and, holding gently but firmly, rocked the joint back and forth using her body and shoulder muscles. I had already loosened it sufficiently so she was immediately able to feel the motion. By the time they returned, Guillermo's knee was normal. I helped him with another problem later, which required the use of *prolotherapy*, another essential I will discuss.

A few years later, when I practiced in Phoenix for a short time, I received an unexpected letter:

May 28, 1984

Dr. Paul Goodley

Somewhere in the desert, AZ

Dear Dr. Goodley,

Although it has been months since you last treated me, I was saddened to learn that you traded palm trees for cactus. I always thought I would have someone to go to when I had another job-related injury. I will always be grateful for your insight and skill, which caused you to succeed where other doctors had failed. You saved my knee, my shoulder, and, quite possibly, my career as a street cop. I remember you fondly every time I successfully overpower a suspect.

I wish you the success you so richly deserve. My life is richer for the good fortune of our paths having crossed. Thank you.

Officer Guillermo Rosales
(After October 1991) Sergeant,
Los Angeles Police Department,
South- Central Division

Coronary ligament strain:

There is an injury that semi-simulates meniscus injury that does not require surgery - or x-rays or other technology to diagnose, and not knowing about it has, in my experience, been responsible for the unnecessary loss of many menisci in the past and ongoing. A simple hands-on procedure will likely relieve it, and if it doesn't help, it won't make it worse. Only a few short trials answer the question.

The late Dr. James Cyriax, a British physician, birthed orthopaedic *medicine* and became the first orthopaedic *physician*.³⁸ Orthopaedic medicine is not a recognized specialty; it is a discipline. He described ***strain of the coronary ligament***. The injury occurs if the knee is hit from the outside, or behind, or is twisted. It is not rare. He believed that a small hemorrhage under the meniscus forms a scar that restricts its passive glide so its movement is limited and causes diffuse pain and joint restriction. *That alone can disable the entire knee. The condition is suspected solely by the history and physical findings. Coronary ligament strain is usually completely relieved by “transverse massage” mobilization performed only a few times.* The condition can be suspected if there is tenderness at the interspace of the knee about an inch to the side of the midline, usually *medially*³⁹ and sometimes, *laterally*. Specifically, it is along the *tibial plateau*, the top of the large foreleg bone, the “floor” of the joint, alongside the patellar ligament that inserts onto the midline knob just below the joint..

Transverse massage

³⁸ You may note that I sometimes use the word *doctor* and sometimes *physician*. I am implying another level of respect with the title, *physician*. That individual has distinguished himself.

³⁹ Closer to the midline of the body.

The sole treatment for coronary ligament strain is a massage technique whose purpose is to release the adhesions. It is performed like sanding wood, and, like sanding, there is no spread of effect. The entire affected area has to be covered. The side of an index finger is usually used as the "sander" with at least the middle finger splinting it to prevent self-injury from holding firmly into the joint space as the maneuver is performed. I have been successful with the treatment a number of times

If you are gutsy, you can do it to yourself, but you must hurt yourself for a few painful seconds to do it effectively. You cannot damage yourself with the attempt.

DEMO

If you do try it, you can use the side of your thumb reinforced with your other hand to push and hold it onto the tibial edge. The knee needs to be partially flexed and relaxed. The digit is held firmly *into* the joint space. A few downward directed firm "sanding" motions are necessary for each treatment. The initial strokes can be gentle, but eventually considerable force has to be applied about three times - back and forth. If it is successful, it will happen in only a few treatments, maybe two to three days apart. I have been able to prevent scheduled surgeries with the procedure. It needs to be common knowledge.

It is one of the procedures that endeared me to Dr. Ted Loseff, one of the two orthopedic surgeons I dedicated this book to. Ted was always open to new ideas. He told me that he had done a meniscectomy on a tennis player and now she had injured her other knee. He told me how it had happened. He had scheduled her for surgery. He immediately picked up on my hint of smile and softly responded with a question about my teaching him something again. That is how inquisitive and receptive he was. I told Ted about this condition, and his tone expressed the irony in his realization, "You get the meniscus moving and relieve the pain. I've been relieving it by cutting them out." That, of course, was not the full truth. Menisci do, in fact, rupture. The

surgery does, in fact, sometimes need to be performed. MRI is excellent for detecting a tear. We didn't have it in the '70's.

Coronary ligament strain always needs to be considered when the history suggests it.

We had new neighbors next to our cabin in Fawnskin. About two years previously, their eleven-year-old son ran into a fire hydrant and injured his left knee. It persistently bothered him, but he was athletic, so he kept right on going. Then, about a year later, he was playing soccer, and his left leg got caught and twisted between the legs of another player. It compounded his injury. His knee became increasingly painful and would visibly swell along the medial border of the patella after he ran for about half an hour. His knee was distinctly warm, the tissues of his medial knee swollen and boggy. He had both a coronary ligament strain *and* PTFJ dysfunction. I'd never seen that before.

The initial mobilization and "sanding" were both painful. I showed his parents how to do them. The appearance of his knee was markedly improved by the next day and both conditions were considerably less symptomatic. His PTFJ was moving. His knee was no longer warm. Within a few days, he was almost completely functional and pain free, and within the week, he was normal again for the first time in those two years and fully engaged in soccer. Remarkable.

I saw my next unequivocal case a dozen years later. It's purity presents a peerless landmark case - a categorical culmination concerning "coronary ligament strain" and its response to directed therapy.

On August 25, 2013, I examined a seventy-two year old man with a five-month history of sudden onset, unremitting, moderately severe right knee pain on weight bearing, which didn't alter from the initial episode. The condition was not associated with edema, abnormal joint sounds, locking or instability. There was no history even suggestive of trauma, certainly none that might suggest this diagnosis. His life style was semi-sedentary.

Previous examinations and treatment had been unsuccessful. X-rays were reported as normal.

Until my examining finally found the diagnosis, all was completely normal except that the right knee area was minimally warmer than the left: there was no ligamentous instability, abnormality of the PTFJ or any other tenderness. Passive knee motion was entirely free. All other diagnoses were essentially ruled out.

I had paused, and then inserted the side of my index finger into the medial aspect of his knee joint groove, pressed down on the tibial edge, and, as the saying goes, the rest is history.

After I explained what I had found and what I anticipated from therapy, I proceeded, and, as expected, the first treatment was painful, but as he stood up, he immediately brightened and remarked that the pain was already noticeably relieved.

When he returned three days later, he said that the relief had lasted for a day before it recurred. When I “sanded” the area again, it wasn’t nearly as tender.

When I saw him two days later, his pain was “80%” gone and the treatment was almost painless. He was completely clear soon after, obviously a very happy and grateful man. Without that specific treatment,⁴⁰ his painful impairment would almost certainly have persisted indefinitely.

⁴⁰ I have never had to inject that site, but theoretically it might work by the same mechanism, disrupting adhesions

CHAPTER ELEVEN

LESSONS ABOUT THE HIP– A NEW DIAGNOSIS

The task of the musculoskeletal clinician is to restore appropriate motion. All the rest is commentary.

- **A relatively unknown cause for disabling hip pain – a new diagnosis**
 - **In pediatrics**
 - **From dancing – jazzercise – other athletics**
 - **Diagnosis and treatment**

Lisa was a delicate 12-year-old girl with a touch of intestinal flu who had only a little fever and diarrhea as she went to the potty to pee. She stood up. She screamed in agony. She fell to the floor. For the next six months, she couldn't bear any weight on her left leg or sit without immediately experiencing unbearable pain. During that time, she had been seen by many orthopedic surgeons, including staff at Orthopaedic Hospital, in Los Angeles, without success. Every known possible diagnosis had been considered.

It was 1972. I was Co-Chairman of Acupuncture Research⁴¹ at USC,⁴² and it was my task to decide which pain patients would be studied. As a last resort, Lisa's mother brought her to the clinic, but one glance at that gentle gazelle and I knew she would never tolerate the needles. Yu Wing Choi, a Chinese physician who had recently escaped from Red China, was teaching us and wanted to try. I smiled as he entered her room, from which there soon screeched the most piercing screams followed by a fast exiting, very pale and sweating Yu Wing, who, in his inimitable accent, pleaded, “*You twy!*”

Lisa's findings were fascinating. As she lay on the table looking up at me, her left leg was 15° more outwardly rotated than her right, with passive internal rotation less than the right

⁴¹ More title than anything else but from which I received an excellent exposure to acupuncture.

⁴² The University of Southern California/Los Angeles County Medical Center

by the same amount, *i.e.* the entire range of her left hip had been shifted. Trying to move her left hip joint through its natural range of motion by raising her leg was immediately prohibitively painful, but she was able to tolerate its passive motion in a different way.

With my hands close about her hip joint, I performed a “short fulcrum” mobilization, rotating the ball-like head of the femur within in the acetabulum (the hip socket). The maneuver was pain free from having avoided the stresses that the long leverage had provoked. Otherwise, her examination was remarkably normal except for a little irritability in her low back.

PHOTOS

Lisa’s mother brought her back the next day and told me optimistically that she had been able to sit for fifteen minutes before the pain recurred, so I repeated the procedures.

I didn’t know what Lisa had, or how it had happened, but I suspected that something was caught in her hip joint, abnormally displacing its range, and that the pain resulted from this something being pinched whenever she tried to bear weight. Such a condition had never been visualized.

Freddie Kaltenborn, a Norwegian physical therapist, who had taught me the mobilization techniques along with much else, had told us about a fatigued hiker who had fallen on a slippery switchback and injured his hip. He hadn’t been able to relieve him until he performed an “axial traction manipulation.” He didn’t know why it had helped. I wondered if there might be a relationship.

I went to the radiology department and asked who might perform a *cinearthrogram*, an x-ray movie of the hip, and was directed to Dr. Frank Turner, Professor of Radiology. Frank became one of the great compatibles of my life, a man of unabashed enthusiasm who wasn't threatened by someone else's ideas and who loved a new search. I was amazed at what his gifted eyes could see on an x-ray. He was a great teacher who loves what he does.⁴³ He could

⁴³ Later, Frank entered private practice.

quote from 10,000 papers he'd read. He'd performed over 5,000 hip arthrograms. Frank listened and simply said, "Let's do it."

I sedated Lisa, secured a strap around her ankle and around my back and, as we watched on the image intensifier, I leaned back and gently and eased her femur from the acetabulum. Frank was astonished. He'd never seen that done before.

Comparing the findings with her right side, there indeed was a difference in the shape of the joint space as I continued to move Lisa's femur in and out. The haze of a soft tissue mass was clearly visible in the inferior aspect of the joint. First, I performed the axial traction manipulation, a sudden additional thrust at the end of the range, and followed it with an *arthrogram* - an iodine-type fluid that is opaque on x-ray is injected into a joint, producing a silhouetted image of anything in it that may not be visible to x-ray alone. In Lisa's case, I added to the procedure by maximally filling the joint under pressure to "push out" anything entrapped, as is done in pediatrics with an enema to push back out bowel that "swallowed itself," a condition called intussusception. When Lisa awakened, she was cured.

CINEARTHROGRAM

The film is likely the only one that demonstrates this condition. I've shown it internationally. Dr. Cyriax saw it when I presented the case in the Canary Islands, and he said he was going to put it in his book, and he did: Cyriax's *Textbook of Orthopaedic Medicine* under "entrapped ligamentum teres."

I had to wait about six years for my second case. I was performing consultations in El Centro, California, just north of the Mexican border, south of Palm Springs, when I received a call from a surgeon who told me he had a strange case. He had admitted a fourteen-year-old girl to the hospital with right low abdominal pain. He suspected appendicitis. After a few days, he decided she had mesenteric adenitis, a non-surgical condition that mimics appendicitis, and he was sending her home. As she got out of bed, she suddenly experienced intense pain in her

right hip as her feet touched the floor. (Lisa's gastrointestinal symptoms primarily involved her descending colon, on the *left* of her abdomen, and her *left* hip was involved.) After my examination, I immediately manipulated her right hip, and she was instantly cured.

What had happened to them? The entrapment was obviously similar to other synovial-type tissue I have already described, but why in them? I believe I know.

Clinically, the soft tissues close to an inflammation may become reflexively edematous (boggy). For instance, a child with tonsillitis can develop torticollis (spasm in the neck muscles). In both girls, it is likely that some inflammation developed proximate to the respectively involved hips. The soft tissues reacted, and the necessary conditions waited. As they had parted their legs while sitting, some of the loose tissue was drawn into the joints. Then, as they stood up, the “nutcracker” closed. Only manipulation – gapping the joint - could release them.

I continue to see such cases. Two were women in their early fifties injured who were injured during the rigors of jazzercise. One of them had thought her hip had begun to tighten only three weeks before she was treated. She is a professional dancer who long ago learned to tolerate pain including the low back pain and increased headaches she attributed to two old whiplash injuries. Later she reflected and decided that her problem had really begun about ten years before, for which she had been unsuccessfully treated many times.

She told me that she intuitively felt she would benefit if someone “tractioned” her leg, and she told those she consulted, but no one ever did. On a scale of “0 to 10” (10 representing worst imaginable pain), she said that her pain had been as high as “7” and, on average, “5.” Her low back became especially painful while she was driving, and her headaches could put her to bed for hours.

She knew that something good happened immediately after the manipulation, and she expressed it in a way I hadn’t heard before - as if someone “had let fresh air into my hip.” Within minutes, the pain was rapidly receding as the rotational asymmetries in her low back

self-corrected. If I occasionally see such patients, other practitioners see them, as well.

Only a few years ago, I saw a young woman in early pregnancy. She stated she had just awakened and experienced marked pain every time she bore weight on her right leg. The examination only suggested the condition, but I performed the manipulation, and she was instantly completely relieved.

An woman in her sixties, a huge woman, wide and short, had fallen in her home and could barely walk because of pain hip pain. Considering what I might be able to do for a woman her size initially discouraged me, but I had the good sense to examine her. She had fallen forward when her foot got caught in a rug, the entrapment the classical mechanism that pulls the head of her femur from its acetabulum. After the manipulative release, she almost danced from my office joyfully, the picture of all is well. She went to the clinic for her flu shot, got sick almost immediately and in a few days, tragically, she was dead.

It is essential to understand that this manipulation is not just “a pulling of the leg.” Please don’t be casual, especially not with this! A developed tissue sense is necessary for virtually all manipulation. I discuss a few exceptions that you can be safe with and begin to develop, but, in this case, please remember that the sacro-iliac joint is close by, with the vertebral column right above it. The leg has to be held in a particular way to transfer the force to the hip, and complications can happen if it is twisted during the procedure.

CHAPTER TWELVE

LESSONS ABOUT THE SHOULDER – A NEW DIAGNOSIS

The physician's job is to cure and how he does it matters not a wit.

Hippocrates

- **The acromio-clavicular joint – relatively unknown, often a cause of pain**
- **Pat Hansen - a new diagnosis**
- **Manipulating the thoracic spine**
- **Arthrograms and abnormalities**
- **Maria's case - a shoulder destroyed by arthritis**
- **Mobilizing the shoulder & self mobilization**

The *acromio-clavicular (AC)* joint is the highest joint on the shoulder. It is palpable directly under the skin, is fairly small and is comprised of the lateral end of the clavicle where it articulates with the forward extension of the scapula, the shoulder blade.

Like the knee's PTFJ, the AC is also adjacent to an obvious large joint- *the glenohumeral joint*, the articulation of the arm into the *glenoid fossa*, the socket at the lateral side of the scapula.

The AC can be easily mobilized to test for restriction and pain, yet, the same as the PTFJ continues to be, it is often forgotten as a structure that, of itself, can disable. The popularization of shoulder arthroscopy did not enhance the exploration of the AC's full spectrum in the impairment scheme of things. Arthroscopy so seduced attention to the large joint that the small was even further neglected. *Still, the AC is not commonly examined appropriately even during a clinical (hands-on) examination.* It is easily manipulated, sometimes with dramatic results. It is another of the joints Dr. Yamamoto referred to.

PHOTO

Only a few weeks after leaving general practice and starting specialty training, I was entering the clinic when a man approached me holding out a drawing depicting his pain. He was a good artist and had drawn an arm and torso with a star burst right out of the top of the shoulder and radiating down the arm. In this joint, pain radiation is a very late sign, if it happens at all. In contrast to many joints whose pain is felt at a distance from it, the AC is one of the “honest” joints whose pain is located precisely at the joint itself. He told me that he had carried that drawing for *two years* and shown it in all the clinics he'd been rotated through, but no one could help him.

"Please. Can you?"

Only a few simple, easily performed hands-on tests implicate the AC joint and predominantly distinguish its pathologies from other structures:

- (1) *The top of the joint is tender.*
- (2) *Mobilizing it reveals painful restriction.*
- (3) *The pain is almost invariably markedly increased when the arm is passively horizontally adducted across the chest, which compresses the joint.*

It took me only about half-a-minute to perform the tests right where he stood. I relieved much of his pain with a manipulation (which confirmed the diagnosis), and I then injected the joint with a small amount of cortisone because it had been inflamed for so long. He smiled at me gratefully, gave me the drawing and was gone. *Two years!*

An important digression: *It is a serious error to assume that pain in the region of the shoulder is "shoulder pain"!* That severely limits the thinking necessary to arrive at an accurate diagnosis. Rather, think that the *pain is experienced in the shoulder area!* When pain is considered in that way, all the structures that have nerve pathways to the shoulder will more likely be considered. It is essential to be seared by that concept to avoid making gross and seriously costly errors. You will see. Testing must begin at all sites where the pain may

emanate from: the neck, the chest, and even the abdomen, if the history and initial examination suggest that the source of the pain is *referring* to the shoulder – as can happen with ruptured spleen – as can happen with heart attack. The concept of referred pain is well known.

Example: When we lived in Palos Verdes, California, I came home one evening to the shouts from my children to run down the canyon across the street because one of their little girlfriends had fallen from her horse. She lay there crying how much her shoulder hurt, but its movement was normal and not painful, and there was no tenderness or bruising. Such an emergency situation emphasizes the value of a directed examination. I *knew* her shoulder wasn't the problem. And her left upper abdomen was tender.

I told the ambulance driver to alert the hospital staff to the probability of a ruptured spleen. I heard the rest of the story the next day. The emergency room doctor wouldn't listen. He put her arm in a sling, sent her home, and within the hour, she was in shock from blood loss - ignorance, arrogance, with the Fundamental Flaw in there somewhere. End of digression.

A young man was brought into the USC/LAC Emergency Department with similar pain after being tackled playing football. The totality of his shoulder pain resulted from a convergence of injuries involving both his AC *and* his neck. The "golden time" for treatment is immediately after an injury, before the tissues have become boggy and irritable. Two manipulations immediately completely relieved him.

Maria's story

Just before my first year of residency, I was invited to study in Paris. Those forty-five days played out with opportunities to study in London and with the Scandinavians, as well, each

of which became foundational to virtually all my future work.⁴⁴

The first day that I returned to USC, Maria's case was being presented to the Rheumatology/Orthopedic Surgery Conference. She was in her early twenties. Only a few years before, she had developed ravaging arthritis in her right shoulder. On x-ray, the joint was essentially destroyed. Any movement was so unrelentingly intensely painful that she was completely unable to elevate her arm. A year of physical therapy hadn't helped at all, and now she was being considered for surgery.

The orthopedic surgeon proposed that since the pain was apparently caused by her humerus impacting the top of the bone structure of her scapula, she might be more functional if the scapular roof was excised. No one had ever attempted such a procedure. He wanted to. I saw it as a mutilation, and asked for a few weeks to try the methods I had just returned with. The surgeon didn't want to wait. In his thinking, "physical therapy" hadn't helped. Of course, he was right, but the habit of thinking of physical therapy as a generic, like "cottage cheese," is one of the consequences of the Fundamental Flaw. When the breadth of concepts is not considered, even a profession, like physical therapy, can be diminished to procedural modalities and exercise.

Some of the methods I had learned are based on restoring restricted joint motion by moving them in directions different from their natural way of going, as I discussed with Lisa's hip. As I explained previously, an extremity is grasped close to its articulation and a specific force is applied that stretches the restricted soft tissues without unduly stressing the joint. The force is predominantly a shearing *transverse* to the joint's surface. The prime purpose is to loosen the capsule, thus providing a degree of joint "play" that allows the bones to move freely on each other. It is surprisingly pain free.

Relating to the arm, the theory is that before it can elevate, the humerus must first

⁴⁴ The description of the trip is archived on my website in the *Newsletter of the North American Academy of Manipulative Medicine* titled "*Goodley's Travels: A Voyage Among The Giants.*" (Its publication would become one of the pivotal and most challenging events to my professional career.

descend a little into the lower capsule of the joint. That is not traditional thinking. Regardless, Maria's shoulder capsule was so contracted from the arthritic inflammation that her humerus was too tight and “up” into its joint. Since the head of the humerus couldn’t descend a little, it immediately impacted the tender, inflamed tissues as soon as movement was attempted.

Maria was small, frail, febrile, and clinically malnourished from the recent ravaging of the disease. The rheumatologist stated that surgery couldn't be performed for about two weeks, anyway,, until she was clinically stabilized, so I had that time.

I showed the physical therapist a few techniques that needed to be done for a few minutes twice a day. I taught Maria how to use a door hinge space as a clamp into which to insert a strap, and how to use it for gentle traction. She would assure that the strap was well secured, and then wrap the other end about her hand and wrist and lean away so her arm would be distracted a little from the shoulder socket. I told her how important it was to remain relaxed and just let the gentle pull happen, and to do it periodically so long as it was comfortable.

Note: The end of the strap can also be placed on the floor and stepped on. Then leaning away provides “axial traction,” as well. By stepping on the strap with the *opposite* foot, closer-in pull can be accomplished. You can also “open” the joint while sitting on a chair by holding onto the seat with the involved hand and leaning away. Staying relaxed. Every little bit can help.

PHOTOS

Two days later, Maria was at the sink crying when I entered her room. Immediately concerned, I asked, "*Maria, por que lloras?*" (“Why are you crying?”) "Look," she exclaimed with eyes shining. For the first time in over a year, she was able to take a washcloth in both hands and painlessly wash her face. Then she picked up her ponytail clip and, with both hands behind her head, comfortably put it on for the first time since her disease had started.

Maria's shoulder joint was obviously just as destroyed as it had been. So, where did so

much painless motion come from? As I previously described, full upper extremity range of motion is only partially the movement of the arm at the shoulder, the scapulo-humeral range. It remained unchanged at only ten degrees, as before, but the therapy had stretched the capsule sufficiently and desensitized the area, likely freeing entrapped tissue. Now, I could restrain her scapula and pull against her arm with considerable force, and, though the joint was still locked, she just smiled. Now she was able to maximize her *scapular range*, which gave her another *sixty degrees of motion*. I taught her husband how to do the techniques, and Maria left the hospital a very happy young lady. PHOTOS.VIDEOS

A NEW AC DIAGNOSIS

Pat Hansen's case is unique. I previously suggested that if you wanted some idea of what Alan Couch went through with his wrist, bite the inside of your cheek and hold it. For Alan, it was three months. Pat's agony lasted *fifteen months!*

Pat will always be very special to me. She trusted me; she brought virtually all the essential concepts orthopaedic medicine can contribute into her case. Discovering the cause of her injury revealed a new diagnosis and mechanism. It was also another bittersweet time because of the chief of orthopedic surgery.

Pat's experience is another damning proof of the fallacy of the pain clinic-mentality which declared that "after six months," pain changes in its elements, automatically becomes "chronic," and requires psychological approaches and not pain medications. Pat's injuries had been compounded by her being even more emotionally traumatized with, "No more pain medications." "Treat her head."

They were wrong, and she suffered horribly for it!

It was early 1974, during my final year of residency at the University of California, Davis/Sacramento Medical Center.

I first saw Pat when she was sitting at the conference table in the clinic. She had been unsuccessfully cycled and recycled through several departments since she'd been injured, and she was back in Rehab again. This time the plaintive order from the orthopedic surgical resident read, "*Teach this woman to use her right arm!*"

Despite all the therapies, excruciating pain unrelentingly drove her to the ground every time she attempted to move her right shoulder. Dr. Mel Sterling, one of my professors, later at the Veteran's Administration Hospital in Loma Linda, California, asked me if I thought I might be able to help her. Of course, I didn't know, but I told him I'd have to admit her to the hospital. He just smiled and said, "Do it."

Pat's history was so unusual, its taunting diagnosis, and the totality of it remained baffling until months after it was all over. When the light came on, *the Eureka time*, I experienced one of the most unusual experiences of my life.

The original accident was only a mild fender bender. Pat had been seen for a very minor neck injury in the emergency room where she was fitted with a firm cervical collar and told to return home and rest for a few days. Everything that was done was completely reasonable and well documented.

She had been lying on her right side reading for a few hours, when suddenly *she felt as if she'd sunk deeper into the bed*. Within minutes, pain was intensifying at the top of her right shoulder and radiating along her thoracic spine and right scapula areas. In a short time, she was totally disabled by severe pain, unable to find any position of relief.

PHOTO

In our first encounter in the clinic as I approached her from behind, a puffy edema in the

skin overlying her right scapula was immediately obvious to me. Just running my fingers gently over it markedly intensified her pain, and when I attempted to barely mobilize her AC joint, she turned ashen gray, groaned, and almost fainted.

Pat and I spoke for the first time, but in the order of things, in what would be a unique and unprecedented case, my hands had done the listening first.

I told Pat that although I had no idea what was producing her symptoms, I was certain where a significant part of her pain was coming from. That itself was therapeutic for her. She knew she was resented because she'd failed to respond for so long. The resident's referral note reflected it.

Palpating Pat's thoracic spine revealed a remarkable loss of the resilience that normally is sensed as a moderately firm spring under the gentle but firm pressure of the examiner's hand as the patient lies prone. Hers was "locked" and exquisitely tender, as well. Skin rolling the area or trying to mobilize her scapula was impossibly painful, and there was also a minor dysfunction in her neck. Neurologically, she was normal.

I completed my examination on the ward that evening and explained my thinking. After fifteen months, many adaptive abnormal tissue changes had occurred from the prolonged spasm and tissue contracture. We could work a few weeks to try to soften them, or I could immediately manipulate the rigidity of her thoracic spine, which I hesitated recommending. Manipulation shouldn't be painful. This one would likely be, and it could cause complications. Whatever I preferred, Pat didn't hesitate to interrupt me. She told me emphatically that she had been in such severe pain for so long, she didn't think it could get worse. ***“Do it!”***

I needed a firm surface to manipulate her on, and rather than re-open the clinic several floors down, I cleared the ping-pong table in the recreation room. With her lying supine, my first manipulation to her neck was easy and relieving.

Then, I placed my right arm around and under her, my closed hand placed carefully under the most obviously restricted segments of her thoracic spine. I folded her arms over her

chest, *one on top of the other, not locked*, and moved my chest close against her elbows. I put my left hand under her head and flexed her neck and thorax to sufficiently focus my intended force through my chest at my hand underneath, which was further facilitated by Pat's pushing her head back slightly into my left hand.

Pat relaxed the best she could. The manipulation is performed by "taking up the slack" and then thrusting down while directing the force superiorly.

It was the shot heard round the ward! It was the loudest single manipulative release of my life, as if a pistol had been fired, so alarming, the nurses ran in from down the hall. At the "*craaack*," Pat's mouth opened to scream, but it stopped in her throat as she looked at me wide-eyed, "*My God, most of the pain is gone!*"

Within minutes, the resilience in her spine was improved, and within a few days, with directed physical therapy, all her skin and soft tissues pain had cleared. Her skin rolling was normal, and I was able to painlessly mobilize her scapula. Such rapid improvement was obviously remarkable. The body's ability to heal when a "log jam" impediment is removed can seem miraculous.

But at that same moment of the thoracic release, despite the reasons to rejoice, Pat's AC joint was obviously the same. Any movement of her arm away from her body still drove her instantly to the ground. I filled the joint with an injection of local anesthetic, and for about an hour Pat was totally pain free for the first time in about four hundred days and able to fully range her shoulder, but she commented that she still felt "*As if there's something in it, like a piece of rubber.*"

The next morning, I performed arthrograms on both ACs, similar to what I had performed on Lisa's hip. There was nothing in the literature about doing AC arthrography, and no one I spoke to knew anything about it, so I had no established standards to rely on. This may have been the first time it was done. I studied the left side first and assumed it was normal, so it became my standard. In retrospect, I should have concluded otherwise.

PHOTO

The dye pattern looked like an inverted T (\perp) with an abundant reservoir and a thick vertical column ascending from it into the joint space. Pat's symptomatic right side also showed a similar reservoir, but as I watched the dye enter on the intensifier screen, the verticality was a bare hairline.

PHOTO

Clearly, most of the joint was filled with something that shouldn't be there that markedly restricted the space and allowed only a minimal amount of dye to enter.

From that point, I believed Pat's condition required surgery. I was compelled to assume that what was caught was firmly entrapped, and it most likely was. Had I the manipulative skill at that time that later developed, I likely would have maximally distended the joint with anesthetic solution and "jack hammered" it to try to shake it loose. It might have worked, but there is little "give" in that joint, and now my possibly having succeeded with manipulation is only conjecture. I spoke with the chief of orthopedic surgery.

When I had been accepted at UCD, one of my first questions was whether the Department of Physical Medicine Rehabilitation, my formal specialty, had a close working relationship with the Department of Orthopedic Surgery. I have always sought to work closely with my surgical colleagues, and for very good reasons, this book is dedicated to two of them, but I have most often been disappointed. The "typical" orthopedic surgical psyche is driven by

the ego of a “jock” athlete and is easily bruised by someone like me, an aggressive, reasonably effective non-surgeon.

In answer to my question about the working relationship with the surgeons, I was told, in retrospect a little hesitantly, that the departments did work closely together. Unfortunately, they didn't, at least as I had hoped. The barrier was always there. The orthopedic surgeons didn't appreciate that I had made the diagnosis - especially a new one - and on a patient they had been seeing for more than a year.

Regardless, I had been influential in some troubling cases in what, overall, would become one of the most rewarding years of my professional life. They didn't like it, and now there was Pat, as I continued to hope it would finally open our discussions, but it didn't. The Chief's reflex response was, they'd first do their own arthrogram. When Pat heard that she breathed fire and scorched them with her fury. She unequivocally reminded them what she had gone through and how many chances they'd had at her. If they wouldn't explore her AC on my diagnosis, she'd go elsewhere.

They accepted but refused to just explore the joint. The Chief's condition was that they would perform only the standard surgery - the excision of the end of her clavicle - or nothing, thus taking care of the problem by obliterating the entire joint. That's the way things were done. That's the way they had to be. They would not consent to see what was there and then decide. The idea that Pat's total shoulder pathology was from unheard of soft-tissue entrapment was not tolerable. Their demand didn't become a major confrontation because an intact AC joint isn't all that necessary in ordinary activity. Pat agreed to the surgery.

The Chief did agree, however, that as soon as the joint was entered, he would step back and allow me to examine and photograph it.

I stood behind him in the operating room with all my equipment set up. After the resident exposed the joint, the Chief incised the capsule. Then in a sudden blur, he picked up a sponge with a clamp and thrust it forcefully into the joint, in and out, again and again, as I

watched in anguished, sickening surprise. What had been trapped was gone. Finally the chief turned his head to me, his eyes slits above his surgical mask, as he said acidly, "*Look for yourself. There's nothing in there.*"

When the resident excised the distal clavicle, the chief commented with a little annoyance that it looked degenerated. I sent it to Dr. Louis Lichtenstein, the internationally famous bone pathologist who had written "the book." He responded in a hand written note, dated June 30, 1974 comparing the findings to those seen when the patella is damaged. He described the presence of a process that is non-specifically seen in aging and as the result of old trauma. Later, I found a paper written by Dr. Marshall Urist, one of my UCLA orthopedic surgery professors, a gentleman, who had demonstrated that such joint changes in the AC were common consequences by the third decade of life.

Most importantly, however, Pat was cured (but I still didn't understand how the accident had happened).

I frequented the autopsy room at night and studied fifty fresh post-mortem AC joints, from infancy through the tenth decades. The pathology and radiology people liked me, and I got away with my research "midnight auto supply" style. I certainly made their nights more interesting. After an autopsy was completed, I excised an AC joint, placed it on a light plastic frame that the hospital engineers had constructed for me, took it downstairs to radiology, had it x-rayed, did an arthrogram on it, injected some with latex, then dissected it and took photographs. I have no idea what the study would have cost otherwise, and I could never have gotten it funded in time, anyway.

What was immediately clear was that Pat had congenital anomalies in *both* joints. I didn't find a single joint with a "⊥" on the arthrograms. In all fifty cases, the ligaments under the joints were completely intact and fully supported them. Not one had any recess at all. The consensus normal arthrographic appearance was discoid, but at that time I still couldn't capture its significance.

PHOTO

That year in Northern California, I was away from my family for two or three weeks at a time. It was agreed I could “moonlight,”⁴⁵ so long as I didn’t work in hospitals around Sacramento. I’d fly back to Los Angeles on a Friday and go straight to a small office I had above Ted Loseff’s, on Wilshire Boulevard, see patients, get a little sleep, fly my Cessna 310 to El Centro early the next morning, see patients, fly back, see patients again on Sunday in Los Angeles, and race for the last Pacific Southwest Airlines (PSA) flight back to Sacramento.

One evening, I returned home after traveling somewhere, exhausted and desperate for sleep. Doing something I’d never before done in my life, I crawled into bed and almost begged the mattress to open for me and then close over me. Lying on my side, I kept pushing myself into the mattress harder and harder trying to literally accomplish it.

*Suddenly, my mind exploded in the purest of Archimedes Eureka experiences! It is among the rarest of human events that, if it happens once in a life, is worthy of a lifetime’s waiting and celebration. **I knew!** Amazingly, I was instantly totally refreshed, on my feet, shouting, jumping up and down on the bed. (I have had one other somewhat similar experience, an incredible illustration of the incalculable power of the mind.)*

PHOTOS

⁴⁵ Perform medical work privately

THE EXPLANATION: Pat had been on her side reading for hours. Her persistent weight on the mattress slowly stretched her shoulder muscles sufficiently so her humerus moved inferiorly slightly from its position directly under her AC joint. Under ordinary circumstances, it would have made no difference at all, *but Pat's underside ligaments are defective*. She had no “floor” to support the AC joint except the closeness of the head of the radius. She could have lived her entire life with no problem except for the unique compounding circumstances that asserted the flaw’s potential.

Anatomically, all the restraining ligaments about the AC joint keep the clavicle from moving *up*. None of them keep it from moving *down*! Pat was wearing a *hard* cervical collar that kept exerting a *downward* pressure onto her clavicle. At the fateful instant, the forces converged, and the joint dislocated into the laxity caused by her humerus descending. As the clavicle slipped inferiorly, it caught synovium and, as suddenly, realigned itself, trapping the synovium in a vicious vise.

Pat was right! She did suddenly sink into the bed!

Lying on her side, her vertical clavicle became a strut supporting her horizontal spine. As it unexpectedly "kicked out," in that instant, her spine reflexively buckled, a totally unnatural release. As the mid-thoracic joints suddenly “sprung” and gapped, they jammed and locked, also possibly entrapping their own synovium along the linkage.



Normal synovial tag extending into a thoracic vertebral joint, one of the remarkable dissections of Dr. Wolfgang Rauschning, an orthopedic surgeon at Uppsala University, Sweden.

Pat's tortured nerves began screaming, and the "swamp" and extreme cutaneous hyperalgesia joined in the devil's merry-go-round that almost destroyed her life. Of note, in her case, the cutaneous hyperalgesia cleared spontaneously.

Pat called about a month later and told me her shoulder was hurting again. As I groaned, she laughed uproariously. *"I felt so good, I went to Las Vegas and played the one-arm-bandits for almost two days!"* She told me she'd found something that had to be mine.

It's a trivet with a ceramic tile in the center. Painted on it is a caricature of smiling man in a bathrobe standing nattily and pointing. The caption reads, "IT'S HARD TO BE HUMBLE WHEN YOU'R (sic) SO GREAT!" I taped her note to the back: "This had to be yours. Pat Hansen."

PICTURE

Pat had needed it all: examination, x-ray, even special x-rays, injections, manipulations, physical therapy and surgery – each in its place - and she was cured - and I so hope she has had a good life.

There were other cases with the chief, but always with the expression on his face of someone who had trapped himself in the cesspool of spite. I saw him years later, when I visited

UCD. It was still there on his face when he looked at me from a distance.

A swimmer's case

Another case involved Audra Nescher, my accountant's daughter. Reed is one of the good ones of this earth, and we have shared significant times. Audra was in high school. She is a powerful swimmer. Her coach was inexperienced but wanted her to do the breaststroke "as best as she could." Audra was concerned about her form, but she gave it her all, charged across the pool and threw her arms out to touch the side of the pool. It was more like a collision. Within a short time, she realized she had injured her right shoulder. Reed called me.

Except for a few areas of muscular tenderness, Audra's exam was normal except for a clear AC dysfunction, which I promptly manipulated and which sweetly reciprocated with the clear "click" of a release. Audra promptly commented that her shoulder felt normal again with the same type of relieving sensation I had experienced when "Bear" cured my elbow.

I told Audra to keep me informed about how she was doing, and when I saw her occasionally, all seemed well. Then I didn't hear from her for almost a year. Audra was working for certification as a scuba diving instructor, but she was increasingly experiencing shoulder pain whenever she put her air tanks on or pulled herself up into a boat. It was becoming serious enough to threaten her intended career.

Audra's AC ligaments had been damaged and finally asserted themselves. It had sustained ligamentous and muscle attachment damage that was compromising her entire shoulder function. Her acromio-claviculitis progressively inflamed. Severe tenderness spread all about the joint, across the "spine" of her scapula and along its lateral edge. Audra was in real trouble.

I told Audra and Reed that her only chance for restoration was a series of prolotherapy injections (which I discuss elsewhere). I performed them twice over a two-week period, injecting all the involved and symptomatic ligaments and muscle attachments. Within a few

weeks, Audra was completely relieved and back on her full athletic schedule.

CHAPTER THIRTEEN

LESSONS ABOUT THE THORACIC SPINE, RIBS AND

“HEART ATTACKS” - VARIATIONS ON THE THEME

Of the Doctor's errors

It may be granted freely that a bad diagnosis due to an error of judgement is more excusable than one attributable to want of knowledge or even a faulty observation. The ghosts of dead patients which in the midnight hour haunt the bedside of every doctor who has been some years in practice will not upbraid him with such questions as "Why did you not know that a ball-valve gall stone may produce symptoms like those of malaria?" or still less "Why did you not attach more importance to the rapidity of my pulse, and less to the signs in my abdomen?" No; the inescapable questions they will put to him will be such as these: "Why did you not examine my fundi⁴⁶ for optic neuritis?" or "Why did you not put a finger in my rectum?"

*Sir Robert Hutchison
The Principles of Diagnosis
British Medical Journal, 1928*

- **Dramatic cases of locked vertebrae and ribs.**
- **Manipulating the thoracic spine – a simple technique**
- **Curing “heart attacks”**
- **Examining for rib motion and why**
- **Life and death issues about assuring rib movement**
- **Some complications**

Allopathy doesn't look for positional changes of ribs (although osteopathic literature from the early twentieth century discusses it). A chest medicine specialist will listen carefully to the lungs and measure all sorts of complex respiratory tests, but it is not part of the diagnostic regimen to place hands on the ribs and sequentially, comparatively palpate their movements.

⁴⁶ The fundus is the back of the eye, the retina. Examining it with an *ophthalmoscope* is an important part of any complete physical examination.

When a bellows cannot properly expand to aerate the furnace, the fire is threatened. The body is the same. If a rib is stuck in the "up" position, the ribs above it lose their ability to move "down." If it is stuck in the "down" position, the ribs below it lose their excursion "up" - so one dysfunctional rib can adversely affect the inflation of a large segment of the chest and its underlying lung.

Air is the most vital of all nutrients. You can survive without food for weeks, water for days, but you die after only a few minutes without air.

If lung segments cannot expand, the moist stasis exposed to airborne microbes is an excellent culture medium. Anecdotally, one of the events that assisted osteopathy's growth was the World Flu Epidemic of 1917. Millions died. There were no effective medicines. If pneumonia got a foothold, its virulence spread rapidly. Violent coughing could "jam" a rib, like a stuck hinge. Only clinicians trained in manipulation examined for and restored rib motion. The lore is that their patients had better survival rates. Assuring that the essential anatomy is moving normally seems so fundamental, but never in medical school was it even suggested to me.

Early in my general practice, a woman was brought to my emergency entrance. She was in ashen agony, grotesquely contorted, and struggling to breathe - the same as had happened to the frail, elderly black lady of my opening story. She had been shopping at the nearby Market Basket, and, as she walked out holding a large package under one arm, her young son said something impertinent. She swung to slap him, screamed in pain and dropped the package, her body locked in rotation.

At that time, I knew only the few crude manipulative techniques that I'd learned during the twenty-hour introductory course, but "*In the kingdom of the blind, the one-eyed man is king.*" In such cases, all that allopathy offered were x-rays, narcotics, oxygen, drugs, generic physical therapy, and weeks of expectancy.

After a brief exam, we placed her face down on the exam table as I soothed her to relax

the best she could, asking her to keep her mouth open and exhale. I crossed my hands and placed them on each side of her mid-thoracic spine so that my hands on the little finger side were adjacent to her spine and over the area of restriction. My arms pressed down to “take up the slack.” I waited until the tension was “right” and then delivered a sudden, short, downward and superiorly directed thrust (Pisiform Thrust). There was a series of audible releases, and she was cured. With a deep sigh of relief, she was immediately off the table, breathing and moving freely - and very, very grateful.

She was among my first cases in a stream of exclamation point cases within only a few months, which emphasized the uniqueness of the training that I had been denied in medical school. As the years pass, that initial series increasingly impresses me. Such a collection of dramatic results over a short time never repeated itself.

Auggie was another of my early-on general practice cases. He was the manager of The Market Basket, and one day, he came to my office pale, sweating, and frightened, telling me he was having a heart attack.

"Auggie, you're only thirty-five years old."

"My friend died of a heart attack at thirty-five".

"What are you feeling, Auggie?"

"I have pain right here", he said, pointing over his left chest. *"I can't breathe without it killing me."* (First clue)

"Exactly what were you doing when it started?"

"I was hanging up the signs for the specials. The crew was behind, so I was trying to help."

"Auggie, show me how you were doing it."

"I can't! Every time I try to twist like I was doing it, the pain gets worse." (Bingo!)

The same single thrust instantly "cured" Auggie's "heart attack."

Years later, I was in London watching a play, *Make or Break*, whose plot developed

around a similar episode. The lead actor played the workaholic president of a door manufacturing company. He was sitting on a couch and had turned to retrieve something, just as my first story lady had done, when he suddenly developed the same terrifying pain.

The audience must have thought me a Yankee (pejorative) when I started to laugh. Then the "house doctor" performed a bizarrely theatrical manipulation, and all was theatrically well. While this debate shakes all of medicine, London playgoers were entertained by it that year.

A few decades later, when I was teaching in Sweden, my assigned subjects for a particular demonstration were the shoulder and knee. Karin, a physical therapist from the Karolinska Institute in Stockholm, kept asking me when I was going to talk about ribs. I couldn't get out a few paragraphs before she would smilingly persist, until I finally began to realize that something important was driving her.

Fourteen years previously, she'd had an incident that caused rib pain that had persisted with every breath since. All the therapies available to her had been unsuccessful. She was her own controlled study. A few manipulations over less than five minutes, and she was pain free. I saw her a few years later. The had pain never recurred.

During my time in Israel with Vendyl Jones, David Yehuda ben Avraham was one of the volunteers on the dig. He was one of those computer geniuses who, back home, sat inside a circular table and worked with about six of them at a time. He had two side-by-side in his caravan, and he made his mouse work across both screens. Amazing. But David didn't look well. He stayed largely to himself and had to rest in the afternoons.

After a few months, as word spread about patients in had treated, like Sarah, he finally opened up to me. He'd been on the dig two years before and had gone to an amusement park in Eilat. One of the rides was a vertical wind tunnel that sky divers train on. He'd never done it before, and he was thrown about violently. Since then he had a strange back pain and other problems, including progressive fatigue.

Most of his right ribs were locked! It took a few sessions before they suddenly released.

Later, David told me that during the ensuing two weeks, he would suddenly experience what he described as “the most incredible sensations as everything inside settled back.” His pain cleared almost immediately, and he returned to normal health. (At a later time he told me that the “self corrections” went on for years.

I didn’t see another case of such profound locking until 2012, while I was editing *Release From Pain* for iPad. Peter is a healthy forty-four year-old man. I had treated him in the past for minor occurrences. He called me because he was experiencing progressive thoracic back pain, which he readily attributed to business stress. There was no history of trauma of any kind. He is stoic, and despite the intense pain that he was reporting, he still appeared completely normal while he was taking off his shirt.

Nothing on observation gave me a hint, but as he faced away from me during his initial examination and my fingers ascended his ribs, each encountered an unmoving right rib! *His entire right rib cage was locked!* From stress? That was his only possibly relevant history.

From wherever the inhibition arose, it resisted my initial efforts and responded mostly to an *au cheval*⁴⁷ technique. Peter was “70%” relieved after the first treatment and had only a few more residuals to treat.

How did it happen? I don’t think I will ever know. But it did. And the only answer was in checking his ribs, his thoracic vertebrae, and hands-on techniques.

DEMO

CURING “HEART ATTACKS”

“Curing Auggie’s heart attack” was only the first of a long series.

An internal medicine specialist referred a woman to me. For fifteen years, she had unpredictably developed intense left chest pain that referred down her left arm. A myocardial infarction was, of course, suspected, and each occurrence hospitalized her for a week. Then,

⁴⁷ Au cheval - on horse. I learned the technique in Paris.

with all tests negative, the pain would slowly mysteriously dissipate - until the next time.

. She looked at me with dull, lusterless eyes, a woman who had accepted the seemingly imminently inevitable too many times. Her husband, a Los Angeles Police Department sergeant, had to retire just to stay with her as the family expended itself waiting.

He showed me the tabulation from TransAmerica Insurance for \$59,600 in medical care paid since it had taken over as carrier of his health plan. The total was considerably higher.

When I examined her, her only abnormality was one stuck rib! When over-irritated, it fired pain along its course to the front of her chest, and it would take days before the inflammation subsided.

She obviously never had a cardiac condition. Both the diagnosis and relief required only hands-on. It took a few visits, and finally there was a small, deep movement as the rib “slipped back into place” and began moving.

When I saw her next, her eyes were bright and she was alive, but after more than fifteen years, the pattern had been established. Occasionally, it would recur, a nuisance but never dangerous.

COMPLICATIONS

My beginner’s series of seemingly miraculous cures had to have a complication or it wouldn’t have been complete. At the same time, while I wasn’t getting cocky, I couldn’t help becoming very nearly convinced that this was simple, reliable, safe therapy.

One morning, I entered the hospital ward just as one of the staff nurses, a post-menopausal, osteoporotic, bronchitic woman, was leaning far forward over a counter while reaching high into a cabinet. Suddenly, she gasped in pain and froze, pale, her breathing audible in jerking gasps as she grasped her chest. I sensed what had happened, and I knew what she thought it was.

Over-stretching is always associated with hazard. The bad leverage had locked her mid-

thoracic spine. An uncoordinated overload can fire the maximally protective, “literal thinking” reflex that interprets any abnormal motion anywhere around the spinal cord as a threat: *Protect the spine! Freeze everything! Pain is irrelevant!*

I moved quickly to her and told her I didn’t believe it was a heart attack. I asked her to trust me to try to help her. She lay prone ⁴⁸on the examining table. For years, every cough from her chronic lung disease had been a statistical instant of risk. At any time, the sudden pressure and contractile changes could have fractured her fragile, aging vertebrae or ribs. I understood that, took it into account, and did my best to adjust the same pisiform thrust to her circumstance. The result was the gratification I had come to expect, and the next morning when I returned on rounds, I expected, at least, a little cake instead of just the frosting from the nurses on duty.

"What happened? Where’s Mrs. Reynardi?"

"She didn’t come to work. *You fractured her rib.*"

However careful I had been, the only technique I knew then was too much for her weak bones. I reported the incident fully when I lectured, and the doctor who had taught it to me wanted to be kind (and self-protective) as he responded that, had I assured her arms were off the table, it wouldn't have happened. I think it would have and that it is critically important to report such events.

I have had only one other complication that I am aware of. I allowed myself to be persuaded to manipulate when I was reticent to. I had treated an elderly woman months before, manipulated her neck, and she had done well. When she returned for another problem, she asked me to "do my neck again. It felt so good." I resisted. I hadn't examined her for that. She insistently persisted. So, instead of being able to finish my morning schedule and leave for the hospital, I had to stay several hours until her light-headedness cleared.

There are several reports in the literature about people who have suffered disastrous strokes from a cervical manipulation. While rare, they more likely occur when the neck is

⁴⁸ Face down

extended and over-rotated. A skilled manipulator guards against that. It is a vascular problem. Arteries enter the brain from both the anterior and posterior parts of the neck. The *posterior vertebral arteries* follow winding courses around and within the upper cervical vertebrae and can be thrown into spasm or otherwise injured.

VARIATIONS ON THE THEME

During my few years in Phoenix, Arizona, I consulted in the hospital on a near-terminally ill 27-year-old woman because of the sudden onset of severe back pain. Sadly, she had end-stage diabetes. She was wasted, on kidney dialysis, almost blind and had been repeatedly admitted to the hospital because of sudden coma. Her life had been a misery, and now she was about to be subjected to what would have been an excessive cruelty. The orders had been written to transfer her to a convalescent facility to endure her last days in intense, pain instead of her being able to return to her family.

She had been hospitalized after another coma and had consultations by two other specialists for the pain. They had agreed she had *spinal muscular amyotrophy*, an incurable, especially painful condition. They had no recommendations for relief.

I discussed her pain with her. Despite the unremitting progress of her underlying disease and its attendant neuropathies, *she had never experienced the pain before the coma*, which had occurred three months previously, *and which she first became aware of when she returned to consciousness*.

The coma had come suddenly. She was standing in her kitchen, had fallen, and remained unmoving and contorted against her refrigerator for hours. A history like that obviously suggests a specific event.

I slipped my hand under her, and examined her where she lay on her hospital bed. She had segmental restrictions throughout her spine down to her sacrum.

I performed a gentle manipulative procedure, and much of the pain cleared. I positioned

her in a relieving posture, put pillows around her so could relax in her position of comfort, and the remainder of the pain remitted as she slept.

Physical therapy relieved the muscle contractures, and the pain didn't recur. Within a week, she was again semi-independent and able to return to her family for whatever time she had left.⁴⁹

The other consultants certainly wanted to succeed. They hadn't been given the tools. (At the same time, obtaining a more perceptive history certainly would have helped.) I was intensely resented for it.

Opinions founded on prejudice are always sustained with the greatest violence.

Lord Francis Jeffrey (1773 - 1850)

⁴⁹ The story was published as part of an interview with me concerning Orthopaedic Medicine in the newspaper *Arizona Republic*, November 24, 1984

CHAPTER FOURTEEN

LESSONS ABOUT THE SACROILIAC JOINTS AND PELVIS – ANOTHER NEW DIAGNOSIS

Let me be contented in everything except in the great science of my profession. Never allow the thought to arise in me that I have attained to sufficient knowledge, but vouchsafe to me the strength, the leisure and the ambition ever to extend my knowledge. For art is great, but the mind of man is ever expanding.

*From The Physician's Prayer
attributed to Moses Maimonides (1135 - 1205)*

- **Fundamentals about the sacroiliac joints**
- **Where the manipulation battle was most intensely waged**
- **The symphysis pubis - a common dysfunction**
- **How to examine it**
- **How to manipulate it – The “shotgun maneuver”**
- **Goliath’s symphysis pubis dysfunction**
- **A near worst case scenario – that proves the concepts**

In the generations of this war, no battle was more vociferously fought than that of the sacroiliac (SI) joints. Nowhere was there a more fanatically defended doctrine of faith that traditionalism pontificated: They cannot - *they must not* move!

My first year in general practice, an orthopedic surgeon retorted to me, “*Paul, how could they move? Have you ever tried to dissect one? Look at all those ligaments!*” I stunned him when I heard myself responding that, since the purpose of ligaments is to *restrict* motion, what were they doing there if there wasn't any?

The joint cannot be well seen with an ordinary x-ray because it is oblique, and many surfaces overlies each other, but the first CAT scans must have shocked the sensibilities of the

can't-movers when the relative immensity of the joint space became obvious. It seems big enough to build a bird's nest in. Regardless, this is the joint for which those who manipulate joints have possibly been subjected to the most ridicule.

(When I returned from Dresden, in 1992, a notice was in my mail announcing an upcoming meeting: *First Interdisciplinary World Congress on Low Back Pain and its Relation to the Sacroiliac Joint* hosted by the University of California at San Diego. *Finally!*)

The SI joint is complex, and its examination is complex. It has three distinct aspects. As well, dysfunctions can occur from the relation of the sacrum *to* the ilia, *or* visa versa. This is not the place to regard its technicalities but to (finally) appreciate its importance and centrality to non-surgical orthopaedic approaches to therapeutics.

While I was at UCD, in 1974, one of my patients had been totally disabled for over a year and couldn't stand for more than five minutes without experiencing severe burning pain throughout his left leg. He was a garbage collector. While carrying a heavy trash can on his shoulder, he lost his balance, fell back, and the area over his left SI joint struck a spike that was stuck in a telephone pole behind him.

Standing was excruciating. For months, all he could do was crawl, but all the x-rays were normal, and there were no "objective findings," so his Workers' Compensation benefits were cancelled. His wife had to work overtime all the time. His whole life was disintegrating.

I worked on him unsuccessfully for over a week. I was on duty that weekend, and I took him down to the deserted clinic and started again. He stood and the pain came. I laid him down, filled a syringe with local anesthetic, attached a three-inch spinal needle, entered the joint and anesthetized it.

Within a few minutes, he was pain free. His face shining, he stood up and began dancing joyously. He put *me* into the wheelchair and shocked the nurses by wheeling me back onto the ward, still doing a jig.

As anticipated, the relief was temporary and lasted no more than a few weeks, but it was

his first validating evidence against his persecutors. I re-injected him periodically. I was only beginning to learn about such dysfunctions, and I certainly missed something. I had no skill to assess dysfunction of the SI joint. Certainly the injury had torn some ligaments that hadn't healed. I had observed some use of prolotherapy injections in England two years before and written about it, but I had no experience with it then, and at that time, regardless, it would never have been permitted at a university hospital.

THE SYMPHYSIS PUBIS

The symphysis pubis is the joint at the front of the pelvic ring that has the SI joints in back. The joints are obviously integrally related.

We were visiting one of our daughters while I was teaching near San Francisco. Diane, Darcee's Mommy, and Dean were at a barbecue with their friends in Danville, and we were invited. I'd just filled my plate when Diane came from the phone and asked me to make a house call.

Norm Cordle, one of their friends, had been injured. He is a huge man, 6'4½", 265 pounds. Hurrying to leave his office, he'd injudiciously bent over his computer to make one last entry when he was near driven to the floor by sudden non-radiating low back pain. He'd never experienced anything like it before.

Again, one of the priceless values of appropriate examination is its capability to localize sites of injury - if they exist. Despite the pain in Norm's back, I found nothing abnormal there. A discoverable physical change usually accompanies the complaint, especially in such an aggravated case. Regardless, examination of the symphysis pubis is a necessary part of every low back examination.

I asked Norm to lie on the floor. He did with some difficulty, and I placed my hand on his low abdomen just above his pubic area. The symphysis pubis is a joint in the full sense but not of the type that is generally considered. It doesn't move much, but all the more, the little it

can - and does - is critical. *When it dysfunctions, the pain is always felt in the low back!*

Medicine knows well that the joint moves. Towards the end of pregnancy, mother-to-be begins to waddle like a duck because the symphysis and its related joints about the ring soften so the pelvis can mold as baby comes through. Dysfunction of the symphysis pubis is relatively common, and it is often one of the "bonus" dysfunctions because it is usually easy to diagnose and treat - *once it is considered*.

I localized the mid-line joint under my palm, placed an index finger gently but firmly on each side of its anterior surface and moved the soft tissues up and away until my fingers rested on the tops of the bones. Then, I looked straight down to observe their positions relative to each other. Goliath was in deep trouble. There was an astronomic, almost half-inch asymmetry.

A "shotgun," one-fits-all maneuver corrects the dysfunction about 80% of the time. It is simple to perform properly, a gift, and essentially harmless if it doesn't work. There is never justification for not trying it – *carefully*. I teach it to a significant other, such as a husband whose pregnant wife is having intermittent back pain. All obstetricians and gynecologists need to know it.

A BRIEF DIGRESSION TO THE TENDINOUS ARCH

There is something else obstetricians and gynecologists need to know. The traditional allopathic practitioner, in very practical focused terms, considers the “gynecologic” pelvis the province between the ovaries. The truth is, of course, that all of the pelvis - every muscle along its walls, every ligament, every tendon is available to the gynecologic examiner and may provide the necessary evidence to the case. Sometimes, and sometimes uniquely, the vagina is the essential entrance for the discovery of back pain.

Pain from within the pelvic structures is often felt as localized low back pain, as often happens during labor. If you are a woman who has low back pain

and dyspareunia (painful sexual intercourse), the back pain may be “from the inside,” as well.

Within a short time, I treated two women who had back pain and preclusive dyspareunia. One had been in a car that had been struck violently from the side. The other had inadvertently walked into an empty rolling clothes rack that had been pushed close behind her. As she turned to walk, her feet became entangled in the low horizontal bars, and she had contorted violently to keep from falling.

Both of their injuries had occurred about two years before I saw them. Each had been examined many times, including by gynecologists, and all the reports had been the same: “No objective findings.”

My twelve years in general practice is the foundation of whatever I do. I delivered a lot of babies. The pelvic examination was diagnostic. The traditional exam was normal, but as my examining fingers “ringed” the muscular, ligamentous and tendinous tissues, a few discrete areas of exquisite tenderness along the *tendinous arches* provided the answer for their disabled sex lives and back pain.

The tendinous arches are the fibrous structure along the inside of the pelvic bones to which the pelvic diaphragm, that I discussed in Sarah’s case, attaches. Their traumas had torn some of the fibers.

PHOTO

I injected the tendinous arches *transvaginally* - through the vaginal wall - by adapting a traditional obstetrical technique for paracervical anesthesia – injecting each side of the cervix to diminish the pain of its dilating in labor.

In this case, I arched the needle considerably to enter the *lateral* wall of

the vagina and into the tendinous arch a fraction of an inch under its surface. I then followed with a short course of transvaginal ultrasound, which requires a special applicator head.. One woman was cured and the other predominantly relieved. Their sex lives were restored, and they were able to get on with their lives. End of digression.

Returning to Norm's case, I'll describe the manipulation, but I do not imply that by following some "recipe," that safety and success can be presumed. If you decide, *on your own cognizance*, and because of your circumstance to try, please remember, *remember* that the craft is in the sensitivity of the feeling. *Go no faster than you can appreciate what you feel.*

Take nothing for granted! Do not attempt it while watching TV or chattering away. *Pay attention to what you are feeling! Do not hurry!*

The procedure is not a contest of strength. Too much force can injure. Enough is needed to assure active contraction of all the muscles' fibers. The person doing the procedure must feel the force without it being strong enough that it has to be aggressively resisted.

Patiently study this and attempt to receive in words what is obviously best transmitted hand-to-hand. Read it several times, both you and the one you are attempting it on. YOU are the one who has the responsibility!

MANIPULATING THE SYMPHYSIS PUBIS PHOTOS VIDEO

The muscles of the *inner* thighs largely originate along the edges of the bottom of the pelvic bones that form the symphysis. By symmetrically contracting these *adductor* muscles against resistance, they exert a downward force on the dysfunctional joint that usually slides it into symmetry and relieves the pain.

It is first desirable to bring the adductors into balanced tonus by using *reciprocal inhibition* that I described in Chapter Eight. In brief, when muscles on one side of a joint contract, the muscles on the other side necessarily coordinately relax. Here, the physiology is

exploited to a specific purpose. To equalize the tone of the thigh **adductors**, first contract the thigh **abductors**, the muscles on the *outside* of the thigh.

If I were performing the manipulation on you, you would lie face up with your hips and knees flexed. Your knees would be together, your feet flat on the surface. I would stand at your side and wrap my arms around your knees, holding them against my chest.

I would then ask you to try to push them open against my resistance. An active contraction in which the parts cannot move is called *isometric*. *Again, this is not a wrestling match*. It is a communication that recruits and unifies all the muscle elements.

After about seven seconds, I would ask you to relax the contraction as I relax my hold at the same time so your legs would not be squeezed together.

Then, *only when you have completely relaxed*, I would *allow* your knees to separate slowly so that the gap would be about a foot wide. Note: Almost always, this first time has to be repeated to develop coordination, and it is an unusual individual who will truly promptly relax and let the legs just start to fall apart. Obviously, the clinician's hands have to be about the knees to control the opening.

Especially with a woman, it is beneficial to explain the whole procedure beforehand so inappropriate imaginings are avoided.

For the second time, I would again wrap my arms around where your legs are now partially abducted and lead you through the same procedure. Again, my request is the same, for you to try to open your legs further against the same resistance, followed by my request for you to relax again as I relax at the same rate so your knees are not slammed together.

I would repeat the maneuver three times. Again, your completely relaxed legs will open further for the last time, sufficiently for me to place my forearm between your knees with my palm on the inside of one and my elbow inside the other.

Then, I would request the *therapeutic* adduction contraction by asking you to try to bring your knees together.

VIDEO

That is exactly what I did with Norm Cordle. The sound and the shake of what happened were unique in my experience. I don't recall anyone more muscular or large boned on whom I have performed it on. The sensation of his tissue reaction resembled the rumbling shudder of a bank vault closing, accompanied by a grinding as if concrete was being dragged across concrete. It reverberated across the room and startled his wife.

"What was that?" he asked.

I asked him if it hurt.

"No! It felt great!"

The objectivity of the re-examination confirmed his response. His symphysis symmetry was restored, and he stood up completely pain free. *Norm was grateful!* Throughout the time Diane lived in San Ramon, she weekly got her hugs, one for her and one for me. Consider what traditionalism would have offered him. Norm would have missed the BBQ.

But sometimes the mass of interrelated tissues in a complex injury can appear as a Gordian⁵⁰ knot of futility. Parts are so twisted and locked that all ordinary therapies are fruitless in what is, for very good reason is virtually a desperate "damned if you do, damned if you don't" situation in which an entire quality of a life is at stake.

I learned that in such a case, the tissues are so caught and taut that releasing them can unleash an avalanche of neurologic frenzy accompanied by excruciating pain. Again, imagine maximally clamping the inside of your cheek with your teeth and then trying to pull it away.

The woman had been injured in 1989, four years before. She owned a gambling house in Virginia City, Nevada. The accident happened as she was descending the snow-covered

⁵⁰ This is an interesting side light in history that applies to this whole issue of missing the most obvious thing to do. Gordius, king of Phrygia tied a complicated knot and stated that whoever could untie it would be king of Asia. Alexander did it easily: With a stroke of his sword.

outside back stairs when her feet slipped out from under her. She crashed onto her left side, jack-hammering all the way to the bottom, where she lay dazed in the snow as generalized pain intensified.

At the hospital, they told her she'd be sore for a while and sent her home. She tried to continue working because she couldn't afford to hire a temporary employee due to the strictness of Nevada's bonding regulations. Finally, she was forced onto disability, and her condition deteriorated for a year.

Her neck pain particularly increased and radiated over her shoulders. She would awaken with "pins and needles" in both arms. In 1991, her neck was operated on. Two weeks later, she was leaving her house wearing a firm cervical collar, unable to look down and see the stairs, and she pitched forward, landing on the concrete, face down. Her low back injury flared. Subsequently, the pain would unpredictably intensify and radiate down the front of her thigh. At those times, any attempt to move would be excruciating. It became impossible for her to lie flat on her back.

When I examined her, the tissues about her sacroiliac joints were edematous. Cutaneous hyperalgesia was intense. As I began rolling it, the skin under my fingers became violently purple as her entire pain pattern exploded and shot up her back. She groaned and grabbed her head.

Her symphysis pubis was shifted, locking her sacroiliac joint. Only mild pressure produced a strange, deep severe pain about her low back.

When I attempted to "shotgun" the symphysis, she groaned as the muscles of her left thigh twitched, then convulsed into a migratory spasm that rippled horrifically again and again across her leg for about a minute. Her entire body contorted against the ongoing agony, and only a narcotic injection relieved the pain.

But the next day, it was evident that something good had happened. There was less swelling over her sacroiliac joints, and she was able to lie flat for a short time for the first time

since the accident. Her husband helped me as we each placed a hand under her with our fingers just medial to her sacroiliac joints. Very gently, we mobilized them by moving our hands away from each other as I performed another maneuver with my other hand under her sacrum.

When it was over, she lay quietly, breathing deep and softly, pain free for the first time since the accident four years previously. Everything was symmetric. After a time, she arose from the table effortlessly and walked about the room as if there had been a miracle.

I predicted her improvement wouldn't persist. The ligamentous tissues had been too damaged, and the structures were unstable. She would need further therapy, definitely including prolotherapy, but now she had hope.

DIFFERENT STROKES

When I painfully dysfunctioned my own sacroiliac joint, I first went to the clinic at The College of Osteopathic Medicine of the Pacific in Pomona (COMP), where I was Adjunct Professor of Orthopaedic Medicine. I gave them three cracks (no pun intended) at it during a week, and in each, the physician used a modified "muscle energy" stretch technique but to no avail.

I walked across the street from my office, then in Big Bear Lake, to Dr. Larry Poland, a chiropractor who uses a treatment table that has spring loaded panels on it that release from the thrust so the force of manipulation is buffered. He never uses a rotary force. His thrust gave me instant relief, and the mild residuals cleared within hours. For me, at that time, it was the perfect manipulation.

I've needed it a few times since and have usually had the same prompt result, but not always. It is the only technique Larry uses. As a commentary of individual difference, when I related my experiences with the symphysis pubis, I couldn't enlist his interest. He believes he can treat all pelvic problems, in fact all spinal problems, through the back. That said for completeness, Larry - who happens to be a chiropractor- is a clinician to be admired.

CHAPTER FIFTEEN

LESSONS ABOUT THE CRANIUM - THE “CRYPTIC CONDITIONS”- ANOTHER NEW DIAGNOSIS - TEMPOROMANDIBULAR JOINT RELATED PROCEDURES

I was educated once...and it took me years to get over it.

Caption on a picture postcard

- **Proof that pain is often a liar – a unique case of neck pain**
- **Endocrine shutdown from head trauma - cured with Goodley Polyaxial Cervical Traction - a new diagnosis**
- **Fundamentals of Osteopathy In The Cranial Field**
 - **The general lack of clinical understanding of this unquestioned biomechanics of cranial joints**
 - **Fundamentals of “cranial”**
 - **Other illustrative cranial cases**
 - **Conditions that may result from cranial dysfunction**
- **Temporo-mandibular joint disorders (TMJD)**

When I was consultant to the Veteran's Administration for Orthopaedic Medicine, the head physical therapists from their hospitals around the country would fly to Wadsworth Hospital in Los Angeles, near UCLA, about four times each year for a long weekend of training. Although our first meeting began almost comically as they sat laid back wondering what the shnook standing there thought he was going to try to get away with, their posturing didn't last long. Soon they trusted me. We became “family,” and they would line up for “injury call” as soon as we got together. One dramatic day, I'd promptly “batted 1000” with about eight of them lined up. I hadn't planned it. It came out spontaneously and mischievously, “Just think. I did all that without a single hot pack.”⁵¹ You could feel the air rush from the room.

⁵¹ For physical therapists, hot packs can be almost religious ritual in some places.

Randy was from Colorado. He'd collided face to face with someone while playing volleyball, and intense pain persisted high on the *right* side of the back of his neck. His neck examination was normal - no asymmetry, no tenderness, no joint restriction or spasm. *Again the value of the appropriate exam to ascertain tissue condition: is there a localized injury or not?* So I looked at him again.

To observe features that may become lost within the familiar, it is sometimes advantageous to look at them upside down. I asked Randy to lie down and looked at his face from above and behind. Then I clearly saw the pallor and flattening of his left cheek contour and the relative wideness of his left eye socket close by where he had been hit. I asked Randy to sit up.

The skull has many bones, *all with functioning joints*. What I did I'd never thought of or seen done before, and it was another time of looking at my hands doing something. My right index finger went into his mouth and moved up his cheek in front of the teeth to the cheekbone,⁵² a bridge formed from two bones that meet as a joint.⁵³ As my finger pressure approached it, Randy gasped as his eyes reddened from the totally unsuspected exquisite tenderness. I encouraged him to forbear as my left hand crossed my other and contacted the skin just lateral to where my right finger was inside, and then it applied an extraordinarily gentle lateral pressure.

After just a few seconds, there was the softest of sounds, like a thin toothpick cracking, and almost instantly, the pallor became a warm red, the flattening filled, the orbital widening became symmetric, and the pain on the opposite back side of his neck was instantly relieved.

It was one of the most profound expressions of the truism that pain may be, indeed, a liar. Except for some of the really tiny cranial bones that are manipulated by minimal pressures somewhere along their “chain” of linkage, this was the smallest manipulation I have ever

⁵² Zygomatic arch

⁵³ Zygomaticomaxillary suture

observed. *But it was curative nonetheless, and totally consistent to the circumstance although certainly unique in its clinical presentation!*

I cannot offer an explanation for Randy's clinical presentation, and I asked and searched. That is the way it was, and all the more reveals that a valuable examination opens the door to discovery wherever it leads. We will never be pain's overbearing masters. In all things, "*We command nature only by obeying her.*"⁵⁴

It is so easy to forget fundamentals, but only to our patient's jeopardy can we forget that the true dimensions of medicine are always beyond us. To confront them with enforced simplistics is to tempt assured failure and worse.

Richard worked for the Department of Water and Power at Big Bear Lake. He was a quiet twenty-nine-year old man, a powerfully sculptured athlete who ran marathons in mountains over seven-thousand-feet high!

He was driving a pick-up to a job when it was violently rear-ended. The crash hyperextended his neck and "javelined" him against the rear window. Almost immediately, he developed a unique constellation of totally disabling symptoms:

- He became profoundly weak. Before the accident, he'd built his own log cabin from scratch and could cut wood with one hand while carrying it with the other. *Now, walking less than twenty feet with a single log literally exhausted him for hours.*
- He lost his equilibrium. If he got up too rapidly, he'd fall over. He developed constant painful tinnitus (ringing in his ears).
- He became totally impotent. When I asked him how his sex life had been before the injury, he'd answered, "*Perfect. We don't have television.*"

Richard was a stoic man, but he became emotionally labile and would cry easily. I don't know if it was part of the pathology, but it was obviously easily explainable. I first examined

⁵⁴ Author not known

him nine months after the accident when I was periodically flying up to Big Bear Lake and consulting. He had been extensively examined at Loma Linda University Medical Center where he was finally signed off by Workers' Compensation as permanently and totally disabled with lifetime benefits.

I informed the insurance company that I would have to admit Richard to St. Vincent's Medical Center for further studies, and they readily agreed. He entered on a Sunday. I spent about three hours examining him to prepare for what I anticipated would be an intense week of investigation including endocrine studies, because Richard's weakness resembled *Addison's Disease*, an adrenal gland condition in which life-sustaining hormones stop being produced.

It would have been of great importance to have before and after studies, if, indeed, there might be a successful after. Under any circumstance, his complaints and findings didn't fit any known disease although a few of his neurologic findings suggested the possibility of brain injury.

Critically important were my findings concerning his cranial bones. This is where the proverbial rubber really meets the road, but where almost all doctors get off the bus. Interestingly, most osteopaths won't touch *Cranial* either. The implications are too threatening for them, as well. It is understandable. The thought that the bones of the skull must move rhythmically throughout life, about eight to twelve times a minute - and that real problems can occur when they don't - is a real test of sphincter continence for almost anybody who has been strapped in the traditional mode. *If that is so, then where are the limits? What other essentials weren't in my training?* The ripples don't stop - because, truthfully, we have no idea about the limits, and the sooner we *really* become scientific in our attitudes that there is no end to discovering fundamental knowledge, the better off we will be.

There's a great line in *Twelve O'clock High*, a War II movie classic that can serve doctors, as well. Gregory Peck plays a general who is responsible for revitalizing a dysfunctional B17 bomber wing. He is meeting with the dispirited pilots for the first time, and

he tells them they should consider themselves already dead because “it’s easier that way.”

The same advice applies to anything associated with manipulation - including Cranial. Science totally supports Cranial’s foundations. Osteology, the study of bones, defines a joint, *without exception*, as any site where bones articulate, are associated with interposed connective tissues, blood vessels and nerves. Although the joints of the cranium are called *sutures*, they have them all.

Regardless, despite irrefutable osteology, in the clinics across the hall there is a long medical tradition against considering that the cranial joints as have any clinical significance. Despite that microscopic examination of sutures demonstrates all the characteristics of a joint, according to *Grant's Method of Anatomy*, "The skull has but one pair of movable joints, the temporo-mandibular (jaw) joints." (page 591). It may be a matter of degree, but the statement is false. Normally, *all* the sutures move.

Although its origin is not fully understand, there is an intrinsic rhythm to the motion. It is subtle and takes refined palpatory skill to appreciate. It actually takes “giving oneself permission to feel” it the first time. The learning takes training, patience and *confidence*, the same in principle as a safecracker’s learning to feel the tumblers falling. Then, as with any other craft, once sensitivity comes, one’s consciousness expands to the perception, and, seemingly amazingly, the sense of the movement amplifies incredibly in the hands.

Cranial motion is unequivocally provable to the student once the sensation is tentatively perceived as the instructor confidentially communicates to the “patient” to push his (her) tongue up against various sites on the hard palate. The pressure instantly startlingly distorts the rhythm entering the student’s fingers, throwing it into unpredictable gyrations, evoking a *Eureka!* sense of inexpressible discovery - a rite of passage – a lifetime conversion experience.

I was only beginning to learn Cranial and was examining Richard with rudimentary skills, but his major abnormalities were obvious. One of the most striking was the extraordinary palpatory difference between the sides of his head. *There is a normal and an abnormal texture*

of bone. Normally it feels like asphalt. When it is stressed and stuck, it has the sense of concrete. The difference is critical.

The right side of Richard's head, where he had struck the window, was like concrete, "locked," rigid, and completely devoid of rhythm. His left side was of normal texture, the rhythm "struggling" in an exaggerated, remarkably abnormal pattern.

I had just invented my *Polyaxial Cervical Traction/Mobilizer*,⁵⁵ a device that provides patients the opportunity, for the first time, to self-apply traction directly onto any level of the neck and *mobilize* it. It removes cervical traction from deserved controversy and restores it as a sound and safe therapy. Sadly, it and its later simplification have had a troubled time in the market, however valuable they are. I will discuss them some edited manner later, but the proof of their concept is emphasized by what transpired with Richard. As part of my consultation that Sunday afternoon, I showed Richard how to use it.

When I returned the next morning, he was clearly somewhat improved. He knew something good had happened when he sat up without falling over.

I asked him if he'd tried the traction.

"Yes."

"For how long?"

"For ten hours."

My complexion likely paled. I hadn't imagined anyone doing that, but Richard was a musculoskeletal genius, and he *knew*. In only a few hours, he had learned what he needed. He would place the adjustable traction strap precisely where he intuitively *knew* the leverage was needed and hold it there as he got into it. Then he would just lie there and rhythmically apply the force through the pulley by pushing down with his feet and relaxing as I had shown him. When he got bored, he would grab a bar hanging from the orthopedic bed frame and do pull-ups, all the while continuing the traction. He improved so rapidly that during his five-day

⁵⁵ U. S. Patent 4,407,274. Canadian Patent 1 196 241.

hospital stay, the traction was his only treatment.

PHOTOS

There was no time for the tests. After a day, he was demonstrably stronger. He could walk down the hall rapidly, and the painful tinnitus was half relieved. Each hour in traction brought observable results, and when I arrived on the ward on the fourth day, he was waiting in the hall for me, smiling the ecstasy of someone reprieved from hell, already explaining as I approached him.

"I had my first erection in nine months last night...*and I didn't waste it either!*"

Richard's cranial rhythm was bilaterally normal and surging like a locomotive trying to make up for lost time. I discharged him, and within a week, he was fully recovered and already working full time. He never had a recurrence.

The concept of cranial motion is part of a far bigger picture, and the fullness of its importance is still beyond comprehensive understanding. Some of it is clear, however, and Richard's case is illustrative.

The inside of the skull is covered with a tough fibrous membrane called *dura*, a tarpaulin-like sheet whose complex extensions support parts of the brain. When the dura is abnormally tensed, like any sheet that is asymmetrically pulled, it loses its normal smoothness and balanced tone and transfers the resultant abnormal pressures to the brain substance, which can adversely affect its function.

As it descends from the cranium, the dura becomes the continuous fluid-filled tube that encloses the spinal cord. It finally attaches to the front of the *second sacral vertebra*, where a reciprocal rhythm is palpable, as well, in the same way that a long rope can ring a bell high in a steeple.

Critical to Richard's case, the dura has two anteriorly-directed cord-like extensions from the horizontal "tarpaulin" (the tentorium) that attach to the front and back of the saddle-shaped bone in which the master gland, *the pituitary*, is located and protected deep in the base of the

skull.

Among its many secretions are hormones that, from the clinical evidence, Richard lacked - *adrenocorticotrophic hormone (ACTH)*, which stimulates the adrenal glands to secrete *adrenal androgens* (male hormones), and *cortisol* (a hormone of vast influence, which protects against fatiguability). `

That relationships of anatomy, biomechanics and physiology considerably explain Richard's seemingly bizarre symptoms and his dramatic relief.

The fullness of the intricacies cannot even be estimated. When Dr. Frymann critiqued this book, she acquainted me with another consideration: there appears to be a relationship regarding adrenal gland function involving the *tentorium cerebelli* (the most posterior and inferior of the dural membranes about the brain) and the thoracic (the respiratory) diaphragm - which may also impair adrenal function.

When the back of Richard's head struck the rear window, his cranial bones jammed and caused the tentorium to torque, excessively tensioning the tentorial cords that "lassoed" the base of the pituitary like a garrote, strangling it, suppressing its function, from which he immediately became pathologically weak and impotent. His releasing the locked cranial bones with my traction normalized the tentorial tension, and his pituitary function was restored.

The tinnitus and disequilibrium were never part of the puzzle: the hearing and balance mechanism are deep within the temporal bones, which were major components of the jam.

I don't know if I would have been able to treat Richard as easily with manually applied cranial techniques in as short a time. Perhaps, but I didn't know the techniques then, and he gave me the opportunity to validate the concept of my traction.

Richard's case emphasizes a basic truth: ***There is special integrity to the whole of the functional anatomy. The fullness of the influence that manipulation offers as an adjunct to therapeutics is not yet known***

I have successfully used "Cranial" technique hundreds of times. It is part of my routine

examination. Two special experiences occurred in Israel when I was first there for three months in 1995-96. One in particular happened in an extraordinary way.

We were at the archaeological dig site for the first time, and I was getting acquainted. My Hebrew name is Pesach.⁵⁶ Terry Julius, a brilliant, highly energetic and outgoing individual, was a consultant to Vendyl Jones. He gave me a ride back to our lodgings and asked what I do. When I told him, he asked me if I was an osteopath.

That night, Avraham Sutton came to lecture. We had met when he briefly joined the tour we took before settling into the dig. He had gone to Fairfax High School in Los Angeles twenty years after me. That was the beginning of our bonding, and in time we became like brothers.

The phone rang. Kevin, one of the volunteers, picked it up, looked quizzical and asked, “*Who’s Pesach?*” At that time only Vendyl, Avraham, and Terry knew me by that name. I went to the phone and heard an extraordinary story. It was Heather, Terry’s wife. I didn’t know her yet, but it was obvious that she was very upset. Their two-year-old son, Nadav Gavrielle, had just had an inoculation. A short time later, his face began to frighteningly contort with myoclonic contractions: all the muscles repetitively suddenly spasm and produce a frightening grimace that slowly recedes and then recurs.

Heather called her mother in California. Her mother called Dr. Frymann. The calls went back and forth a few times, and Dr. Frymann said the child needed cranial osteopathy. She was informed that I was in Israel, and she told them to get me to see the child. I had never seen such a case or even heard of the complication.

Terry and Heather live in Beit Shemesh, about thirty-five miles away from Mitzpah Yeriocho, our somewhat remote camp on near the Dead Sea. It was about 9:30 p.m. How could I get there? Kevin reassured me with his hand. As soon as Avraham finished his lecture, Kevin was planning to drive him home in Telz Stone and then go to Terry’s home to pick up a stove for the camp. There are no coincidences.

⁵⁶ It means Passover.

Nadav was sleeping. I quietly sat down behind him on his bed. His cranial rhythm was distinctly abnormal. The manipulation wasn't difficult. It usually isn't in children. When the little guy awakened in the morning, he was normal. True, he might have been anyway. This is an excellent case in which a "*post hoc, ergo propter hoc*" argument can legitimately be raised. ("After this, therefore because of this." - the reason the sun came up is that the cock crowed - an elementary error in logic.) I agree. That's the way it happened.

Soon after, Avraham's wife, Esther, also developed extraordinary symptoms. In her case, as with Richard, there is no possibility to consider the result coincidental because her relief was instantaneous, however inexplicable. Her eyes had suddenly lost vertical convergence, and she began to see with a very unusual type of diplopia (double vision). It's a frightening symptom. Very serious disease has to be ruled out. Conditions like brain tumor and vascular anomaly have to be considered. I called Shaare Tzedek Hospital and had Esther admitted. The initial tests, particularly the brain MRI, were normal, which was very relieving. We considered a viral-type infection the most likely diagnosis. Esther stayed in the hospital for a few days and was discharged wearing an eye patch. I returned to the dig.

Esther called again a few days later, the tension in her voice obvious. Years later, she wrote, "First, my vision started to slant, like a fractured image. I was very frightened by this. Then, it got worse. When I went from a light room to a dark room, besides the slanty vision, my left eye suddenly went blind." She had entered a darkened room, and for some reason blinked her eyes one at a time. With her right eye closed, she told me on the phone that she realized she was totally blind in her left eye.

I returned to Telz Stone immediately. My neurological examination was otherwise normal, but Esther's cranial rhythm was totally absent. I performed an "emergency jump start" maneuver through the temporal bones, and at the instant the cranial rhythm returned, Esther's vision became normal.

At UC Davis, Dr. Sterling and I were talking after he had attended a meeting on child

education. He remarked with a smile that one of the speakers had said, *“If G-d knew what schools would be like, He might have made children different.”* It could charitably be paraphrased to the present situation about medical education and the body He created.

The joints of the skull are obvious in the infant, and their palpation (but not their movement) is part of the traditional newborn examination. Over time, they undergo extraordinary changes towards complexity as each bone develops an intricate anatomy, but most of their sutures persist, and their disturbances of movement can be an influence in many common conditions.

Dr. Frymann concentrates her work on the young, where the greatest long-term potential for some manipulative methods may be realized. For example, birth can be a major trauma. Some cranial vault injuries can cause persistent, fatal projectile vomiting. Dr. Frymann’s lifetime commitment to osteopathy in the cranial field happened when she learned, too late, that her own child, who had died from such a condition, would likely have been saved with its application.

Many blanket claims are made concerning the benefits of routine manipulation for the young - from the maintenance of general health to such circumstances as irritability, mucous discharges and common headaches. The long list includes such conditions as sinusitis, tinnitus, spasticity and other nervous disorders, including facial palsies and neuralgias, visual and learning disabilities, vertigo, dizziness and temporomandibular joint dysfunction. I don’t know enough to authoritatively comment. While Richard’s and Esther’s cases are as rare as they are powerful examples, at least an appreciation of Cranial is essential because of its potential influence.

TEMPOROMANDIBULAR JOINT DISORDERS (TMJD)

The treatment of temporomandibular joint disorders (TMJD), often mistakenly referred

as TMJ's has only begun to mature during approximately the past thirty years, significantly because of the actualization that a medical/dental blend is often essential for success. In the mid-twentieth century, "TMJ" was an uncomfortable "no man's land" between the fringes of both.

Medicine largely remains deferential to dentistry since the TMJs are on the face and involved in chewing. Regardless, many other structures which dentists have no training to treat are dynamically involved. Here, *orthopaedic medical knowledge* is essential but is largely unavailable because of the Fundamental Flaw.

While the idea that "*the jawbone's connected to the head bone; the head bone's connected to the neck bones...*" is the truth, in this case, instead of the truth making dentists free, it (had) terrified them. Until recently, there was little medical help, and then only in some places. So problems developed early in the attempts to grapple with the increasing number of "TMJs" being diagnosed, correctly or not.

The most dominant problem was the fixation that the TMJs themselves were the "cause" of the symptoms. Another was the predilection of some dentists to aggressively respond early-on with surgical procedures, one more expression of the *orthopaedic medical* vs. *surgical* tension, where medical authority is again weak, with little to inhibit the surgical inclination. (In appropriate cases, surgery may, of course, be helpful *if* the joints are damaged.)

That controversy continued for twenty years, from the 1970s to the mid-90's, during which time a few types of TMJ implanted prostheses were invented. The surgeries were obviously expensive. Science seemed to lead because examination commenced with costly technical studies, including impressive computerized force and motion analyses.

Unfortunately, the history is blighted by the inept popularization of a plastic device that disintegrated over a relatively short time, causing hellish tissue reaction that severely scarred the

tissues of the patients, who were seriously, permanently damaged.⁵⁷ As well, when at times the TMJ was not even involved– but the symptoms only mimicked TMJD – surgery disastrously added to the patient’s distress.

“TMJ” became a malpractice debacle, and the debris discredited its care. Insurance companies may still refuse to pay for its treatment despite the advances being made, to which the inventive common response is to bill for the treatment of “something else close by.” While expeditious, it doesn’t assist the rehabilitation of legitimate treatment.

My first involved exposure was in 1992. I was invited to lecture at the Craniofacial Pain Clinic at White Memorial Hospital in Los Angeles about one of my inventions, the Goodley Polyaxial Cervical Traction/Mobilizer, which I introduced in Richard’s case.

It was already well recognized that TMJD regularly involves the neck, the reason for the dentists’ attraction to my traction. It is well known that the traditional “Sayre-type” sling fastens onto the chin and jams the temporomandibular joints, which, in fact, is a major cause of its injury, the second most common cause for TMJ malpractice suits. Mine is the first traction to treat the cervical spine with biomechanical soundness while completely protecting the TMJs. However, while it is simple to use, the dentists were apprehensive about making even the few easy adjustments necessary for it to be individualized. Those were truly early days, and they told me candidly how frightened they were to go onto the neck at all. Might there be an even easier way for patients to do most it by themselves? From that, *A Goodley Lift*, the simplification eventually emerged in just a few hours.

The revelation that orthopaedic medical approaches may be essential in TMJD treatment was a major advance. There are now dental books with chapters on some aspects of it.

When I returned to Los Angeles, I was invited to become a participant in the White Memorial Hospital clinic. My first afternoon there, I treated a woman came who had been

⁵⁷ As a historical note, the dentists who invented the devices had their practices close to mine when I admitted patients to Glendale Memorial Hospital, in Glendale, California. The dentist who invented the stainless steel device was sincere and reserved. The dentist who invented the disaster did his best to discredit him. He paid for it in spades.

injured more than a month before, when she had been subjected to a traumatic tooth extraction. The prolonged yanking had thrown her head about, and her neck musculature became a mass of tension to prevent what the reflexes literally interpreted as an attempt to pull her head off. She could hardly open her jaw. Her face was the classic facies of pain. She had difficulty eating and sleeping. She couldn't work, so she lost her job. After the dentists completed their unsuccessful examination, they asked me to examine her. She lay supine on a medical examining table. I had no preconceptions, which, I hope I made clear chapters ago that I avoid like the plague. Her neck was a mass of spasm. Her cranial rhythm was absent. The releases took about ten minutes, and, as I concentrated with my eyes closed, she responded with silence when I asked her how she was feeling. She was sound asleep. When she awakened a half-hour later, she was pain free, smiling, and able to move her jaw normally. Everyone, including me, was very impressed.

At the next clinic, two weeks later, we examined a young woman who had been in a near-fatal auto accident fifteen years before. She had lost her left leg. Her liver had been ruptured. She had been in the hospital for months. Since that time, through all her therapies, she had developed constant facial pain and "migraines" that occurred weekly and lasted for days. She also complained of "TMJ."

Her findings were similar: abnormal cranial rhythm and cervical spasm predominantly involving the anterior muscles. With the rhythm restored and musculature relaxed, the "logjam" broke, and releases automatically followed along the chain, relieving the pain and tension from her face. Remarkably, though it had been present all those years, there were apparently no contractures. She was almost immediately radiant and energized. She remained and talked excitedly for almost an hour, continuing to repeat how much better she felt. She didn't return for follow-up, and I hope it was because her "migraines" are no longer bothering her.

Another woman came, also complaining of chronic facial pain. The dental examination exonerated her facial structures as the cause of her pain, but the woman also had left shoulder

pain, which she reasonably thought was unrelated to why she was there. I was asked to examine her. She had shoulder capsulitis associated with some tendinitis. Both are common conditions that often radiate pain into the arm, but I had never seen it reflected into the face. These inflammatory conditions respond dramatically to well-placed cortisone/local anesthetic injections so frequently that, to me, it is near malpractice to initially treat them otherwise. I promptly injected them, and *all* her symptoms cleared. Some recurred by the time we saw her two weeks later, and I injected again. She returned a month later to tell us that she was symptom free. While such a pain pattern seems to be rare, it happens.

Concerning the enthusiasm I have observed for injection techniques in TMJD therapy, succinctly, I have seen too many injections habitually administered “just because they can.” It is a “trigger point” issue I discuss elsewhere.

Another important story comes from the achievement of Dr. Jim Boyd, one of the dentists who attended the clinic, who invented a new mouth prosthetic for TMJD, bruxism (teeth clenching and grinding), and headache.(www.drjimboyd.com_)

I first learned the following technique from an old osteopath about forty years ago, when it was an incidental office treatment for posterior pharyngeal congestion. An adventurous dentist at the clinic assigned the name “trigeminal pharynoplasty” to it, and charged lots for a procedure that takes slightly more time to do than my writing this last sentence. For its purpose, it can be irreplaceable. It needs to be in the toolbox of anyone who treats ears. The symptoms that require it can be related to TMJD because a tiny branch of the fifth cranial nerve, the trigeminal, the nerve that innervates the muscles of mastication, also innervates the middle ear and the soft palate. Within that complex and intimate binding, what may go wrong in the mouth can affect the ear and vice versa - from the purely physical, like malocclusion, to bruxism that is most likely a physical expression of emotional stress. The procedure’s primary application is the treatment of congestion behind the soft palate that can be responsible for hearing loss,

“popping” in the ears, and earache when the orifice of the eustachian tube behind the soft palate becomes plugged. They can frequently be relieved by an easily performed sweeping maneuver across the eustachial orifice: a gloved finger goes far back into the mouth beyond the soft palate. As the gag reflex retracts the edge of the soft palate, the finger rapidly sweeps medially across the “back wall” of the throat, stretching the eustachial orifice and adjacent tissues and breaking down adhesions to relieve any edema that may cause sufficient stasis to “close the area.” The procedure takes only a few seconds. A variant of the technique has been reported to use in small children where the effect is attempted by massaging through the soft palate. It attempts to avoid the gag reflex, which is obviously less tolerable to the little ones.

The structures I’ve discussed (and more) can become sources of “TMJ” pain. With the blending of the orthopaedic medical approaches into the dental foundations of TMJD treatment, a major contribution to the healing arts is in the offing.

*There are no boundaries. **There are no boundaries!***

CHAPTER SIXTEEN

ALL THE FACTS, BUT A RIGIDLY MISSED DIAGNOSIS

*Myself when young, did eagerly frequent
Doctor and saint and heard great argument
About it and about,
But evermore came out
The same door as in I went.
Rubaiyat of Omar Khayyam*

Denial is among the mind's most powerful defenses. We all do it. With the Fundamental Flaw, it is so powerful that it too often dangerous. Doctors whose training denies the Flaw's existence can deny the existence of an obvious diagnosis. The doctor may hear the patient's complaint, but it literally may not enter consciousness if it does not fit into his preconception.

It is part of the instinct of *negative knowing*: the mind first recognizes at a *pre-conscious* level; then it decides if it will allow the content into conscious consideration. What is too distasteful, too threatening is rejected. Negative knowing is not a curiosity, but awesomely operative and, here, it is highly relevant.⁵⁸

This story is about a reputable board certified orthopedic surgeon, a member of a moderately large and well-regarded group in a fairly large city in Southern California. He sent Sandra's reports where he obviously knew that many people would read them because she was a workers' compensation injury case, and, eventually, she was legally represented. He certainly would not willingly have done this to her, and to himself, had he realized its implications.

Sandra's case is not unusual to me. Physicians who act as a sieve and perform consultations in orthopaedic medicine see something like this fairly frequently. Her case demonstrates what can happen when someone who needs to understand dysfunction doesn't.

⁵⁸ Goodley Stories Of A Medical Maverick begins with an example.

Sandra had been in pain for most of the year. The documentation in her chart included the monthly reports of the orthopedic surgeon who cared for her. I first examined her on October 5, 1992, for an injury that occurred on February 6th the same year. All the reports were in the file: an initial comprehensive examination and four monthly progress reports. Each repeated that Sandra predominantly reported pain in her spine between her shoulder blades - the *thoracic spine*. The surgeon continued to end his reports with a diagnosis of *lumbo-sacral injury*.

Sandra was a 37-year-old teacher of autistic children. She had been bending over and trying to pull a large child up from a desk chair when the child suddenly reached up and forcefully pulled her down. The unexpected excessive resistance overwhelmed her, and her most immediate intense pain was in her *thoracic area*. She fell onto her hands and knees as the pain then radiated into her low back.

She was examined promptly in a general situation and given a diagnosis of a "low back strain." Motrin, an anti-inflammatory medication, was prescribed, and "physical therapy" was started. She tried to continue working, but her pain increased, and she reluctantly had to go on disability.

Sandra was referred to the orthopedic surgeon who, in his reports over five months, reveals himself progressively in a quandary during which he increasingly questions a number of issues but never his diagnosis or what he is doing. He continued to prescribe "physical therapy" during which, according to Sandra, nothing varied. Each time, she got heat; she got ultrasound; she got some massage, and she got out (shake 'em, bake 'em, ultraviolate 'em). She was also put through "Back School."

(I will have considerably more to say about that.)

As the months passed, his reports became a pattern: "Since I saw the patient last (on March 23, 1992), she is still complaining of pain in the *thoracic* to low back area." [any italics and () are mine]. He then continued to provide reports that his physical examinations were

normal. He continued to remark that there were no nerve injuries in her *low* back, but he never comprehensively reported examining her *thoracic* spine, where she persistently reported her pain. In comment, he was locked in persistent selectivity to locate an operable condition in which he was competent, therefore comfortable. *After each assessment, he diagnosed, "Lumbosacral Strain."*

Early on, he reported that physical therapy was helping her. (The patient denied that.) Then he wrote that she "was improving ...even though at a slow pace. *She still does not have the confidence to return to work at this time.* "Physical therapy" will be continued at this time."

As time passed, thinly veiled comments appeared questioning her volition and inappropriate responses: "Although this patient still complains of pain in the *thoracic* and lumbar spine areas, *her subjective complaints seem to outweigh her objective physical findings. It is strange that she believes that she cannot go back to her usual and customary work.* I am requesting authorization for an MRI of the *lumbar* spine at this time to investigate the condition of the *lumbar* spine." (All studies were essentially negative.)

..."She mentioned that physical therapy helps for a short while, but the pain comes back. Occasionally the pain becomes so severe that she can't do much." He continued to report his physical examinations as negative, but despite their negativity, he persisted in giving her a diagnosis that denoted pathology: "Diagnosis: Lumbosacral Strain... *Physical examination is very inconsistent...She clearly has an ability to move more than I have observed as indicated by her worst results.* (I have no idea what that means.) *However, it is my general assessment that physical examination is basically negative....* I will continue physical therapy at this time...If you have any questions, please do not hesitate to contact me." (I wonder how he might have responded if any questions were asked.)

On June 19, 1992, "...*she is still complaining of pain in the low back area. She complains of pain in her back whenever she moves around....* Diagnosis: Lumbosacral Strain....The patient still complains of pain in the lumbar area *but subjective complaints far*

outweigh objective physical findings. Her complaints are unexplainable from the physical examination as well as MRI findings...."

In summary, the rigidity of this thinking reflected in his reports became the all too painful orthopedic surgical equivalent to the old joke about the drunk continuing to look for his car keys under the street light because there was more light there, but this was real life:- real pain - and real impairment - and real disability.

When Sandra was referred to me, she emphasized in the initial examination that her pain was "burning" and always radiated from her *mid* back. (A burning pain is often related to nerve irritability.) She stated that a doctor had not examined her when she was first injured but that a number of x-rays were taken "all over" her back. Only after a series of unsuccessful visits was she then referred to the orthopedic surgeon.

Sandra told me her condition never improved. To the contrary, she had been getting progressively worse. Her pain was both spreading and intensifying, especially during the previous month, becoming constant from her neck to her low back.

She began to get headaches regularly about 5:00 p.m. She described her pain as a "bruise-like" pain in the mid-thoracic spine from which pain radiated both up and down her spine and increased with movement, but not radiating into her arms or her legs. It increased with coughing *but only through her chest area*. She told me that her eyes would tear from the pain when her husband rubbed her mid back, but it "felt good," as well, and she got some temporary relief from it. (There was such a multitude of clues from her history alone.)

Sandra was an athletically built, articulate, and very respectful woman. She was small, standing 4 feet, 11-1/2 inches, weight 115 pounds. Her anatomic landmarks were all so easy to examine. She moved about the room easily, demonstrating no desire to exaggerate. She stoically did everything I asked her without letting me know about the pain they were causing until I reminded her a second time. The most obvious finding, just by observing, was the flatness in the normally anticipated anterior/posterior curvature of her mid-thoracic spine. As

she bent forward, the entire flat area moved “en bloc,” as one. When she lay face down, the anticipated "springiness" of the thoracic spine was completely absent, fixed as if it were a bar of steel.

The cutaneous hyperalgesia was remarkable. She had minor findings in her low back, as well, but consistent with her repeated history, Sandra’s primary problem was interscapular.

I was seeing her in consultation, didn’t have control of her outside therapy and wouldn’t see her again for at least two weeks. She’d been in pain too long. I explained to her what I had explained to Pat Hansen when she told me to manipulate her back immediately, and Sandra responded the same way.

I softened the tissues to the degree that I could and immediately manipulated her mid-thorax with a series of high-velocity low-amplitude manipulations (HVLA). Each responded with a sharp, audible release accompanied by immediately observable improved motion. I used a few other techniques, and, as she moved about, she estimated that she was "80%" pain free for the first time since the accident.

After six months of pain, impaired function, disability, increasing tendency to chronicity, lost wages, absence from a job she loved - and many other factors that further complicate long term injuries, Sandra just stood there looking at me blankly.

I commented that if I were "80% better" after so long, I thought I'd be smiling. She wasn't. She said she was too befuddled by what had just happened to be able to smile. Sandra was saying that if she was so easily relieved, why had she been in so much pain for so long? All I could respond with was the sadness in my expression, and there was anger there, as well, as I had to tell her that she wasn't out of the woods. The injury had been given a long head start, but, at least, her diagnosis and new course of therapy were clear.

Obviously, from the outset, her thoracic spine was primarily implicated. She had repeatedly said so. A sudden pull through the arms is likely to transmit a major strain through the shoulder blades into their musculo-fibrous attachments to that area. (Wait till you read about

Diane Gates!)

But Sandra's thoracic spine was a "no man's land" for that orthopedic surgeon. He was not comfortable there. The non-specific physical therapies were consistent with the non-specific reports. The PT followed orders that were only generic, not directed. Nothing focused on Sandra's needs, so predictably nothing succeeded.

One of the most serious aspects of this dilemma is to whom could this unfortunate orthopedic surgeon reasonably refer Sandra when she didn't improve? From his sincere perspective, he was the authority, a personification of what the orthopedic surgical residents at UC Davis miserably confided to me the night they invited me to dinner, a story I will eventually relate.

Nothing in his professional indoctrination prepared him to consider otherwise. He *had to believe* that Sandra's injury was in his province of proficiency. From his perspective, he may have reasonably believed that if her case confused him, it would be confusing to anyone. The tools in his bag weren't useful for her, and while he didn't have the slightest clue that there was a misfit, he certainly felt he had to do something. *But refer her to a (competent) osteopath or chiropractor?* *Inconceivable!* Today, an orthopaedic physician is a rare breed. (An appropriately trained physical therapist needs to be mentioned, as well.)

Had any of them treated her, Sandra would most likely have been back at full, unrestricted work in less than two weeks. Concerning all her x-rays, I didn't need to examine any of them. They were ritualistic, CMA⁵⁹ cash-register, idolatrous "shots in the dark."

Manipulative thinking's comfort is the confidence of it. Without clarity of principle with which to approach either previously unseen presentations – or Sandra's, which was common “bread and butter,” all the floundering was Fundamental Flaw.

This allopathic specialist is representative of any one a patient might randomly see. As a

⁵⁹ Cover My (posterior)

surgeon, he might not be expected to learn manipulation any more than I might perform an occasional laminectomy, but his responsibility requires his cognizance of these very common pain problems and appreciation regarding their reasonable solutions. What happened to Sandra happens every day in places that lack orthopedic medical perspective.

CHAPTER SEVENTEEN

ALBERTA – ALL THE PRINCIPLES WORKING TOGETHER

*"An expert is only someone who uses the basics better."
Someone who really knows said that.*

- **Resolution of a “most hopeless” case – reason for hope**
- **Myofascial release of the pectoralis minor**

And so we come to Alberta’s story. She is the fourth of my patients who suffered the most, trusted me the most, and taught me the most. She is the only person besides Diane Gates whom I have ever told that by accepting my care she would willingly walk through the gates of hell.

Alberta is unique because her diagnostic challenge was like a Gordian knot. Everything I could conceivably glean from orthopaedic medicine was tested. Her case is my highest proof that the *thinking* of the problem is inexorably linked to the *hands-on* of it: information that can only be derived from palpation continually directed my insistence on persisting.

Alberta had already been suffering terribly for five years when I first saw her, and she was still deteriorating. *One of the most important lessons to be learned from her is that the potential for relief exists as long as soft tissue abnormalities can be palpated.* In the end, in contrast to soft tissues, only a few joints themselves had to be treated.

Alberta was injured on August 23, 1988. She had already received extensive, prolonged, and reputable treatment at a major medical center in the Long Beach area, but nothing had worked. After so long a time, her workers’ compensation case had become one more big pain.

Hers was the classical example of what happens when doctors do not carefully nurture the need to develop the sense of tissue familiarity that they are inherently obligated to. The loss denies them the drive to persist when the going gets tough. In the struggle to try to accomplish something, Alberta was operated on twice, which only further complicated her problems. After the procedures,

the surgeon concluded that he had done *his* job. He stepped back, expecting the ancillary services, like physical therapy, to do *theirs*, after which he would evaluate her through their *reports*.

Alberta illustrates why too often it can't work that way: writing orders for treatment but not witnessing them at all so that understanding might be facilitated - so the course might be altered from the close-in evidence - is one of the unspoken causes of failure in challenging cases – all Fundamental Flaw. Therapeutic apartheid allows essentials to easily fall through the “disjoints.”

When I first saw Alberta in August 1993, she was the personification of unending, hopeless suffering. She hunched on the examining table with her left arm in a sling, holding it even closer with her right arm while looking at me dull-eyed, like some long beaten animal who, as far as she was concerned, would be just one more doctor in the long line who hadn't touched her problem. Beyond her pain, she looked as if she could have been Oprah Winfrey's sister.

PHOTO (the black and white)

As I tried to examine her, any movement at all exploded into radiating agony, curling her into groaning defense. Finally, I had to tell her softly that she already knew the outcome if she didn't allow me to examine her at all so that I might begin to understand what was happening - but that all I could promise her was more pain, that I would be sending her to hell, but that I would be there with her. She considered for a week, and somehow, despite the five years of agony, she found the courage to tell me to send her further into hell.

Ralph, her husband, was always there, quiet, patient, and supporting. I have rarely had the privilege of knowing such a devoted, gentle man. Anita and Ralph had been employed by one of the large aircraft manufacturers. They both operated the same machine, called a *Hydropress Hand Form Finisher* but on different shifts . It converted a rubberized material into finished products, like window panels and toilet seats. She had been ,working with it for seven years. It was hard work, but she was good at it.

Alberta described how the extruded material that she had to handle weighed well over a

hundred pounds. The he maneuver required the coordinated strengths of at least two people to lift one side of it at a precise time and throw it back to an area high on the machine. She told me that Ralph and other men had been laid off while she and other women had been kept on the evening shift since they were paid less. She said that, in the morning, four men would then take the place of the two women who had been doing the job through the night.

As she explained it, two workers would stand facing each other on each side of the machine as a "blanket approximately six feet wide by fifty feet long and five inches thick flowed out." Each worker would then take hold of the leading end with one hand and coordinately throw it back like a "hook shot," so that the edge would return into the machine approximately three feet over her head.

Alberta was training a new woman, who assured her she was ready. Alberta was standing with the extrusion coming from her right so that she would use her left arm. At her signal, she exerted herself and threw. The other woman did nothing. Alberta's chest, shoulder and neck structures were instantaneously overwhelmed as she instantly felt such an excruciating tearing pain "as if from my heart" that she almost fell over. (Please remember that phrase. It was only in 2005, 12 years later, as I was driving to teach at Sheba Medical Center, Tel Hashomer in Israel and intending to describe this case, that I had the sudden revelation that I had never realized before about what Alberta had tried to describe. I will amplify later in this chapter.)

She was taken immediately to the dispensary, then to the hospital, as the pain spread about her entire left upper quarter. She was referred to an orthopedic surgeon who, she said, saw her daily for "a long time." He continued to use physical therapy, but every modality worsened her pain. She was given a neck and back brace.

Approximately four to five months after her injury, he informed her that the only way she might be helped was with surgery because the enclosing tissue about her shoulder joint, the rotator cuff, was torn. Authorization was finally obtained, and she entered the hospital on November 18, 1989, fifteen months after the injury.

Immediately after the surgery, she was given physical therapy that consisted of gross

upward motions of her arm, "wall climbing" and use of a shoulder wheel. (Remember Maria's story - that the humerus needs to initially move *down* so it can go up.) The shoulder wheel, a large device attached to the wall that the patient holds onto and turns so that the often aggravated shoulder moves up is, too often, in reality, a modern medieval torture device rigidly clung to for the sake of tradition. All of it only compounded her pain because Alberta was required to move her shoulder despite the persisting exquisite joint area tenderness. *Even the lightest touch to any part of her extraordinarily broad pain pattern caused all of it to violently flare, from which the torment would reverberate throughout for hours.*

Her shoulder became cold, a dread sign of *reflex sympathetic dystrophy*. She said it had been that way before, but the surgery worsened it, though there were no notes in the old charts that acknowledged it. She was discharged from the hospital shortly after the surgery. At home, she awakened to find her bandage blood soaked. She returned to the hospital, and the treatment, she recalled, was "agonizing". The sutures were removed, and the entire incision opened. Her pain flared severely, and, again, she had to see her doctor daily "for months."

She was released to "restricted" work in January 1990, two months after the surgery. In reality, she was returned to *unrestricted* duty despite her condition, and, unbelievably, she attempted to continue performing the same type of work, only using her right hand - all the while, receiving an unchanging course of unhelpful physical therapy.

In May 1990, she attempted to lift an airplane rib that weighed about seventy pounds. The pain exploded, and her shoulder swelled "massively." She lost the little shoulder motion she had been able to preserve.

She was readmitted to the hospital for a week, and her shoulder was "manipulated under general anesthetic," which only worsened her condition. "Lots of tests" were run. Another MRI was performed which, she said, showed the same rotator cuff tear that had previously been diagnosed.⁶⁰ The surgeon who was to perform the repeat surgery died, and it was never done.

⁶⁰ I have examined a number of people whose MRI's showed the same defect, but I found no evidence of loss of tissue integrity on my examination.

Another doctor administered a number of injections over a three-month period, but according to Alberta, they weren't coordinated with other therapies.⁶¹ In the records I did receive, one referred to the use of stellate ganglion blocks,⁶² but Alberta insisted they had not been done. In cases where the extremity is cold, they are likely essential.

Alberta was again returned to work on considerable pain medication, but the danger of working under the influence of narcotics was finally realized. She was placed on total disability, and all treatment was stopped. In 1991, her chest pain suddenly intensified, and she underwent cardiac angiography (remember the “locked-in-syndrome” in Chapter One). It was normal. Chiropractic care was then tried but was unsuccessful.

On my examination, Alberta's tenderness extended from her left chest muscles through her shoulder, into her neck and onto her head. Trying to treat any part of it was like electrocuting all of it. So total was the lock that just attempting to palpate muscles on her rib cage (pectoralis major), or palpate the long muscle on the side of her neck (sternocleidomastoid) produced such an intense headache, it required narcotics to subdue.

Until I could figure out what to do, if I would be able to do anything at all, I did all the therapy myself. After weeks of aborted attempts, the beginning of progress came when I finally decided to administer narcotics *before* her treatment. In retrospect, it sounds so simple.

I treated an abnormal cranial rhythm, but no matter how I attempted to relieve the spasm in her neck, it was unremitting. Virtually every joint was intensely tender and locked. Eventually, I performed a series of deep cortisone/local anesthetic injections onto the joints along each side of

⁶¹ I attempted a number of times to learn what they were, and where they were injected, but my inquiries were never answered.

⁶² The Stellate Ganglion is a juncture of many sympathetic nerves in front of the extensions off the sides of the 6th. cervical vertebra, low in the neck. The nerves from the ganglion influence the side of the face, including the eye, and the upper extremity.

Injury which results in "sympathetic nerve dysreflexia" causes abnormal constriction of blood vessels, making the injured part relatively colder. Since sympathetic nerves cause vasoconstriction, anesthetizing the ganglion allows *vasodilation*. The needle enters the anterior neck and passes down to the front lateral side of the sixth cervical vertebra, between the esophagus and the largest artery in the neck, just above the lung. While the block is working, a number of changes are obvious, including warming of the affected part that is sometimes associated with considerable pain relief. Stellate ganglion block is the emergency treatment of choice to break the abnormal reflex and restore normal physiology. It has risk, but the landmarks are clear and when there is indication for it, nothing I know about replaces its potential.

neck that provided another small breakthrough.

Alberta continued to complain that it constantly felt as if there were a bone splinter sticking up into her skin from the outer edge of her shoulder (the edge of the acromion), just lateral to the end of the surgical scar. Fine detail x-rays showed no bony roughness. It responded only temporarily to cortisone injections, so I tried small amounts of prolotherapy solution⁶³ three times over a month, and they relieved it.

Once, while I was in close, concentrating on Alberta's shoulder, gently palpating for a point of tenderness along the anterior rim of the joint, Ralph turned my head with a soft slow soliloquy. "Why didn't anybody else do that? Even the *Independent Medical Examiner*, the one they all agreed on, who told her she'd never again be able to move her shoulder, even he only gave her a *verbal* examination!"

Each tiny success gave me a little more working space, and with the help of the narcotics, I was able to slowly get deeper into the tissues. When I could finally palpate her pectoralis minor, a thin muscle that runs under the breast from anterior ribs up to an anterior facing protrusion from the scapula (the coracoid process), it was rope-tight and exquisitely tender. My palpation became a myofascial release therapeutic procedure. My hand started on the skin of her lateral chest and moved toward the midline sliding along the ribs under the pectoralis major, the major muscle of the chest. I gently and progressively increased my pressure and advanced my fingertips until they encountered the rigid tension of the pectoralis minor fibers. I coordinated with Alberta's breathing, increasing my force each time she exhaled, holding while she inhaled, and kept repeating. Slowly over a few treatments, the spasm and likely scarring released and the muscle stretched to its normal resting length and tone. The general anatomy of this area is critically important. The pectoralis minor overlays many large blood vessels and nerves that enter the arm. Persistent spasm in the muscle pins them against the rib cage and tethers the scapula so that arm motion is markedly restricted and painful. It became evident that the thin band of pectoralis minor muscle had gone

⁶³ Next chapter

into screaming spasm and remained that way for more than five years. Likely, it was the major “hot wire,” the linchpin of her entire distress. (Its being thrown into massive spasm by the injury was what Alberta likely was referring to when she described being overwhelmed by excruciating tearing pain "as if from my heart" (the revelation I had in 2005). For the first time, Alberta’s shoulder movement improved, but it still remained cool.

In retrospect, instead of waiting for records, I should have administered a series of stellate ganglion blocks earlier, regardless if they'd been attempted in the past. Happily, after I performed them, and *immediately mobilized her tissues* while they were warm, Alberta enjoyed some major relief from her symptoms for the first time. After the block was repeated a few more times, Alberta’s shoulder temperature remained normal.

Cervical manipulation was finally helpful, and combined soft tissue therapy finally cleared her headaches. Then, for the first time, after months, I was able to successfully normalize the more remote affected tissues all around her chest.

In overview, Alberta had developed a series of interlinked "dysreflexias" involving multiple contiguous structures involving her left chest, upper extremity, neck, and head. Muscle, tendon, ligament, nerve, and fascia had locked into a torrent of searing ceaseless screams. They were the price of her tissues' violent protest to what they had reflexively perceived was imminent dismemberment, and any movement thereafter was perceived as another attempt to violate her. Alberta’s tissues had been a living electric storm of unimaginable violence.

All her therapeutic failures were not for lack of good faith. Every physician who treated her wanted to relieve her. I can imagine the frustration of her physician who saw her daily for so long but was unable to follow the signs in her tissues.

Only through my learning and following her signs could I insist on persisting until I found some handhold. Alberta’s salvaging was only from my trust in what I palpated. Her pathology was obviously remarkably complex, and it took many weeks to begin to realize what to do. With perfect hindsight - the “retrospectoscope” we only wish we had up-front - so much is now clear, but

somewhere, her story is a template for someone else's relief. will never be able to adequately thank her for her courage to endure what I put her through to learn so much.

In July 1994, six years after her injury, Alberta became predominantly pain free. I examined her on October 26, 1994, and she had full power and almost full motion of her shoulder. All of her neck symptoms had cleared. The only "footprints" were the surgical scar and minimal asymptomatic local coolness. From a woman of immeasurable suffering, she was whole again.

When it was all over, Alberta returned to my office one more time. She was joyous and wearing a bright, bright yellow T-shirt. Like Sarah later, in Israel, her eyes were sparkling, her smile pure magnificence. She had full, painless range of motion. *If you didn't recognize her, the photograph on the book cover is Alberta.*

I wish Alberta's story had a Cinderella ending. Alberta was anxious to return to work. I rewrote her final examination and changed my initial disability rating from her being capable of only semi-sedentary work to capability for any normal work.

I wish the Workers' Compensation ending was part of the happily ever after, but it wasn't. The wicked witch didn't die, and there was sufficient disappointment to go around.

Early on, I had told Alberta that, as a Workers' Compensation case, the fewer her residuals, especially if she could return to work, the less her award would be. She had obviously given her all to improve. So she didn't get the award she deserved for her six terrible years, but my own wrenching twist was yet to come.

My total fee was approximately \$8000. (workers' compensation fee schedule), very, very little for all that I had done, and diminutive compared to her surgeries and other former care - minuscule compared to the monetary reserves the insurance company expected she would drain over her lifetime.

Alberta's was an "authorized case," but when it was over, the claims examiner said that while what I had accomplished was near miraculous, "now if you want your money, take us to court."

It took two years. I spent most of a day at the Workers' Compensation Appeals Board, in Long Beach. Alberta was unhappy because her settlement was so low after all she had been through, and she was right. She did, in fact, get more than what the regulations dictated because of the independent medical examiner, whom she had to return to for a final report.

I had to settle for \$5000 or come back in a year to fight for the rest. The insurance company attorney told me that I was lucky I was getting anything at all. I know the independent medical examiner. We had skied together for years, years before. Obviously, he is an orthopedic surgeon, the one who Ralph had said had done only a *visual* examination and told Alberta she would never use her arm again. I had called him to give him the good news. He couldn't deal with it. The attorney told me he had released Alberta to work, but he had submitted a final disability rating that was even worse than when he had first seen her. I didn't believe him. He showed me the report.

CHAPTER EIGHTEEN

PROLOTHERAPY – “FOR WANT OF A NAIL...”⁶⁴

CORTISONE INJECTIONS -

EPIDURAL AND SELECTIVE NERVE BLOCKS –

CHELATION THERAPY

(INTRADERMAL VITAMIN B12 INJECTIONS WERE DISCUSSED IN
CHAPTER EIGHT)

CONTRAST BATHS

And by knowledge shall the chambers be filled with all precious and pleasant riches.

Proverbs 24:4

- **Prolotherapy – injections that regenerate injured ligaments**
- **Cortisone injections – how they work**
- **The most precise injection techniques – their virtues and problems**
- **A brief comment on chelation therapy**
- **The magic of hot and icy water**

Manipulation must not be repeated, repeated, repeated when its beneficial effects are repeatedly temporary. Stories of “easy in, easy out” are common. When pain and impairment persistently recur, an essential has not been considered. Ligaments are the connective tissue straps that are intended to support the joints and guide them efficiently through their movements. They are joints’ primary protectors, and if their tone, length, and strength are damaged, nothing compensates for the loss and the inevitable instability from *hypermobility* that ensues. While muscle spasm is painful, its reflex intent is to attempt to splint an area, but it has

⁶⁴ "For want of a nail, the shoe was lost. For want of a shoe, the horse was lost. For want of a horse, the kingdom was lost."

virtually no ability to do what ligaments do - protect essential joint integrity.

Remember the degenerative cascade. Once a joint destabilizes, the "die is cast," especially around the spine as the damage spreads among the linked tissues similar to how a progressively loosening bolt in an engine mount allows the vibration to increasingly disrupt and destabilize the entire assembly.

One aspect of the cascade is the periosteum becoming overstressed and detached. Periosteum is the bone building tissue that adheres to bone. The usual reaction is that new bone "grows out" in an attempt to reconnect the tissues, but with the inevitable result that nature's original modeling is lost. The resultant distortion further impairs movement and can obstruct the spaces through which vital soft tissues, like nerves, pass. A genetic influence is sometimes present, as well.

When degeneration spreads up and down the spine, the efficiency of the movements becomes increasingly impaired. What began as a single-segment dysfunction can replicate and cause a creep of spreading pathology - the degenerative cascade. XXX

The connective tissues do more than connect bones. We generally refer to the parts that we move as the "musculoskeletal" system, but the phrase is functionally incomplete. While doctors unfortunately and unsuccessfully imagine the workings of the spine as a single spring, springiness does, in fact, exist - *but it is in the connective tissues*.

When the body's parts move "reciprocally" - one way, then the other - as in walking or twisting - the connective tissues normally absorb energy as they are stressed, store it as tension, and release it into the opposite movement, thus smoothing the motion and conserving energy. When the ligaments are damaged, that function is impaired, as well. This system is referred to as the *fascial-ligamentous system*, and is one more example of bodily unity that still awaits general appreciation. From its lack, there is no scale to estimate the unnecessary multitude of chronic pain sufferers who are assigned a diagnosis such as "*degenerative joint disease*" as if their conditions were unquestionably the normal anticipated result of aging.

Prolotherapy injections specifically address those issues.

I first learned of prolotherapy in England, in 1972, while visiting Dr. James Cyriax. He was using it regularly in his office with his associate, Dr. Ronnie Barbour. My skepticism had not been fully satisfied, and I was very slow to try it.

About a year later, I was unsuccessfully treating a young woman, a former cheerleader, for low back pain. Throughout, her facial expression was grim. When I incidentally asked her how she could have been a cheerleader, she replied that she hadn't been in constant pain then.

On every examination, she had one discrete site of exquisite tenderness. It became clear afterwards that her injury was restricted to one specific superficial interspinous ligament. Such a condition is unusual. I finally decided to try prolotherapy to that one site, and, incredibly, two days later, she was a cheerleader again. I can't explain that the sudden result was purely from prolotherapy, which takes time for the tissues to regenerate, but, regardless, it was obviously the perfect therapy for her, and curative therapy for my resistance. Since then, I have administered prolotherapy many hundreds of times.

Prolotherapy was the other technique I treated Sgt. Guillermo Rosales with (besides treating his PTFJ⁶⁵) for which he credited me for saving his career. He had injured his shoulder while wrestling a suspect to the ground. His ligaments weren't totally torn, but there was enough laxity that when he raised his arm, his shoulder became painfully unstable, so he obviously became an ineffective peace officer. He had been unsuccessfully treated traditionally elsewhere for several months. The x-rays, arthrograms and other studies were all normal. A short prolotherapy series cured him.

At the wedding of one of my daughters, she asked me to examine a friend who had a "bad ankle" from an injury several years before. It was chronically unstable, and would unpredictably twist and sprain again. In my emergency kit, I had a bottle of 50% dextrose, the major ingredient of prolotherapy solution. I mixed it with local anesthetic and injected the

⁶⁵ Proximal tibio-fibular joint.

ligaments. I saw her incidentally about a year later. She reminded me of the injection with the comment that that one injection had made the ankle so strong, her uninjured one felt weak in comparison. The instability was completely relieved. Ankles are excellent sites for the injections.

A high school athlete who competed in track had badly sprained her ankle, and it became unstable. She required a series of seven injections, but she was running her events the next season.

Prolotherapy is based on well-known and accepted physiology. Normal healing depends on sufficient blood flow to injured tissues. Muscle has an abundance of blood that is necessary to its function, so it usually heals completely, but ligaments and tendons are designed differently. They are connective tissues and do not have “intrinsic vascularity.” The presence of blood vessels would distinctly decrease their strength. They are dense, more like ropes, or like sheets, made mostly of *collagen*, which has relatively few cells packed among their fibers. They are normally nourished as “wetlands” by the protein-poor fluid of the “extravascular” circulation (*outside* the blood vessels) that is, by far, the largest volume in the body. It flows from blood vessels, moistens, nourishes, removes products of metabolism, and then returns to the blood vessels through the *lymphatic system*, near invisible streams of circulation in a vast continuing circuit. *The extravascular fluid is sufficient for basic nutrition, but is inadequate for healing.* For that, blood must be brought in, and, for that, a vast network of capillaries, the smallest of the blood vessels, is available to reflexively open on need. The duration of its activity is modulated not by need but by *time*. A clock starts ticking, and when the clock runs out, almost invariably in less than two weeks, the capillary bed closes regardless of the state of healing. If it is not complete, it almost certainly will not be thereafter, *and any residual weakness will persist indefinitely.*

The purpose of prolotherapy (sclerotherapy, proliferant therapy, ligament regenerative injections) is to open and maintain the natural repair process with the intention for healing to

be completed. The body interprets the injection solution as another injury and reflexively responds. The injections are usually administered in a series over a period of weeks, or a few months, to keep the process going.

In a complex structure like the vertebrae, it is not realistic for only specific ligaments to be targeted. I conceptualize prolotherapy as the laying down of a field of healing within which the body's wisdom does its work.

Dose

No injection should be in such a bolus that its mass becomes painful from distorting the tissues. When I inject an area, I “tattoo” the solution with small amounts. With prolo, about 0.5 ml. at a site.

Duration of therapy

There are different philosophies about how many times and how often the injections should be administered. Some prolotherapists, myself included, prefer to inject about every ten days to keep the process in high gear. Others prefer to wait about a month for each of the series to fully accomplish what it may.

I inform my patients that if they elect to proceed, barring unforeseen circumstances, they should accept it three times. Then we wait and evaluate. Except in special circumstances, if there has been no significant improvement by then, there is little justification for continuing. On the other hand, every procedure after the initial three would be performed based on mutual consent because of observable improvement.

While prolotherapy does not substitute when surgery is, indeed, necessary, the opposite is as true, and many have been relieved with the injections after surgery was unsuccessful. Even when surgery is required, there may well be surrounding ligamentous weakness that it cannot address.

For overall duration, I doubt anyone could compete with Beth Nick. She remains the most remarkable prolotherapy case of my career, probably a Guinness World Record candidate. I injected her intermittently for about a decade.

I first examined Beth on September 16, 1985. When I discussed the symphysis pubis earlier, I described how the pelvic ring normally “softens” in pregnancy so baby can slide through, after which it tightens again. Beth’s didn’t after her second son was born. Some hormonal eccentricity prevented the process of connective tissue normalization and her pelvic bones and spine remained loose in the extreme. For four years, she walked almost with the wobble of a loose toy as her hips and back continued to “go out.”

Beth unsuccessfully saw many doctors as her pain ominously increased. One day, she candidly remarked that she had been close to suicidal. She became acquainted with me when her mother sent her an article concerning me that was published in the Arizona Republic while I was practicing in Arizona for a short time. She was about to travel to Phoenix from Southern California when she learned that I had returned to California, and was located only a few hours drive away.

Beth’s lumbar and pelvic joints were so loose that whatever caused it was almost irrelevant. It was immediately clear to me that the only help she might possibly obtain could be from prolotherapy. I discussed it with her and expressed my conjecture about a genetic/hormonal causation. Beth was gutsy and preferred the injections without analgesia, which I usually use for vertebral injecting. It took time, but she was clearly improving. As her pelvis and low back stabilized, the laxity of the adjacent structures became manifest, and we had to go higher and higher until virtually her entire vertebral spine was treated.

Beth became like a daughter to me. We correspond regularly.
I received the following email from Beth on April 29, 2013.

*(You will better appreciate the x-ray issue after you read Chapter Twenty-Three.)*PPP

Hi Dr. Goodley,

Good to hear you were able to view the video. I understood, from your perspective, why seeing a doctor look at an x-ray was objectionable. In my case, I had had all kinds of procedures including x-rays done when the specialists I consulted couldn't diagnose me. I still remember you physically examining me and within 20 minutes, said you had a diagnosis. I also remember going to the hotel in Big Bear after your initial visit and crying with joy that someone could finally tell me what was causing all my pain and be able to HELP me! You really did save my life because the pain was getting unbearable after five years of agony. God provided the ability for me to care for David and Doug during that painful period on my life. It was divine intervention that brought me to you for treatment. You know you will always have a special place in my heart.

Much love,
Beth

Beth's note was in response to mine. She had sent me a beautiful video about a troubled young boy who teacher helped and who eventually became a physician. It hadn't opened on my computer. Beth persisted and sent it again, and I was able to view it. In it, the picture depicting his professional success showed him reading an x-ray.

(<http://www.makeadifferencemovie.com/>

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April 28, 2013

Beth, Beth, Beth, Dear Beth:

Thank you so much for persisting. This time it did open, and I opened, too. So beautifully done. In retrospect, the only objectionable part for me was when it first showed him as a doctor. And what was he doing? Looking at an x-ray! That scene fed society's delusion of x-ray primacy - to see patients through images instead of focusing on what patient's tissues willingly "speak" to knowing eyes and hands. X-rays must be relegated to adjuncts, when they are necessary. I never ordered an x-ray on you, I don't think. The issue didn't consciously effect me as I saw it, but I'm finishing my book again now and just visited my soapbox rant about the misuse and the mythology about x-rays.

Again, thank you,

[Show photo of doctor looking at x-ray]

A few more cases

I examined two remarkably similar young women who were small and athletically built. Both had fallen twisting, and both sustained major ligamentous injuries predominantly to their left sacroiliac joints that caused persistent, remarkable instability. Both were unsmiling, frustrated young women who had not been believed or well treated by workers' compensation. Both were anxious to return to work.

I had manipulated and given them complete relief on several occasions. Each time, their landmarks had been easily balanced, but their hinges were so visibly loose that nothing held. After three prolotherapy treatments, each was about "70-80%" relieved and requested more. At the conclusion of the series, neither was normal, but they remarkably improved, needed no further pain medications and were employed.

A brief history

Prolotherapy is the refined application of a method that goes back centuries when a horse's bowed tendon was seared with a red-hot poker. Eventually, various injections began to be used, some of which became well known in traditional medicine for the treatment of other conditions. Around a hundred years ago, sclerosant injection was even used in attempts to repair hernias, and it is still used to close varicose veins in the extremities and esophagus. It had also been used to treat hydrocele (a condition in which fluid collects in the scrotum). I know. I had the condition when I was in my early teens. The urologist inserted a needle, aspirated the fluid, attached another syringe to the needle and injected another fluid he had aspirated from a bottle. I didn't understand why he moved so fast for the door until my brain

exploded into blackness as my stomach suddenly collapsed and sucked my scream back into my lungs. I can't rightly recommend the way he used it, and with no attempt to educate me, but it did work - and I didn't die. Others, however, were sterilized by it, and the practice was eventually discarded. Unbeknownst to me, it was my first experience with the therapy.

By now, the logical question has to be answered: If such injections have a legitimate traditional history, and they are clearly essential in the treatment to relieve many injuries, why isn't prolotherapy a standard of care?

First, this is more flotsam of the Fundamental Flaw. Not thinking about manipulation and its implications inhibits considering the comprehensive treatment of ligament injuries with consequent dysfunction, however common they are. These are the *sprains* and *strains* that many have been told will "go away with time." They may not. It is more likely they will persist, but that doesn't attract appropriate attention. Little attention is given them in publications. There has been a general failure to recognize the special nature of connective tissue injury throughout the entire orthopedic surgical literature.⁶⁶

Prolotherapy began in the United States in the 1950's. The story I heard is that it a veterinarian used it, showed it to a dentist named Schultz, who used it for TMJ disorders, and from whom Dr. George Hackett, an industrial surgeon in Canton, Ohio, learned about it. Dr. Hackett had a pioneering spirit and began its use in musculoskeletal disorders, methods that eventually others improved.

The solution Dr. Hackett used was harsh, more sclerosant than regenerative. From his efforts, the alleged admonition was to do all the injecting that could be done the first time, because the patient would never come back.

Early on, a few unfortunate patients reportedly were injected into their spinal canals.⁶⁷

⁶⁶For example, the first article in the Sports Medicine issue of *The Orthopedic Clinics of North America*, July 1995, is a lengthy discussion on skeletal muscle injuries. The index lists two minor references to ligament injuries of the elbow and knee. While the elbow discussion specifically recommends against corticosteroid injections "because it may induce further attenuation of the ligament or tendons" there is no statement that prolotherapy may do the opposite.

⁶⁷ These were not Dr. Hackett's patients.

The results were catastrophic, and, like manipulation, the adverse results reportedly were profusely publicized, which resulted in understandable but unbalanced condemnation. Doctors who used it were considered, at best, "fringe." With its increasing popularity among osteopaths, (because they understood the issues), prolotherapy's "fraudulence" was even more "proven." And, like osteopathy, over time, the science of it grew, and sufficient people were helped so that more practitioners began to seek instruction in its use.

The popular injection solution

Eventually, Dr. Milne Ongley, a New Zealand physician studying in England with Dr. Cyriax, introduced a gentler solution consisting of dextrose, glycerin, and a low percent of phenol that he had found was an approved substance in the New Zealand formulary.⁶⁸ It is popularly called "Ongley Solution." Some call it P2G. It is mixed 50:50 with local anesthetic. Some add "just enough" sodium morrhuate, one of the potent sclerosants, to increase the stimulation sufficient for a more challenging site, such as injecting the major ligaments of the sacroiliac joints. Ongley doesn't do that, and I don't usually since I began to use his solution, but I do not fault its use by experienced clinicians. A number of other solutions are also used.

Another major reason for prolotherapy's remaining on the sidelines for decades is that its emergence coincided with the discovery of the herniated disc. Orthopedic surgeons are obviously enthusiastic about surgery, and it would be scores of years before laminectomy's limitations became obvious. (Now, there are orthopedic surgeons who have swung so far the other way, they believe the need for surgery is rare.)

Regardless, while it has been increasingly popular around the world throughout all this time, prolotherapy didn't make it into orthopedic surgical thinking.

An enormously important factor that has inhibited prolotherapy's popularization is that it serves no corporate commercial interests. There is no investment wealth to be made from it,

⁶⁸ Personal communication.

so there is no thrust for “research” or business impetus to advertise it. The solution is inexpensive and readily available, and only requires physician skill, integrity, and the countless people who need it. This issue impacts on the far more recent proliferation of other injections, “selective nerve blocks,” from which an entire heavily financed industry has rapidly emerged, and which I discuss elsewhere.

The number of practitioners slowly increased until recently. From the relatively few practitioners even thirty years ago, now there are recognized “main stream” physicians who advocate its use and some have reported personally benefiting from it.⁶⁹

As stated, publications concerning prolotherapy are increasingly appearing, including in traditional journals. Scientific proof of its efficacy is being reported^{70, 71, 72, 73, 74} decades after what may be the first tentative study performed, in England, by Sanford, which I reported in an organizational newsletter⁷⁵.

⁶⁹ The published statement of Dr. C. Everett Koop, former United States Surgeon General, which is printed herein.

⁷⁰ Liu YK, Tipton CM, Mathes RD, et al: An in-situ study of the influence of a sclerosing Solution in rabbit medial collateral ligaments and its junction strength. Connect Tissue Res 1983; 11:95-102

⁷¹ Maynard JA, Pedrini VA, Pedrini-Mille A, et al: Morphological and biochemical effects of sodium morrhuate on tendons. J Orthop Res 1985;3:236-248

⁷² State of the Art Reviews, Spine, Prolotherapy in the Lumbar Spine and Pelvis. Ed. Thomas A. Dorman, M.D., Introduction by Vert Mooney, M.D., May, 1995. Pub. Hanley & Belfus, Inc. ISBN 1-56053-187-8.

⁷³ Ongley MJ, Dorman TA, Klein RG, et al: A new approach to the treatment of chronic low back pain. Lancet 1987; 2:143-146.

⁷⁴ Klein RG, Eek BC, DeLong B et al: A randomized double-blind trial of dextrose-glycerine-phenol injections for chronic low back pain. J Spinal Disord 1993;6:23-33

⁷⁵ Goodley's Travels – A Voyage Among the Giants, Newsletter of the North American Academy of Manipulative Medicine, 1972. Copies are available on request to: drgoodley@earthlink.net or the professional office.

Therapeutic indications:

The therapeutic indications include treatment of all injured ligaments, commonly for back injuries. There, many of the ligaments are deep. That can require many injections to provide a “healing field,” and the intent to provide full therapy should not have to contend with the psychological and physiological reactions of a patient being (intentionally) repeatedly hurt. Performing such procedures under some narcotic analgesia is wise.

How clear are the indications?

The fast answer is a statistical one, and it will be given, but the reality is that injuries are often complex, and fast answers are often inadequate. In the back especially, several structures and processes are involved, and their apportionment in each case may not be well understood. It is clear to me that injury severe enough to cause persistent pain likely caused ligament damage. Then, there is the hurdle concerning how carefully the patient was studied and with what approaches. When Descartes said, “The truth lies in small distinctions,” he could have been referring to this issue.

One statistical answer is from Ongley’s study.⁷⁶ He largely avoided individual variations, as do virtually all statistical studies. He took 81 patients with chronic low back pain for an average of ten years duration and divided them into two random groups. The group treated with prolotherapy had “greater than 50% improvement in disability scores, compared with 16 of 41 in the control group, less than 50%; and the number with zero disability scores at six months were 15 and 4, respectively. (p0.003).” In other words, many in a random sample will be helped with prolotherapy. This is consistent with how common ligamentous damage is among those who do not spontaneously completely recover.

Animal studies:

⁷⁶ A New Approach To the Treatment of Chronic Low Back Pain, Ongley et. al., pub Lancet, July 18, 1987, 143-146.

Animal studies have also been done so the injected tissues could be analyzed. The efficacy of the method was scientifically proven by one of the most respected biomedical laboratories.⁷⁷ The study demonstrated significant increase in "the mass of the ligament and the strength of the junction."

New uses will likely continue to be found and sometimes in imaginative ways.

I found a news item on the Internet on September 13, 2001:

"Injection Stops Snoring for 19 Months" by Ed Sussman, UPI Science News. Denver, Sept. 10 -- A simple injection in the back of the mouth stops problem snoring for at least 19 months in about three-fourths of people who undergo the procedure, researchers reported Monday.

"The snoreplasty procedure is very simple and effective, minimally painful, and very inexpensive," said Dr. Scott E. Brietzke, an otolaryngology specialist at the Walter Reed Army Medical Center, Bethesda, Md. The procedure can be performed in a doctor's office... they receive an injection in the soft palate - an area at the back of the mouth - of a tiny amount of sodium tetradecyl sulfate. The irritating substance destroys tissues, causing scar formation -- known as *sclerotherapy* -- that induces stiffening of structures in the back of the mouth. This reduces snoring associated with flutter of those structures..."

In his Introduction to *State of the Art Reviews – Spine* (end note 29), Dr. Vert Mooney contributed: "Then a funny thing happened. Some of my patients who had failed to benefit from my traditional orthopedic surgical approach received some injections of proliferant solution. These made them better. I thought it must be a hoax or a placebo effect. Nonetheless, since I did not understand the material being injected, I had to investigate it further. To my surprise, a prospective scientific study on prolotherapy was about to be initiated in Santa

⁷⁷ The solutions used were the old ones, but the efficacy was clearly demonstrated: An In Situ (in living tissue) Study of the Influence of a Sclerosing Solution in Rabbit Medial Collateral Ligaments and Its Junction Strength, Y. King Liu et. al., *Connective Tissue Research*, 1983, Vol II, pp. 95-112. The research was performed at the University of Iowa Department of Biomedical Engineering.

Barbara, California. I was asked to monitor the study to vouch for the methods and result. I actually took on this role with a confidence that my scientific integrity would be able to squash this “hokey” concept of sclerosant injection into ligaments once and for all. I had heard of it, of course; the same concept had worked for the old-time vascular surgeons. However, none of my professors had ever talked about it, and I had never seen an exhibit at an academy meeting about it. What reason was there to believe it worked? But, I wondered, could it work? ...To rule out all placebo effect, the results of this prospective study were not evaluated until 6 months after the completion of treatment. It was described by the editor of the journal *Spine* as an elegant study.

It clearly documented the benefits of prolotherapy over injection of local anesthesia. The editors of *Spine*, however, said they could not publish it, because they did not like the results! Although I was one of the founding editors of *Spine*, I resigned, and the paper was published elsewhere.

This short story underscores the bias of the scientific community against innovative concepts that, by the nature of the tissue being evaluated in treatment, have poor capacity for objective measurement...”

Notwithstanding my statement that mainline medicine has only recently considered prolotherapy, on the letterhead of the University of Pennsylvania, dated September 2, 1981, former United States Surgeon General C. Everett Koop, M.D., at that time Deputy Assistant Secretary of Health Department of Health and Human Services, wrote in support of it:

Dear Dr. ---,

Following our telephone conversation, I wanted to put in writing what I told you concerning my opinion of sclerotherapy. I not only have used sclerotherapy innumerable times for the control of pain but I myself have been the recipient of sclerotherapy and can tell you beyond any shadow of a doubt that this is efficacious treatment. All I need tell you is that two competent neurological groups independently diagnosed my pain as intractable. After

sclerotherapy, I returned to an active surgical life and have had no recurrences of pain that could not be treated by repeated sclerotherapy.

Hackett's original microscopic studies on small animals was of primitive type of therapy to be sure, but better technology has more recently arrived at the same conclusions.

I would like to think that for our own local concerns that treatments with sclerotherapy might become a charge item for Pennsylvania physicians.

Sincerely,

C. Everett Koop, M.D., Deputy Assistant Secretary of Health Department of Health and Human Services

I met Dr Koop while he was still Surgeon General and asked him why he had not publicly stated his views on such a valuable therapy then. He told me that, at that time, some other influences had to be considered. He didn't elaborate.

In the Appendix is the information sheet on prolotherapy that I give patients.

OTHER INJECTION TECHNIQUES

Cortisone is the body's most potent anti-inflammatory agent. I have mentioned it frequently. While hailed as a miracle drug when it was first formulated in the 1950's, now some have concluded that it should not be injected for orthopedic conditions. This is an important issue, and this is my opinion concerning it.

The corticoids are essential for life. They circulate continuously in the body from the adrenal glands, which are located on top of the kidneys, where the predominance of its many forms is produced. As you learned from Richard's case in Chapter Fifteen, it is part of an intricately controlled system of balances, and troubles promptly visit anyone who isn't sufficiently circulating them. – or when there is too much, as from an adrenal gland tumor.

Now enters cortisone as an injection around ligaments and tendons, with the intent to concentrate its effects and accomplish what it wasn't able to in the natural dilution of the general

circulation. While the localization is very temporary, cortisone's concentration in an area can exert overwhelming influence to accomplish what is desired, but at the same time, it asserts all of its general physiologic effects as it soon circulates, so dosage is a vitally important issue.

All aspects of dosing are at the discretion of the clinician: specific location, amount, frequency of use - and misuse. Potent weapons require appropriate care, and the fruits of overuse can be bitter.

A major argument is that cortisone weakens the tissues that are injected and that its (repeated) use causes other problems as well. Both are true and well documented. *But the other side of the story is the countless times its reasonable injection has promptly terminated what had been prolonged and distressing problems.* To me, any blanket condemnation of such potentially invaluable therapy largely arises from statistical manipulation for the consumption of the inexperienced.

The battle is allegorized by two timeless one-liners. One is from *Cyrano de Bergerac*, that marmalade would no longer be allowed at court because the king had become ill after its gross over-consumption, and in the other, from Ogden Nash's *Reflections on Ice-Breaking*: "*Candy Is Dandy But Liquor Is Quicker.*" An experienced clinician knows the physiology and limits undesirable consequences.

Any therapy injudiciously applied can cause problems that sloppy thinking attributes to its essence.

Dr. Cyriax wrote a classic paper on it in the early 50's. His first sentence was perfect and easily quotable despite the elapsed time: "*Cortisone works, but only where it is put.*" Jimmy was committed to carefully localize and dose a structure, as I have previously described.

Of critical importance - assuming cortisone's appropriate use in all respects, while *symptoms* may promptly resolve, the happy loss of *awareness* of the abnormal condition must not be equated with *cure*. The immediate relief is from reversal of the inflammation, but the healing is another matter. Its rate is delayed as compared to the otherwise normal rate of

healing. In fact, the tissues are temporarily materially weakened, so they must be rested and time must be allowed for cellular reorganization. The need wasn't realized early on. A long distance runner with a strained Achilles tendon might get a shot, feel great, go for a 10K run and totally rupture the tendon.

There are just so many "silver bullets." Repeatedly (and inaccurately) shooting up everything with too much is a prime cause of the controversy. Under any circumstance, the injection of cortisone never strengthens a tissue. Prolotherapy does.

Vitamin B12 intracutaneous injections are discussed in Chapter Eight.

Selective Nerve Blocks and a few comments on Pain Management

Two new stars in the medical "East" have considerably changed the pain treatment firmament. *Pain management* is rapidly emerging as a new medical discipline, and one of its major tools is the popularization of *selective nerve blocks*.

I was first introduced to the injections in 1984, when I was teaching a course to the New Zealand Society of Musculoskeletal Medicine. I shared the podium with Dr. Nikolas Bogduk, an Australian professor of anatomy, who is a pioneer of the method. I presented these fundamentals and conducted a hands-on seminar, and Nik showed the wizardry that can accompany injecting under fluoroscopic guidance.

Selective nerve blocking is the most exact of injection techniques. The needle is directed by C-Arm fluoroscopy that can be turned about the patient for multi-axial views, so the needle tip can literally be placed within a millimeter of a selected site. A preliminary injection of dye confirms the flow pattern of the medicine so that it can be seen to properly bathe the involved tissues, or not.

The potentially enormous value of these techniques can hardly be overestimated. They permit injecting not only precisely within the space where the nerve roots first begin to leave the

spine, but also where they exit the neural canal, where the nerves can be entrapped.

The techniques are exacting hi-tech, very heady, obviously expensive, and open new therapeutic frontiers. When I was first exposed to them, I saw them as the high end of the spectrum of the orderly therapies.

I never thought I would be performing the procedures, but in 1999, I had the opportunity and entered the fascinating world. My first instructional course and exposure to its great proponents left a lasting impression, and I was able to perform numerous procedures in a matter of months.

Over the years, I had performed hundreds of epidural nerve blocks as an essentially blind procedure, which was the standard. The needle enters the space guided entirely by palpable landmarks and the sense of release of the syringe pressure as the space was entered. The injections could work well, even dramatically, as I personally experienced on several occasions with my own back problems, but when the injections didn't work, the blind method provided no way to categorically assure that the needle had been properly placed and that the medication was flowing where it was needed. That problem is resolved with fluoroscopic control.

The specialists within the discipline of pain management who largely uses these techniques are the anesthesiologists. They are the pure physiologists of medicine, who most intimately understand the cellular activity of drugs. Their knowledge is a great contribution, but, on the other hand, they aren't intrinsically competent with the "bread and butter" of orthopedic diagnostics and have no exposure to the Fundamental Flaw within their specialty. Anesthesiologists, of course, largely approach pain problems by anesthetizing something. They use equipment they are comfortable with, which the industry is very happy about. They go straight for the needle. So the Fundamental Flaw is casually compounded by the advent of the remarkable achievement of x-ray guided needle placement that largely makes the blind technique a procedure of the past.

Despite his previous exposure to the fundamentals of orthopaedic medicine, Nik Bogduk

stood behind me at a national meeting of his organization and literally shouted that they were now, in essence, the masters of pain therapy. *But the fundamentals for fixing things remain immutable; proper patient selection for all procedures - in their time, if there is one - is always a paramount issue.*

Realizing the existence of the Fundamental Flaw has been an unhappy shock within this new world of true believers. I must confront that issue now, however I am impressed with the quality of these people. Regardless, the principle that refutes the Fundamental Flaw must prevail. Two of the deservedly acknowledged leaders in this field are anesthesiologists, Dr. Richard Derby and Dr. Charles Aprill, both superb teachers and men of impeccable credentials, who, along with Dr. Bogduk, are the “trinity” of this movement. I met them, and we discussed these matters. Both absolutely sincerely expressed their interest in reading this manuscript, for which I was, of course, very grateful. Desirous of their commentaries, I was pleased with their absolutely sincere assurances that they would promptly provide them. With sadness, I must relate that it didn’t happen. I never heard from them again. Despite numerous letters and calls, neither of them ever responded, which, in a sad way, is kind of a compliment.

A year passed. At another time when my personal professional circumstance became increasingly challenged, my daughter, Caryn, called me. She had been at a birthday party and met a woman who is a nurse at a pain management office in Rancho Mirage, close to Palm Springs, California. I came up in the conversation. I called their office and was invited for an interview.

I was enthusiastic, with nothing to hide. I was impressed with the doctor. It was his practice. He was beholden to no one. He was friendly, open, informal, and informative from the first. He told me he’d focused on pain management in 1992, when the American Society of Anesthesiology predicted dread consequences for its members in a Clinton-type health care system. He’d started doing his nerve blocks at a surgery center, where he insisted on talking to his patients and examining them, which wasn’t “productive time” to the owners. That’s when he

decided to open his own practice.

He was busy, had eighteen employees and three C-Arm fluoroscopy units. He was bringing in another anesthetist in a few months. We talked about what my contribution could be. He appeared very impressed. He ordered pizza for the staff and began to read this book. The hair on the back of his neck went up. I was literally shown to the door.

I had no illusions. His reaction was understandable. I have a mission. He has a ravenous investment that must be fed. How philosophic can a practitioner be who is chained to an astronomic balance sheet? Truly, it was Quixotic my going in, and I knew it.

So, another clash of fundamentals versus technology, two rational concepts unnaturally forced into conflict - both essentials in their times and places - the pure medicine first, the technological advancement an available extension, but again displaced and indefensibly defended to compete as medicine weeps. Fundamental Flaw.

In my experience, these “injectionists” are sailing full speed ahead into unsounded sea. Because of the Fundamental Flaw, too many today are prematurely directed to these treatments which are aggressively supported by a burgeoning industry that has joined others that already must propagate themselves merely for their own survival. However, most of them are meritorious *in their places*.

As the term pain *management* becomes increasingly ingrained, consider the influence of the wording. To “manage” implies permanence, as indeed there are many for whom management is necessary, *but be aware of the compelling need to persistently sift those sands for the curable who are sometimes lost in it.*

Chelation Therapy

Briefly, chelation is an intravenous therapy that is non-traditionally used to “open clogged arteries.” There are people who have had chelation and, incidentally, their chronic pain was also relieved. I knew of it for years and saw trustworthy patients converted from cardiac

invalidism to full function. I've also seen others who did well for a time and eventually required surgery.

Because it is such a powerful competitor to the cardiac surgery industry, chelation, like manipulation for its own reasons, is another of traditionalism's compulsory controversies, and for that - and its possible help to some people in pain - it needs mention. More definitive information is available from The American College For Advancement in Medicine.⁷⁸

Chelation therapy is authorized by the FDA⁷⁹ for the treatment of only one condition: lead poisoning. It is the slow intravenous infusion of "EDTA," a substance that binds with the lead so the body can pass it through. Its innovative use is described as an ability to "roto rooter" the blood vessels, remove other toxins, and improve general circulation. Its early use caused there are some people with cryptic pain who report having been relieved, then it requires mentioning.

Contrast Baths

Pun intended, this is a therapy to get totally immersed in.

Evelyn's story exemplifies the basic that as long as a patient is resistant to a therapy, *all possible therapies need to be periodically considered*. Seemingly the simplest adjustment may be essential for recovery, even dramatically so.

When I first consulted on Evelyn, on October 5, 1999, she had been in constant pain since her injury five months previously. She worked as a dispatcher for a national truck rental company. The office carpet was torn. As she was walking rapidly across it, her entire left foot got caught in the rip, and she fell forward twisting her leg and sustaining other injuries.

Her leg was casted, and she was given crutches and told she could return to normal work. She couldn't. She received various physical type therapies, but no progress was made as

⁷⁸ 23121 Verdugo Drive, Suite 204, Laguna Hills, CA 92653, Fax: (949) 455-9679 www.acam.org

⁷⁹ Federal Drug Administration

the pain spread throughout her leg.

On my examination, the ankle was tender, and stressing the ligaments caused severe pain. Her foot was so tender, she couldn't even wear a sock. Her leg was distinctly cooler than the right, and there was some loss of sensation across her instep. Among my recommendations was consideration for treating the signs of reflex sympathetic dystrophy and for prolotherapy.

After considering for a few weeks, she accepted prolotherapy. My hope was that the reduction of ligamentous pain would turn off the dysreflexic response. After the third series of injections, she began telling me that she was improving, but objectively nothing substantial was happening: she could wear a sock for about half an hour and walk without her cane but only for short distances that she could count in feet. She tried to remain game, but her expression became increasingly dull from the depression that was obviously affecting her, and when I reexamined her on January 24, 2000, she demonstrated an unexpected, very disturbing finding in her sensory exam:

From my report: *"As the patient continue to report abnormal sensation as the examination ascended from her foot, it was continued. The examination eventually revealed a total body hemi-hypalgesia in which the line of demarcation was midline or perhaps a fraction of an inch to the left of the midline. This includes the top of the head and all the areas of her body except her forehead."* Evelyn was reporting to me that she couldn't perceive pinprick in exactly half her body.

"Hysteria" is a real medical word. It refers to physical impairments that the body manifests with absolute reality but that originate solely in the mind. Over the centuries, legions of examples have been reported in the medical literature, such as "blindness" in a person who has seen something horrible; sudden paralysis of the lower limbs in soldiers as their landing crafts opened onto hostile beaches. Some of these unfortunates never recover.

In all the torment of what was happening to her, totally without her realizing it, Evelyn's mind was shutting off her left side. The imagination does not know anatomy. The nerves that

innervate the skin on one side of the body cross the midline several inches, so there is double innervation of the near midline skin: if nerves of one side are not functioning, nerves from the other still provide full sensation, so there is no anatomic sudden loss of perception at the midline. Regardless, Evelyn's face and head could not be involved from the injuries she sustained.

Evelyn's husband was always there to support her. I gently and unthreateningly explained to them the findings and their general significance. I recommended psychiatric intervention. When I next saw her, I decided to introduce one other therapy that, for her, was near miraculous in its effect.

Contrast baths is one of my "beloved therapies." Its physiology is pure. It is essentially cost free and can be totally self-administered with only moderate inconvenience. Think of the natural way to wash out a dirty sponge: hold it under running water; wring it out and continue repeating it until the sponge is clean. Contrast baths approximates that.

If some part of you that is submersible requires this treatment, in one container, have comfortable but definitely *hot* water (keep it that temperature with a constant hot water drip). In another, the water needs to be *cold*. Immerse the part in the hot water for *three minutes*, then into the icy for *thirty seconds*. Continue to alternate for *about twenty minutes three times a day*. End with a short dip in the hot water. Very simple, but the effect is often profound. Almost universally, healing is enhanced.

Consider that there are many disruptions in the "injury zone." Stasis is the enemy, and healing cannot proceed efficiently until the circulating of the body's fluids is restored. Edema has to be removed; blood has to pump abundantly through the area; the "shocked" reflexes that mediate all the flows of fluid need to be reawakened. Contrast baths actively addresses all of them.

Evelyn's response is among the most dramatic I have ever seen. Within a week, her skin temperature was normal; her sensory examination was near normal, her pain and tissue

tenderness significantly diminished. She was able to wear her socks, and she was walking normally. All around, she was so reinvigorated that she sparkled. She is a prime example that there is no separating the so-called “mind/body.” Contrast baths is among the most ancient of therapies. It is the whole of Finnish Sauna. I first encountered it during the Thanksgiving I learned to ski when I was a pre-med student.

As the man said when he was asked how his first ski lessons went, “If it was work, I couldna’ done it.” By the end of the first days, I was exhausted, but in the evenings, a tired group would head out and return radiant. The third night, I went along to find out what it was all about.

The Mammoth Lakes region is volcanically active, and Hot Creek is a perfect confluence of nature. An icy mountain stream rushes along the side of a hot pool whose source flows vigorously from deep underground. The icy stream was on the side where the trail ended, so it took a bit of guts the first time to get across about fifteen feet of rushing fridity to get into the heat – and float – and find near-heaven. The fun really started when the sweat came, and it was time to flow with the current. The idea is to float to the top of the pool and swim into the turbulence. Instantly, a million hot needles massage the skin as everything inside gets excited by the arctic rush (which had better end at the bottom of the pool or you could end up in the Los Angeles aqueduct). Once is never enough. It’s only the beginning. Each cycle brings elevation of another order as the accumulated metabolic products from prolonged exertion, like lactic acid, are washed away and startlingly superseded by increasing delight, ending in conviction that you can stand virtually indefinitely in a wet bathing suit in the winter wind and ski all night on your bare feet. It’s the ultimate contrast bath.

The Far West Medical Association had its annual meetings at a ski resort. We skied all day and had excellent meetings in the evening. World famous Sun Valley, Idaho has a heated outdoor pool. It is surrounded by a high glass fence in which a small door can be opened to squeeze through to the adjacent snow covered field. Every night, I’d leave the pool, come back

covered with snow, dive back in and recirculate till I was joyous. Everyone in the pool thought I was insane.

One of the members of the organization was a dentist. He'd attended the Miss Universe contest when it was in Long Beach, California, seen a beautiful young woman on the stage, said he was going to marry her, and did. She was truly a lovely young woman.

On about the third evening, I became a bit mischievous. She was in the pool resting her arm on the border tile. I returned from the snow with a big clump, came up behind her and slowly lowered it onto her back. She opened her mouth to scream, didn't, looked at me wide eyed and exclaimed, "It's marvelous! Take me outside!" When she returned snow covered, she couldn't stop talking about how "marvelous" she felt. The pool emptied. Within a short time, all the fluffy snow was gone, all compacted by the dozens of discoverers rolling around in it.

CHAPTER NINETEEN

DIANE GATES – PROFOUND PROLOOTHERAPY

I learned long ago that sometimes I understand the real reason I go somewhere is only after I am there. Diane was the reason I went to Visalia.

PHG

- **The versatility of Counter Strain manipulation**
- **A great reward for thinking prolotherapy**

And now I will relate the unique story of Diane Gates. As Ozzie's relief with manipulation was life saving, prolotherapy preserved her life. She had been in so much torment that she eventually told me that I had been her last hope before suicide, which in her case was reasonable thinking.

When I first saw Diane in 1997, she had endured unremitting, often agonizing pain for two years. She was sitting in the corner of the examining room, holding her right arm close to her, similar to how Alberta had held her left. Diane spoke in soft Texan, but an undercurrent of desperation permeated every word.

She had been injured in a Kafkaesque nightmare. She was in her bed in one of the most prestigious medical centers of the world when suddenly she realized the doctor was killing her. Her father was in the room. He couldn't comprehend the insanity that was suddenly happening, and so he reacted to his daughter's "violence" by helping to restrain her on the bed, even as the doctor repeatedly stabbed her in the chest with a trocar.⁸⁰ Each man weighed approximately 300 pounds.

Months later, her father understood what he had participated in. Diane's pain had become unbearable. He was sitting next to her during a flight back from one more medical center where she had gone to seek relief when the aircraft encountered turbulence, intensifying

⁸⁰ A hollow sharp instrument introduced into a vessel or cavity so a catheter can be inserted.

her agony. He couldn't endure living with his guilt, and, arriving home, went to his room, put the muzzle of his rifle into his mouth and pulled the trigger.

It all began because Diane had an unusual heart condition. Its rate would unpredictably race wildly, and she was expected to die before she was thirty-five. She had traveled extensively, but unsuccessfully, seeking help, and had almost given up when she decided to try just once more.

The diagnosis was made at the famous hospital in Houston, Texas, and she was cured and very grateful. She had required a central venous catheter, which is inserted into the heart through a major blood vessel in the chest, just under the clavicle. The risks are real: the blood vessel can be injured, the lung punctured. Many major nerves are close about. It obviously must be done skillfully, and, of course, as a sterile procedure. The catheter had been removed but had to be reinserted.

A strange doctor entered her room. He wasn't accompanied by a nurse. Diane realized that he didn't have all the necessary equipment when he told her what he intended to do. Diane was surprised, but this was, after all, the world famous medical center that had saved her life.

She described how he had fumbled about, become flustered, then frustrated, and began the stabbing. Her resisting, that her father fatally misunderstood, only increased his agitation. In extremis, she finally freed her right arm, twisted, and exploded in pain as her superhuman effort to shove them off exceeded the force that muscle/tendon attachments can withstand. Diane's injury was of the same type that had happened to Alberta.

Damaged most were the muscles from her spine to her scapula. The scapula "floats" on the back of the chest like a large raft, muscles all around, a reason the arm performs so wondrously as the scapula can slide, rotate and dynamically, precisely, and powerfully stabilize.

The *serratus anterior* originates from the sides of the upper eight or nine ribs and travels posterior close around the chest wall where it inserts along the medial "under surface" edge of the scapula. The *rhomboids* originate along the vertebrae and attach in a similar area along its

medial edge. They work reciprocally: when one contracts, the other relaxes.

Most of the attachments of these muscles is by the muscle fibers themselves, so it would seem the blood supply should be adequate to facilitate healing, but the bone-muscle fiber junction is a special place, and there are slips of tendon, as well. Diane's tears hadn't healed.

Diane's pain rapidly increased all about her shoulder. The medical center covered itself by sending in a neurologist, who peremptorily certified that no injury had occurred. Diane said that he had barely touched her and was in her room only a few minutes. The perpetrator disappeared from the ward as if he never existed, and Diane was discharged to a living hell.

Her history and findings should have been diagnostic from the first, but the Fundamental Flaw precluded that. Within a few months, Diane developed the largest area of cutaneous hyperalgesia I have ever seen. It straddled her shoulder and descended over much of her right chest, front and back. She couldn't wear a bra and had to try to keep even cloth from touching the area. Every instant of those two tortured years, "high-voltage wires" had fired lightning jolts through her chest and arm that would frenzy with any motion. Diane, Ozzie Hansen, Pat Hansen, and Alberta could have had a long conversation about who had suffered more pain.

Our first meeting was one of those instances when time becomes timeless because everything is on the line. I asked her to lie on her left side on the examining table. Gently supporting her right scapula with the pressure of my fingers along its medial edge and eliciting just enough tenderness, I attempted a Counter Strain technique. The pain immediately increased when I moved her scapula anterior to shorten the serratus fibers, but when I moved towards the midline a fraction of an inch, much of her pain temporarily cleared for a short time - for the first time. The maneuver strongly implicated the rhomboids.

If prolotherapy didn't help her, I had no idea what else I might offer. But instead of injecting weakened *ligaments*, these injections would be among the myriad attachments of *muscle fibers*, and in Diane's circumstance, each would be like hurling a lightning rod into an electric storm.

I shared my thinking with her and had to add that accepting what I proposed would be agreeing to jump headlong into hell with only hope of what the outcome might be. For what it might be worth to her, I promised I wouldn't desert her. There must not be misunderstanding concerning commitment in such cases. Winning in such a grave situation (no pun intended) means willingness to risk. Such cases take time and commitment to the patient's needs during the aftermath.

Diane could not be seen during regular office hours under the circumstances I was in. Each procedure would consume hours, so I opened the office Sunday afternoons for her. Attending the cutaneous hyperalgesia was first. As Diane's skin was continually sprayed with Fluorimethane, I injected more than one hundred and fifty "mosquito bites" with the dilute vitamin B12 solution. As so many times before, the exquisite skin sensitivity disappeared within a few minutes, and never recurred. Only a few areas remained about the edges, which cleared with the next treatment.

Even with intravenous morphine and tranquilizer, the pain of those first prolotherapy injections had to be indescribable. There was a technical problem, as well. I had to inject the underside edge of her scapula, but no matter how much I was able to ease it off her chest wall and tilt it, the straight needle kept gliding parallel to its very thin presenting edge and couldn't make contact with the bone. I had to bend a large bore three-inch needle into a semicircle, like a huge suture needle. It took a little learning how far away it had to enter her skin to follow the curve (*not too deep!*) to the scapular edge.

Each procedure could require fifteen injections. After a few weeks, the pain began to decrease. The injections continued for a few months, and with each episode, her pain and tissue sensitivity progressively diminished. Each search revealed fewer and fewer involved areas, the last along the scapular spine, the long bony ridge that runs superficially, roughly horizontally along the bone.

The two or three days after each injection were always rough for Diane, and I had no

compunctions about giving her unrestricted injectable narcotics for her use at home. Both she and Ben, her blessed husband, who was there for her all the way, readily learned how to inject them. Trusting Diane and Ben came easily. When you enter a jungle together, you'd better be able to trust. They are remarkable people.⁸¹

Diane progressively improved until, after about a month, she was able to remove her sling, and she began to use her arm for the first time in the two years. It was obvious that we were winning, and eventually we did. Her right arm became painlessly fully functional.

Sadly, only a few months later, Diane's hypertension sprung a leak. She had a right-sided stroke, which limited the use of her left arm and leg. Diane's and Ben's spirit is strong, and from their perspective, had Diane survived and not had the prolotherapy, both her arms would have been worse than useless.

⁸¹ As an example of how special a person Diane is, before she was injured she had been a monkey trainer for *Helping Hands*, an organization that provides monkeys as companions for the severely disabled, like spinal-cord injured patients, much as seeing eye dogs help the blind. Diane told us how they do virtually all the essentials for people: comb hair, feed, on and on. Training a monkey to be a skilled near-human aide takes years of dedicated effort, and Diane did it essentially for free.

CHAPTER TWENTY

NEUROLOGIC RESPONSES TO MANIPULATION –

COMPLICATIONS

*The Moving Finger writes; and having writ,
Moves on; nor all your Piety nor Wit
Shall lure it back to cancel half a Line,*

*The Rubaiyat of Omar Khayyam
Stanza lxxi*

- **Relationships of your reflexes**
- **Allopathic resistance to such notions**
- **Proof in allopathic literature**
- **The concept of referred pain**
- **Near catastrophes**
- **My complication from a manipulation**

Along with the old battle about whether the sacroiliac joints move is whether manipulation affects the nervous system. In general, obviously it does because joints are loaded with nerves. Some chiropractic offices have game charts and machines with lights that purport to portray how manipulation influences virtually all the body's activities, to which traditionalists historically reflexively responded, "*quack quack.*" If tissue is stimulated - compressed, twisted or traction is applied, nerve impulses are excited, and when a dysfunction is relieved, the irritability – the signals - may normalize, as well. So, does manipulation *influence* other structures and functions?

A REAL SYMPATHETIC CASE

Five thousand-year-old Chinese medicine describes potential effects of massage, particularly along the thoracic spine where the paired "*sympathetic nerve chains*" run along each

side. The “sympathetics” are one of the two components of the *autonomic (automatic) nervous system*, and, in general, “winds things up” for action. The counterbalance is the *parasympathetic nervous system* that “winds things down” for restful and basic bodily functions. The constant dynamism of the two seeks balance in the systems they mediate. Too much or too little of either is movement towards a condition of excess, possibly disease.

Late one evening, a woman entered an emergency room where I was “moonlighting.”⁸² She didn’t look in distress, but she requested a prescription for codeine for pain in her upper back, which she said she’d had for several months. Examination revealed a thoracic vertebral restriction that she permitted me to manipulate.

I performed essentially the same procedure I used in the opening story of this book and with a similar result, instantly relieving her discomfort. I was walking away to write my note when she startled me with her scream, and I whirled to see her grabbing her head in pain. Her previously normal blood pressure had suddenly alarmingly soared before slowly returning to normal.

As her head cleared, she was **Hostile!** She had come for *pain medication!*

But the pain was gone, so why did she need a prescription? Why wasn't she delighted?

Then, she confessed. The pain had been present for *eleven years*. During that time, the only treatment she had received from her doctors was codeine pills - and she became addicted to them.

There can also be a parasympathetic response. I was performing a gentle circular Chinese-type massage over the same area of spine of another patient when she fainted from sudden hypotension (low blood pressure).

Dominating questions, of course, are: Can joint dysfunction influence viscera, the internal organs? Reliably? How much? If so, how much dysfunction is necessary? Can the influence travel the other way? Does dysfunctional correction or any manipulation on normal

⁸² Practicing medicine on the side while I was in my residency.

tissue have any visceral therapeutic effect? How correct can this chiropractic contention be after outlandish claims are discounted (then again, whose head decides the outlandish)?

The cause of the question is the relationship and course of nerves that leave the spinal cord in pairs. One of the pair stimulates the tissues of the body frame, like muscle – the somatic nerves – and the other innervates the internal organs – the viscera.

The very same relationship explains the routes for “referred” pain, when an internal event can be felt in the periphery. When a novel massive emergency message from inside arrives in a brain, it is easily confused. It may never have received a message along that line before. The brain doesn’t know what to do with a sudden and new pain message from, for instance, the heart. But the brain is very familiar with messages from the periphery from its paired nerve. So it “interprets” the pain as coming from the pathway that is always sending messages, for instance, from the shoulder.

Allopaths are expertly trained in referred pain. For us, it is a pure concept. In fact, we learn to depend on it. It is *reversal* of the message – the transmission and influence *into* the interior – *to the organs* - that allopathy believes is, at least, controversial.

When visceral function affects the musculoskeletal system, it is called a *viscero-somatic reflex*. In the opposite direction, it is called *somato-visceral*. While this is completely acceptable science, allopathy refuses to reconcile to the fullness of the clinical implications that an activity in the periphery can *significantly* influence internal function - which would support the concept that manipulation can affect the physiology of internal organs.

Far more than scientific discussion is involved here. This is where blood pressure rises (a somato-visceral reflex?), where the sense of who we are is threatened. Here is where the Fundamental Flaw and the turf war between professions converge.

More fuel for the fire is that the conflict is, in truth, not as total as some want us to believe. The allopathic literature, in fact, describes several fully acceptable *viscero-somatic* reflexes where disease of an internal organ causes a musculoskeletal response: The splinting of

the abdominal wall as a reaction to visceral infection, such as appendicitis, is one of them. In *Current Pediatric Diagnosis Treatment*, ninth edition, page 537, under “appendicitis,” *"Abdominal films may be helpful.... Scoliosis (curvature of the spine) with concavity oriented to the right...are indirect signs of appendicitis."* In other words, inflammation of an internal organ causes discrete spasm.

Experienced osteopaths long ago noted that people with myocardial infarctions commonly have a thoracic spinal dysfunction at the level where the nerves to the heart exit. Sherman Gorbis, D.O. published a paper on it.

Recall my college associate, in Chapter One, who incidentally visited my office on his way to the hospital because of upper abdominal pain – cardiospasm. Whether his pain and thoracic vertebral dysfunction were from a *somato*-visceral or a *viscero*-somatic reflex, in either case, he was instantly manipulatively cured.

These exquisite reflexes that account for the preservation of life adapt to circumstance beyond our imagining. Until recently, our definition of what a reflex is presupposed that reflexes are involuntary, automatic. Then the prestigious Menninger Foundation studied a yoga practitioner who, under the most stringent circumstances, consciously stopped his heartbeat and restarted it. It was, of course, demonstrated on EKG. I saw it.

In varying degrees, both osteopathic and chiropractic principles consider considerably more than musculoskeletal conditions. I will relate a few of my own experiences.

GOOSE BUMPS

One of my most dramatic encounters occurred in a young man who had sustained a low back injury. It had not been well treated. As his persistently dysfunctional spine attempted to accommodate, the problem spread, and he developed neck pain and headaches. I found a restriction high in his neck and I elected to manipulate it immediately. It released. He gasped. He paused, then told me his headache had cleared. As I returned to the foot of the table, his legs

were covered with the most dramatic *pilo-erector response* (goose bumps) I have ever seen. He told me that, at the release, he'd felt a sudden chill from his neck to his legs. I don't look forward to seeing it again. It is always there in my mind if I consider manipulating in such a critical area before preparing the soft tissues first.

DR. CYRIAX'S CATASTROPHE CLINIC:

I studied in London with Dr. Cyriax in 1972. Each year, he would invite a small group of physicians for a week. We attended his clinic at St. Andrews Hospital at Bromley-by-Bow, where he would re-examine the patients he had treated the previous week. On the notable day we were there, fate declared that every patient would be some sort of a disaster.

Dr. Cyriax's manipulative techniques are legitimately criticized and have retarded consideration of some of his considerable contributions. It seems as if he decided that since he could come up with such an ingenious method of musculoskeletal examination, he certainly should be able to come up with a distinct manipulative system, as well. *He certainly did!* One particular lumbar maneuver even required the therapist to take a short hop immediately after performing the thrust.

A very properly dressed London physician sat smartly in front of us.

"Well, my good man, I manipulated your neck last week, did I not?"

"Yes, Dr. Cyriax, indeed you did."

"And would you please tell us what happened after."

"Dr. Cyriax, fifteen minutes after you manipulated my neck, I developed paraesthesiae ("pins and needles") in all four extremities!"

Under all circumstances, the overbearing rule is that any therapy potent enough to relieve can also afflict. Manipulation must never be capriciously performed.

The medical literature continues to report complications of manipulation, some very serious. Wise clinicians keep that in mind. Every manipulation must be a considered act. My

personal test is whether I could sleep the night a complication happened.

In the early '80's, shortly after my first invitation to lecture at Los Angeles College of Chiropractic, I began to have a low back problem. I consulted a chiropractor I met, one of the most skilled and dedicated professionals I have known. When his initial manipulation only temporarily relieved my pain, I realized I was flirting with a herniated disc, and when I returned to him the next day, and he tried the same procedure without success, he told me to roll over. I didn't like the idea, and I told him so, but he told me, "Right now, I'm *your* doctor." So I did, and he thrust, and the months of doubt were instantly over as fire shot down my left leg, making mush of my calf muscle and banishing my Achilles tendon reflex forever. In a way, I was relieved because it was likely inevitable, and I'd learned one more valuable lesson.

CHAPTER TWENTY-ONE

PROBLEMS WITH “SCIENTIFIC ANALYSIS”

In experimental science, it is always a mistake not to doubt when facts do not compel you to affirm.

Louis Pasteur

- **Foundations and limitations of science**
- **The scientific design**
- **Damage from “scientific” publication**
- **“Case Histories” and “Anecdotal”**
- **Truths about controlled studies**
- **Limitations of statistics**
- **Limitations of scientists**
- **Adverse influence of traditionalist publications**
- **The Deyo controversy that perpetuates the Fundamental Flaw**
- **Medical shocks from good statistics**

In recent years, an increasing number of “scientific” papers have favored manipulative approaches, although in restricted areas, but they prominently state the “other side,” that discourages the energy to attack the preponderant preconceptions. Thus it has been since the “great rejection.” From the beginning, more has been invoked against manipulation in the name of *science* than any other indictment. “Unscientific” became the mantra, as if just its utterance is sufficient to condemn manipulative practice, and, in fact, it has, because “unscientific” is imbued with so much power. What “science” really denotes needs to be resolved.

The ideal of science implies an unrelenting *appropriate* skepticism. It implies the fearless, unprejudiced search for clear criteria for what constitutes proof. But medicine is never pure, especially never pure science. A multitude of other factors, known and unknowable, are involved. Any product of thinking, called science or not, is susceptible to error, attitude, prejudice, bigotry, self-defensiveness, and envy.

The sands of recent history are strewn with the scandals of the misuse and conscious falsification of data. The self-perceived need to protect the veneer of one's professional status can overwhelmingly restrain the constraints that define professionalism. Seeking more and more "recognition" can become a blood lust.

From its scientific aspects alone, that which may be possibly controlled and regulated in the laboratory may not be translatable to complicated real life trials of clinical practice. Before you finish this chapter, you will understand why, even under forthright circumstances, so-called "scientific conclusions" may have to be doubted. *We now know that the experimental design that is so precious to medicine can actually adversely affect the result.*

As much as some in medicine deceive themselves that their habits are dominated by science, our overbearing obligation as physicians refutes that. *Our task is to understand abnormal processes the best we can within the sphere of time and knowledge allotted us. Then, in the particulars of one case, we need to account for as many variables as we can, and apply therapies which we decide are in our patient's best interests.*

Medicine, in its highest expression, is an *art* in which available science is readily, even anxiously consulted while life, disease, dysfunction, and death go on. We can give no guarantees except the promise to do our best. No warranty can ever be implied. During the treatment of an active disease or injury, there is no opportunity to disappear for unlimited time into the laboratory to try to settle some problem. We are in the trenches, and the ideal is always elusive. Amidst that implicit uncertainty, the urge to embellish medicine with a reputation for being more scientific than is deserved is understandable, but it is an illusion nevertheless. The final results of our treatments are truly out of our hands. We perform treatments. We monitor. *But we never heal.* Only G-d does that.

Concerning manipulative therapies, hiding behind "science" to discredit it almost always arises from unscientific motivation.

Serious issues are supposed to be reflected in serious medical literature. Papers

published in medical peer review journals carry special weight. The *New England Journal of Medicine* (NEJM) is, for good reason, one of the most prestigious and respected in the world. Many doctors are now aware of two papers concerning manipulation that were published in the October 8, 1998 issue (Volume 339, Number 15).

The lead article, in particular, allegedly concerns the efficacy of manipulation. It compares a chiropractic manipulation against two “therapies” – a particular technique of physical therapy (McKenzie) and the patient’s reading an educational booklet. From the clear, very scientifically controlled limitations of the study, it concluded that, *under those circumstances*, there was really little difference among the three. But in today’s ignorance about these issues and managed care’s lust for the “bottom line,” the damage that publication is doing cannot be calculated. The second author listed is Richard A. Deyo, M.D. I have taken intense issue with Dr. Deyo’s conclusions since 1992.

I submitted a letter to the editor reminding that while the paper was narrow in scope, general unfamiliarity with the real issue was already causing broad and inaccurate conclusions to be drawn from it. I explained that the real question was not chiropractic or some exercise, but the efficacy of applied biomechanics to restore tissue function and relieve pain. The paper’s condemnation, even merely implied, through statistics devoid of allowance for the complexity of an individual case, is not reasonable.

The February 4, 1999 issue of *NEJM* published eight responses that predominantly reported the biases of the paper from the chiropractic and physical therapy perspectives. Mine was not published. None addressed the fundamental issues, and the authors’ rebuttals were, at least to me, confusing.

Another aspect of the profundity of charts and data provided in some papers, as in this article, is that they enhance an impression of comprehensive authority. Few doctors today know how to critically analyze statistics. Pre-medical education stopped teaching the skills required

decades ago. Most doctors may find time to only scan summaries. The consequences of such summary judgment can be pervasively destructive.

This *NEJM* paper is a particular case in point. With its journalistic authority acknowledged, this particular paper's underlying limitations are easily lost amid the buzz words "chiropractic" and "manipulation" and "no unique benefit."

In the case of manipulation, pure, remote statistical analysis can fail simply because manipulation is largely a craft. What impact could Ozzie's case have if it were included merely as a number among hundreds of others?

Medical research has its own vocabulary. The devil is in how it is applied, and traditionalism selectively sets its rules. When a single medical event is reported, it is called a *case history*, but only if the topic is "acceptable." While it is, of itself, insufficient for general proof, its approval is implied, and its intention is to attract scrutiny and consideration for further application and study.

The other word for what is really an equivalent event is "*anecdotal*," which in normal circumstances merely means "narrative," in essence, a case history, but in medicine that definition is violated and loses its presumed innocence. "Anecdotal" gets only sidelong glances, is almost a pejorative, a code word for a suspect event not acceptable for serious discussion. So, in the medical real world, a cure with an antibiotic is a *case history*; a cure such as Ozzie Hansen's, with a manipulative procedure, is *anecdotal*, and locked in thinly disguised contempt. That Ozzie was his own controlled series against many other therapies that didn't work is irrelevant to such thinking. "Anecdotal" can be a mantra assumed to elevate the status of the speaker to being a real "scientist." George Will says it better. He defined anecdotal as "today's preferred description of inconvenient evidence. A multitude of anecdotes make a pattern..."⁸³

Controlled Studies:

⁸³ (Newsweek, November 14, 1994)

The generally accepted benchmark of scientific investigation is the *controlled study*, which alleges science's rigorously disciplined approach and is intended to protect against false conclusions based on anecdotes.

The design of a controlled study requires a group of subjects to study the effects of a particular treatment. They are subdivided into those who are treated and others who act as "controls" in a "double blind" arrangement so that no one closely involved is aware of which group each subject is in, neither patient nor clinician.

The so-called treatment used on the "control group" is, by the nature of the experimental design, not supposed to have the ability to cause change. It could be a sugar pill. It has been presumed that if any change is reported, it is because of the "power of suggestion," the so-called *placebo* effect, but only recently is the placebo beginning to be generally appreciated for what it really is⁸⁴ - one of the most potent forces in nature. In truth, a patient deriving therapeutic benefit from it is paying one of the highest compliments that can be bestowed upon a clinician because it signifies that the patient accepted in trust what was provided. From that, the body released "*endorphins*" (naturally produced morphine-like substances) that relieve pain, promote rest and enhance healing. All scientific studies have to account for and balance the anticipated placebo effect. It occurs in virtually all well-conducted controlled trials.

Obviously, the treatment group must show statistically greater response than the control group for a treatment to be considered effective. Overall, the value of the controlled study depends on a host of details that include the proper use of statistics according to sample sizes. But, as I have alluded, regardless of the "elevated" theory, the reality is too often not what was desired. There are many reasons for this. One of them was demonstrated during the '80's when, again, *The New England Journal of Medicine* published a paper that concluded that a substantial number of studies, from which important medical conclusions had been drawn and clinically applied, had been improperly analyzed. *In over 50% of the cases, the findings did not support*

⁸⁴ An excellent monograph that discusses placebo: Wall, Patrick. PAIN: The Science of Suffering. Columbia University Press. ISBN0-231-12006-0

the conclusions the medical researchers had extracted and published from them.

‘The mountains may have labored from the disclosure, but what they produced, if anything, was a mouse.’ In 2012, C. Glenn Begley and Lee M. Ellis reported in *Nature* that they were able to replicate only six out of fifty-three “landmark” cancer studies!

Throughout, those cases involved highly acceptable topics such as the use of drugs for the treatment of specific diseases. It might seem that the use of controlled studies concerning only one disease and one drug - where one clearly defined group was administered it and another not - would not present great difficulty, but that was not the case. Major problems may arise from even seemingly clear applications.

The study of manipulation through statistics is an exceedingly more formidable challenge. *Appropriate case selection*, individual anatomy, the influences of other injuries, associated conditions, variability in how manipulations are performed, and other unspecified influences make strictly scientific-type statistical analysis more than extraordinarily difficult.

There are a number of types of manipulation. They work in different ways. In the first encounter, one cannot predict which person will respond to a particular technique. The application is a major variable: when? how often? how much? All are variables that are inherent in the therapy and can only be theoretically reflected on.

As for any craft, skill is the prerequisite to manipulative competence. Allopaths understandably tend to have a heavy emotional burden about that because they’ve heard the stories about relief that they couldn’t provide for patients whose problems were within their spheres of alleged competence.

For many such reasons, expectation to prove manipulation's efficacy purely from rigid methods identical to drug studies is not rational. That is allopathy's Catch 22. It has demanded that manipulation play against a stacked deck and win. And if it can’t, why should traditionalism be concerned when using it isn’t “scientific” anyway?

But traditional medicine does not apply such rigidity to subjects that are free from its

legacy of hostility! Medications are used for hosts of purposes for which they were not initially intended when they were formulated. Coincidences during clinical use revealed they had value for other conditions, so they continue to be prescribed only because they seem to work. For instance, anti-convulsant medications are regularly used for certain types of pain.

Thalidomide was popularly prescribed for women during early pregnancy to treat “morning sickness.” Before its disastrous effects on the fetus were realized, it caused many thousands of children to be born with severe (phocomelic - seal flippers) limb defects.

As a side story demonstrating the occasional value of incompetence, while thalidomide was prescribed throughout Europe, it was never released in the United States. The document for approval was lost in the sloppy piles of paper on the desk of the administrator of the Federal Drug Agency. That wasn’t common knowledge, and she was feted as a heroine for the rest of her life

Returning to the issue - years later, and serendipitously, thalidomide was shown to be remarkably effective against major manifestations of leprosy. And, during the AIDS crisis, drugs were approved before rigorous study because people were dying. Later, sometimes much later, the documentation may, or may not, have caught up. Regardless, manipulation remained medicine's scapegoat - for “lack of science.”

Still, many studies concerning manipulation have been conducted. Since 1986, a number have been published that are provocative and bend towards manipulation’s efficacy. Most were published in specialized journals and have to be searched for, but only, until recently,

could they begin to penetrate the prejudice.^{85,86,87,88,89,90,91,92,93,94,95,96,}

The papers that minimize or deny the value of manipulation tend to focus on a non-

⁸⁵ Waagen, GN, Haldeman, S, Cook G, Lopez D, DeBoer KF. Short-term trial of chiropractic adjustments for the relief of chronic low back pain. *Manual Medicine* 1986; 2(3):63-7

⁸⁶ Anderson, RM, Meeker, WC, et al. A meta-analysis of clinical trials of spinal manipulation. *Journal of Manipulative & Physiological Therapeutics* 1992; 15: 181-94

⁸⁷ Assendelft, WWJ, Koes BW, et al. the efficacy of chiropractic for back pain: blinded review of the relevant randomized clinical trials. *Journal of Manipulative & Physiological Therapeutics* 1992; 15: 487-94

⁸⁸ Assendelft, WJJ, Koes BW et al. The effectiveness of chiropractic for treatment of low back pain: an update and attempt at statistical pooling. *Jour Jnl of Manipulative & Physiological Therapeutics* 1996 (Oct); 19(8): 499-507

⁸⁹ Coulter, ID, Hurwitz EL, Adams AH, Meeker WC, Hansen DT, Mootz RD, Aker PD, Genovese BJ, Shekelle PG. The appropriateness of manipulation and mobilization of the cervical spine. Santa Monica CA: RAND Corporation, 1996

⁹⁰ Hadler, NM, Curtis P et al. A benefit of spinal manipulation as adjunctive therapy for acute low-back pain: a stratified controlled trial. *Spine* 1987; 12:703-6

⁹¹ Hsieh, CJ, Phillips RB, Adams AH, Pope MH. Functional outcomes of low-back pain: comparison of four treatment groups in a randomized controlled trial. *Journal of Manipulative & Physiological Therapeutics* 1992; 15: 4-9

⁹² Koes, BW, Assendelft, WWJ, et al. Spinal manipulation and mobilization for back and neck pain: a blinded review. *British Medical Journal* 1991; 303: 1298-1303

⁹³ Meade, TW, Dyer, S, Browne, W, Townsend, J, Frank, AO. Low back pain of mechanical origin: randomized comparison of chiropractic and hospital outpatient treatment. *British Medical Journal* 1990 (Jun); 300:1431-7

⁹⁴ Meade, TW, Dyer, S et al. Randomized comparison of chiropractic and hospital outpatient management for low-back pain: results from extended follow-up. *British Medical Journal* 1995; 311: 349-51

⁹⁵ Nansel, DD, Peneff, A, Quitarano, J. Effectiveness of upper versus lower cervical adjustments with respect to the amelioration of passive rotational versus lateral-flexion end-range asymmetries in otherwise asymptomatic subjects. *Journal of Manipulative & Physiological Therapeutics* 1992 (Feb); 15(2): 99-105

⁹⁶ Nansel, DD, Slazak. Somatic dysfunction and the phenomenon of visceral disease simulation: a probable explanation for the apparent effectiveness of somatic therapy in patients presumed to be suffering from true visceral disease. *Journal of manipulative & Physiological Therapeutics* 1995 (July/Aug); 18(6): 379-97s

specific symptom, such as "back pain," after specific diagnoses, like infection, tumor and fracture, were eliminated. Among those with "benign pain," subjects were selected and then randomly divided into two groups. One group was treated with some form of manipulation and the other with an "innocuous procedure" that was supposed to serve as a control. I found no studies that took the "benign back pain group," *and then precisely identified those with physical findings that suggested the need for manipulation, and then divided those into treatment and*

⁹⁷ Nansel, DD, Peneff, A, Quitariano, J. Effectiveness of upper versus lower cervical adjustments with respect to the amelioration of passive rotational versus lateral-flexion end-range asymmetries in otherwise asymptomatic subjects. *Journal of Manipulative & Physiological Therapeutics* 1992 (Feb); 15(2): 99-105

⁹⁸ Nansel, DD, Slazak. Somatic dysfunction and the phenomenon of visceral disease simulation: a probable explanation for the apparent effectiveness of somatic therapy in patients presumed to be suffering from true visceral disease. *Journal of manipulative & Physiological Therapeutics* 1995 (July/Aug); 18(6): 379-97s

⁹⁹ Nilsson, N, Christensen, HW et al. The effect of spinal manipulation in the treatment of cervicogenic headache. *Journal of Manipulative & Physiological Therapeutics* 1997; 2: 326-30

¹⁰⁰ Pope, MH, Phillips, RB, et al. A prospective randomized three-week trial of spinal manipulation, transcutaneous muscle stimulation, massage and corset in the treatment of subacute low-back pain. *Spine* 1994; 19: 2571-7

¹⁰¹ Pope, MH, Phillips, RB, et al. A prospective randomized three-week trial of spinal manipulation, transcutaneous muscle stimulation, massage and corset in the treatment of subacute low-back pain. *Spine* 1994; 19: 2571-7

¹⁰² Shekelle, PG, Adams, AH, Chassin, MR, Hurwitz, EL, Phillips, RB, Brook, RH. The appropriateness of spinal manipulation for low-back pain: project overview and literature review. 1991a, RAND Corporation, Santa Monica, California (Document #R-4025/1-CCR/FCER)

¹⁰³ Shekelle, PG, Adams, AH, Chassin, MR, Hurwitz, EL, Brook, RH. Spinal manipulation for back pain. *Annals of Internal Medicine* 1992; 117: 590-8

¹⁰⁴ Triano, JJ, McGregor, M et al. Manipulative therapy versus education programs in chiropractic low-back pain. *Spine* 1995; 20: 948-55

¹⁰⁵ Wiberg, JMM, Nordsteen, J, Nilsson, N. The short-term effect of spinal manipulation in the treatment of infantile colic: a randomized controlled clinical trial with a blinded observer. *Journal of Manipulative & Physiological Therapeutics* 1999; 22(8): 517-22

control groups. The devil, indeed, is in the small print.

In most studies, only one type of manipulation was used. That alone should have disqualified the assuming of broad conclusions, because it invalidated the fundamental question. *Manipulation*, not just some specific type, was being tested - or should have been. The skilled manipulator, like the skilled carpenter, has more than one tool in his bag.

Even when there is no irritation of the nerves exiting the spine (as can occur in "herniated discs"), mechanical back pain has many origins, with extraordinarily complex interrelationships within which many different injuries may manifest. When people with comparable other factors, such as age and body type, have a specific type of manipulable injury whose symptoms are of similar duration, and there are no other known mediating conditions, and that group is randomized, only then *might* results be accurately compared.

Regardless, statistical analysis of large groups always dilutes the value of individual responses that may make the case, as I emphasize with the opening story about the elderly lady in the USC Emergency Room, and others, like Ozzie Hansen. Still, "double blind" is often quoted as the holy grail and sounds sacred to the unacquainted.

Statistics, of course, are vital in the real medical world - when they are honest. Statistical analysis can approach integrity when it considers that individual patients can rationally provide a sufficiency of their own controls from past failed therapies. Then, the mask of the dilution problem is avoided. I have already commented about sample imprecision.

Wisdom spoke when statistics were likened to a beautiful woman in a bikini: "*What is revealed is tantalizing, but what is hidden is essential.*"

And from Arthur Bloch, author of *Murphy's Law 2000* (in the title, the 2 is inverted) *What Else Can Go Wrong in the 21st Century!* comes GRIFFIN'S LAW: *Statistics are a logical and precise method for saying a half-truth inaccurately.*

Indeed, even when studies have shown earlier improvement in a group of patients who have received manipulation, the traditionalist conclusion tends to demean it, nevertheless, with a

comment that it was only “early-on,” and that eventually, *statistically*, the groups were similar. *But an early difference is important!* It is the difference between weeks or months of unnecessary pain, disability, lost productivity and all that ripples from them.

Also, in the unsatisfactorily or untreated group, eventual relief from pain may only have been a temporary tissue “accommodation,” that then lay dormant before emerging at a later time, more resistant and chronicity bound.

Such possibilities have not been studied, nor should they be! Any such attempt would reasonably raise a serious question of ethics. To intentionally not treat an injury with characteristics of impending chronicity just to see what will happen (in the name of science, of course), would be unconscionable. But I have seen it.

I have seen how far skewed thinking can drift when it is not anchored by the confident experience of the hands-on skills. It happened at a major university medical center. A study was authorized that intentionally disregarded the possible dread consequences of a condition for which the agreed standard of care requires joint mobilization. It is called reflex sympathetic dystrophy (*RSD*), also called complex regional pain syndrome. *It can be a terrible rabid cascade that, once started, may become irreversible.* The pain can be so devastating that the sufferer justifiably elects suicide. Even its possibility is a defined emergency, and any rational treatment that may possibly break the dysreflexia must be commenced immediately.

I have treated such cases early when all the incipient findings were present, but prompt mobilization, sometimes supplemented with special injections, provided dramatic relief. From just hands-on alone, I have gratifyingly replaced the fearful sign of ominous coldness of the extremity with the hot blush of restored circulation.

Ultrasound is generally known to be useless in the treatment of *RSD*. But in one doctor’s mind, “science” had to be served, and she proposed the first controlled study to prove “once and for all” whether ultrasound had any effect.

So, in the name of “science,” every “subject” in the study was jeopardized. Each patient

either received the useless ultrasound or, as a “control,” intentionally received nothing - the ultrasound machine was used but not turned on. All of them lost the most critical weeks for successfully attacking such a malignant condition by not aggressively receiving treatments that were potentially valuable. The result was predictable, but in a few minds, the almighty god “science” had been appeased.

I seethed as she read the paper with obvious satisfaction at an Academy meeting, and was on my feet raging when she finished with a self-satisfied flourish. Tragically, I the only commentator from the large, otherwise passive audience. I thought of the “old days,” when there were doctors who consoled themselves that, with all their ministrations of noxious purging and bleedings they hadn’t saved their patient, but they had to have done something right. After all, didn’t the patient pass a formed stool before s/he died?

Historically, controlled studies are not universally demanded for a treatment to be accepted. None were ever performed on the use of cortisone in septic shock. When cortisone became available, it went into immediate use, because the implications of requiring a “control group” just to fulfill a protocol were innately understood. Without cortisone, people were dying. What additional controls were needed? With cortisone, some survived. It was safe space, regardless, because a medication, not manipulation, was involved. There are many such examples.

(Please be sympathetic to this farce.)

The scalpel and hemostat are basic surgical instruments. Incisions cut blood vessels and cause bleeding. The hemostat is the clamp that controls the bleeding, and the ligature is the cord that ties the vessel. Believe it or not, no controlled study has ever been done to prove the effectiveness of hemostats and ligatures in the control of bleeding! According to the strict scientific criteria which manipulation has to endure, each “clamp and tie,” however successful, is still anecdotal. Although performed countless times, by the same standard, each must be considered only a collection of individual experiences until it survives the statistical challenge.

There has never been a side-to-side study in which bleeders have been clamped on one side of a wound, while another just bled as an innocuous control "treatment" to satisfy the protocol.

(Thank you.)

Where anyone can see the need for the clamp, so the competent manipulator may see or palpate the need for manipulation. Neither procedure may work every time. When there is success in the surgical case, the result is immediately observed. In manipulation, again, the clinician may also have to palpate for the local result, but the conceptual essentials are identical. Regardless, the patient's ability to move more freely with less pain certainly will be visible.

For a more complete understanding of controlled studies and the gamut of assumptions which must be allowed in order to support "scientific" conclusions, I recommend *Health At The Crossroads*, by Dean Black, Ph.D.¹⁰⁶ It is a remarkable book in which the battle between the conflicting ideologies in health care is seen in a brilliant light. Summarizing one aspect, the physiology of the person who has choices and the one from whom choice has been removed is different. Being "caged" as a passive recipient of an experiment actually alters one's body chemistry in measurable ways. The first has a body mechanism that is free while the other is a slave. Knowing just that causes the change. *Attitude influences biology*. From the first, the two groups are not equivalent. The power of positive mind set is eroded by submission to long waits in doctors' offices, being told what to do and what not to do, and being restrained into a treatment. The objective blood tests in which doctors place such confidence actually change, and the "scientific" experimental design can actually enhance that change.

There are other examples. In his first book, *Anatomy of An Illness*, Norman Cousins described how he had cured himself of a serious disease by placing himself on laugh therapy. He discovered that when he laughed, he felt better. So he read, looked at, or listened to anything that would make him laugh. His book has had increasing impact. He was a professor at UCLA Medical School, my alma mater.

¹⁰⁶ Published by Tapestry Press, copyrighted 1988.

Cousins wrote a second book, *The Healing Heart*, which further described his experience with traditionalism. He was having some difficulty, and his physician administered a treadmill test. He was told the result was abnormal and that he needed heart surgery. That wasn't consistent with his personal experience. He had been walking long distances comfortably. So he did it his way. He had the treadmill set up where he was in command in familiar surroundings. He refused to be someone else's laboratory animal. The results of that test were normal.

Allopaths never (or hardly ever) read osteopathic or chiropractic literature. This is a critically important issue, especially because doctors, like the rest of us, generally most welcome reading what reinforces what they already think. Dr. Richard Deyo, MD, MPH (Master of Public Health), was the senior author of an influential and persistently damaging paper in the *Journal of the American Medical Association*.¹⁰⁷

THE DEYO CONTROVERSY

The low back pain problem is so immense that it commands greatest attention. In the United States alone, annual cost estimates in the early 1990's varied from \$80 - 200 *billion*.¹⁰⁸ The number continues to increase. Low back pain's deleterious effects on quality of life is inestimable. A breakthrough here would likely influence thinking in all other areas of musculoskeletal treatment.

Dr. Deyo has published a number of papers about this and related issues including an admirable statistical analysis of the literature concerning low back care. In it, he astutely described the limitations of drawing conclusions from published studies regarding the efficacy of joint manipulation.¹⁰⁹

¹⁰⁷ "The Rational Clinical Examination --- What Can the History and Physical Examination Tell Us About Low Back Pain?" *JAMA* August 12, 1992.

¹⁰⁸ It is now 2013. This figure is over ten years old.

¹⁰⁹ "Conservative Therapy for Low Back Pain: Distinguishing Useful From Useless Therapy." *JAMA* 1983; 250:1057 - 62.

From his credentials in Public Health in the Health Services Research and Development Field Program, Seattle Veteran's Affairs Medical Center, Dr. Deyo is not a hands-on practicing clinician. He manipulates statistics, not people. He does not publish from knowledgeable experience in the treatment of low back pain, from which he might have drawn independent conclusions, but from the writings of others. It appears he depends on their knowledge (and reputations) to essentially validate his conclusions and from which he implies his own authority.

The authorities he cites represent *allopathy's* view about manipulation. So he circles the loop of the controversy in a manner that is likely not evident to the casual reader thus unwittingly declaring the full consequences of the Fundamental Flaw. *He wrote, "Up to 85% of patients cannot be given a definitive diagnosis because of weak associations among symptoms, pathological changes, and imaging results. We assume that many of these cases are related to musculoligamentous injury or degenerative changes." "85%!... cannot be given...!" is the fullest published admission of medicine's Fundamental Flaw I know! Stated unambiguously, without hesitation or shame, as fact, as a given condition! Such general admission is the penalty for a century-long campaign that produced the Pain Pandemic!* From that statement, the authors proceed into assumptions, possibly trying to make 85% more acceptable. *It is not! And it must not be!* Any business that is "85%" ignorant about a common occurrence has very serious problems. Except for respiratory conditions, colds and the like, musculoskeletal pain is the most common of complaints. The statement implies that the "science of medicine" cannot unravel a profound mystery. *From Deyo's authority, practicing M.D.'s can rest more at ease and assume that, under such circumstances, they are justified in providing the host of non-specific therapies that are now the general rule.* On the other hand, M.D.'s with my training, and others in neighboring professions, claim that they do not have nearly that degree of difficulty in ordinarily coming up with a diagnosis from which to begin rational treatment.

"85%" failure was not even close to the statistics for the worst plagues the world has ever seen. Yet, even then, when large fractions of populations were perishing, there was still the

Old Guard that refused to reconsider other ideas about how the pestilences happened.

I accuse that a big slice of the 85% ignorance accounts for the rejection of the skills attendant in manipulative approaches.

Despite the title, the authors' conclusions are distinctly *not* "Rational," (as claimed by the title of Deyo's paper - footnote 99) yet here is where the traditionalist stands and attempts to justify what you are too often compelled to contend with: "Since the specific cause frequently cannot be identified, diagnostic efforts are often disappointing." That is classical, nonsensical circular thinking. If the diagnostic tools are refused, how can a specific cause possibly be identified? As I described, the truth in that statement *is only because of how examinations are usually performed*. Dr. Deyo comments on none of that.

Dr. Deyo continues, "Instead of seeking a precise cause in every case of back pain, it may be most useful to answer three basic questions:

- (1) Is there a serious systemic disease causing the pain?
- (2) Is there neurologic compromise that might require surgical intervention?
- (3) ***Is there social or psychological distress that may amplify or prolong pain?"***

Concerning (1):

The determination whether a life threatening condition is present must always be the clinician's primary obligation. That is so self-evident, the admonition has no place here except as a platitude.

Concerning (2):

Dr. Deyo is again correct. Sudden loss of bowel and bladder control because of a back injury is indeed a neurosurgical emergency. Obviously such conditions would fall into the "15%" with a clear diagnosis.

THE DECLARATION OF WAR:

The battle is joined in question (3): *Is there social or psychological distress that may amplify or prolong pain?"*

Dr. Deyo dares to fly blindly into the abyss with a question so premature that nothing can assuage the mockery it deserves. *When clinicians do not find or suspect a condition that is life or function threatening, their next immediate obligation is to conscientiously seek whatever is there **that is consistent with the complaint!***

No one is entitled to precipitously jump to (3)!

Such contrived, presumptuous questioning motivation is self-serving recklessness! Except in the unusual, demonstrably psychological aberrant case, psychologically based questions may only be appropriate after the fullness of the physical examination has been explored!

(3) is among the most onerous consequences of the Fundamental Flaw! It must be unconditionally condemned.

Despite grossly inadequate data, *they* focus their attention on the possibility that you, an individual in pain, have dominant emotional difficulties. *The attention shift gratefully relieves their collective mind about having possibly missed something - and having to search for it. Instead, it is your mind that is on trial!*

They then may attempt to justify their professionalism by prescribing *education*: psychological testing, “back schools,” and mind-game-skewed pain clinics with, of course, categorical “answers to all questions.” The ‘80’s, when those practices peaked, was a time of too frequent warfare for me.

Yes, there are hypochondriacs and all other emotional sorts, but their unfortunate burden didn’t come with an absolution from having painful conditions, as well. Like x-ray procedures, psychological methods for pain relief must be balanced by common sense.

I find it incredible that the body, with its wondrous ability to perform through such exquisite ranges of expression – the marvel in the sounds from a singer - from musical instruments - mind boggling athletic achievement – is truly expected to comprehensively yield answers about its impairments to crude, too often poorly performed physical examinations that

are essentially designed to disclose only major abnormalities, yet - because of the Fundamental Flaw - are the irrefutable criteria of medical determinism!

An extensive reader correspondence about Dr. Deyo's paper was published in the January 20, 1993 issue, which only emphasizes the intensity of the problem. Where there is no skill at performing an art, some will vicariously play by manipulating the numbers, and that's what the letters did. As in the NEJM paper, the letters delved heavily into "statistical analysis."

As already commented, most practitioners are too busy, too unskilled or disinclined to study everything intently and perform their own analysis of medical papers. The common experience is to read only the summary to reach an overall conclusion. I am as prone to the same expediency for issues in which I am not intensely involved. But there is no absolution from the risk that too much, or too little, is concluded, and concepts become confused without it being realized.

Such issues were remarkably elaborated in a TV series, released in 1993, called "Healing and the Mind." The series explored the hazards of falling into traps by unwittingly mixing attitude and ego with indulgence for science.

Bill Moyers¹¹⁰ interviewed world-class scientists whose work focuses on mind/body. They candidly admitted their serious errors because they had permitted themselves unsupported confidence about the validity of what they had been doing for many years. They described their realization that dividing up the body for scientific examination is "a declaration of ignorance." In their studies (which can be viewed as a parallel to the allopathic - osteopathic - chiropractic conflict), behavioral and biochemical scientists developed two incompatible languages. Only in retrospect did they sense that they were talking of exactly the same things.

Candace Pert Ph.D., one of the scientists, explained that such a fundamental interference with scientific inquiry had come about only because of a political agreement between Descartes and the Catholic Church over three hundred years ago. (This is well reported in other sources.).

¹¹⁰ This should not be construed as endorsement of politics or some of his other works.

The church allowed Descartes to deal with the body as an entity so long as he promulgated that it was entirely separated from the "soul," to which the church claimed total jurisdiction. The enforced dichotomy persevered, and strengthened its hold even till this day.

One of the scientists described the mind "talking" to body as "old think" - that mind is realistically "an enlivening energy that enables the cells to talk to each other and to the outside," that the entire body is the place where emotions are stored. This is aphorism to any sensitive musculoskeletal clinician. The poets knew at least a millennium before professional acceptance that a disappointed lover could turn his face to the wall and be dead by morning. These thinkers in biological research are willingly returning to the beginning to meaningfully commence again. It took time, but eventually they realized that fixed attitudes and static dogma destroy science. These researchers are honest people, but there are others.

In science, the issue always seems to become statistical. Its implicit design is to impress a point. People are well paid to accomplish that, and there seems no end to their cleverness. For decades, it was the tobacco industry that best illustrated how the public could be duped by its statistical vernacular "proving" that cigarettes don't cause cancer. Setting aside the decades when the tobacco industry misled the public with its statistical allegations that cigarettes didn't cause cancer, let's reflect on a potentially catastrophic threat - nuclear power.

The problem was, and is, that the power of fission is frightening. Overwhelming concentration of power, whether animal, vegetable, or mineral, always is. So safety had to be sold. The statistics of what radiation can do over time come from the survivors of the Hiroshima and Nagasaki bombs, and cancer rates among them have been studied for decades. Great care was allegedly taken in the name of humanity in the preparation of those statistics, but how were they to be used?

The bombs were dropped in 1945, *but studies didn't begin until 1950*, long after the devastation. Because of the five-year lapse, it was easier to skew the statistics, and the skew was not obvious. Many unstudied variations could have contributed to the known bottom line.

For instance, those who lived longer could have been genetically pre-selected - the survival of the fittest.

Then in 1979, the *Three Mile Island* disaster happened on the east coast of the U.S. Again, statistics had to dominate and continue to allege over time that nothing serious had happened because the release of radiation had been low. The accident happened on a Wednesday. *In the ensuing panic, the area-monitoring equipment wasn't finally installed until the following Saturday!*

The science of statistical analysis begins with the sampling, but there are agendas and agendas. For many reasons, independent investigative studies dispute industry-financed “studies.”

Reported in April 1999, Dow-Corning and other companies were being sued by thousands of women because of their reported complications from leaking silicon in their breast implants. Another science-based paper was published that concluded that there is no relationship.

A lawsuit was filed to disallow the report because the investigators were fiscally associated with companies that manufacture the product. A comment was made that the lawyers for the plaintiffs had to eventually go “all the way to Canada” to presumably find an honest voice. However, further inquiry revealed that the Canadian source also had financial dealings with the companies. None of that proves dishonesty, but the problem is older than the Bible.

Scientific American has published numerous articles exposing the pharmaceutical industry's exploitations. Its allegedly scientific “research reports,” based on the “statistically proven” efficacy of medications, is largely conducted by medical researchers who are funded by the companies that need their products to pass the test. According to *Scientific American*, eight of the nine doctors who developed the 2004 cholesterol guidelines (still used) were on the payroll of drug companies that manufacture statin cholesterol-lowering drugs. Huge, huge market.

Every statistic, its source, its reliability, its applicability, has to be unambiguously known or questioned. How many people know how to do that? How many people know all that has to be inquired about? How does a reader unambiguously recognize innate prejudice? Two crushing studies amplify on the potential relationship of science and medicine. The first is particularly related to orthopedic surgery's stature in relation to its historic apathy for manipulation.

Arthroscopic surgery of the knee for pain and stiffness of osteoarthritis is a staple in orthopedic surgery's armamentarium. For years, it has been performed on "at least 225,000 middle-age and older Americans each year at a cost of more than a billion dollars to Medicare, the Department of Veterans Affairs and private insurers." The paper, accompanied by an explosion of disclosure heard around the world, reveals the procedure is statistically a sham.¹¹¹ Using extraordinary controls, it proves that patients who received the "control procedure," in which virtually only skin incisions were made, did at least just as well as those who underwent the complete surgery.

At almost exactly the same time, another statistical paper was published that rocked the world of another considered surety in medical practice. For fifty years, HRT (Hormone Replacement Therapy) has been a near-sacred declaration of women's release from the "misfortunes" of aging, considered by many as a veritable fountain of youth. The conclusions: HRT's dangers significantly outweigh its benefits.

This had to have been an education for you, but please don't get lost in it. Its purpose has been to "enter the lists" with honesty to combat the vast conspiracy against the manipulative discipline. The exploitation of words like science, the intimidating use of statistics, can be from the same motivation that has been successfully used by tyrants throughout time. Please be aware of that. The ongoing price of the prejudice is beyond counting.

New York Times, July 11, 2002

¹¹¹ A Controlled Trial of Arthroscopic Surgery for Osteoarthritis of the Knee, Mosely, O'Malley et al, NEJM, Vol 347:81-88, July 11, 2002, Number 2

CHAPTER TWENTY-TWO

THE HISTORIC FOUNDATIONS OF MANIPULATION

Those who cannot remember the past are condemned to repeat it.

George Santayana

Whatever holds back a spirit of inquiry is favourable to error; whatever promotes it, to truth. But nothing, it will be acknowledged, has a greater tendency to obstruct the spirit of inquiry, than the spirit and feeling of party. Let a doctrine, however erroneous, become a party distinction, and it is at once entrenched in interests and attachments which make it extremely difficult for the most powerful artillery of reason to dislodge it.

*Robert Hall
19th century*

- **Explorer James Cook cured by Tahitian manipulation**
- **The bonesetters**
- **Medical scorn and early warnings**
- **Competing philosophies in medicine**
- **Medicine's early history**
- **Jeopardy in allopathic medicine**
- **Purges and bleeding**
- **The death of George Washington**
- **A.T. Still - The beginnings of osteopathy**
- **D.D. Palmer – The beginnings of chiropractic**
- **Medical progress**
- **The economic power of pills**
- **Managed care**

Manipulation has been a part of virtually all healing systems from antiquity. *Cyriax's Textbook of Orthopaedic Medicine* has a photograph of a statue performing what appears to be a manipulation among other statues along the walls of a 2000-year-old Buddhist Temple in Bangkok, Thailand. The ancients were at least as intelligent as we and far more tuned to natural methods. They had similar medical problems; they had hands, and they had a sense of

biomechanics. The ancient mariners who navigated whole oceans as no one today can comprehend certainly were astute in their healing methods, as well - and there was no interposed technology that might confuse the issues.

A passage from the *National Geographic*, September 1971, *The Voyages and Historic Discoveries of Capt. Jas. Cook*, pages 341-2, concerning his expedition to Tahiti about two hundred years ago briefly describes his experience.

Cook was not always his former self on this last voyage. His strained digestive system, the constant worry over leaky, badly refitted ships combined to torture his iron will and inclined him to outbursts of shouting, cursing and sometimes ill-judged actions.

When he reached Tahiti, he found that another affliction had become unbearable. He had developed crippling rheumatism, intensified by wet quarters below leaky decks. "We'll fix that," said a friendly chief.

So 12 large, muscular women, four of them the chief's relatives, were paddled out ceremoniously in a great canoe, descended to Cook's cabin, and spread a mattress and blankets on the deck. "Lie!" said the women.

Cook lay down. The 12 giantesses immediately fell upon him, pummeling and squeezing unmercifully with their plump, lively hands, *until his joints cracked* (italics added) and all his flesh felt like misused blubber. After 15 minutes of this, the released victim got up. To his astonishment he felt immediate relief.

"More?" asked the ladies, smiling.

Indeed, agreed the captain. Three more treatments, he recorded, ended his pain.

The Polynesians called it *lomi-lomi*. Primitive, perhaps, but obviously effective.

Regardless, today there are still allopaths who blink incredulously and ask how manipulation could possibly work, when the more reasonable question is, "*How could it not?*" They attempt to convince themselves that it is merely a form of suggestion therapy, the ubiquitous "laying on of hands." Captain Cook, one of the great scientist explorers, would not likely have been so deceived. Were he alive and similarly symptomatic today, only

manipulation, likely refined, would relieve his condition.

Manipulation followed the folk path through cultures, remaining in families and passed along the generations to the present. It was surviving among lay healers while medicine was only beginning its struggle towards professionalism. Then came a time when, from their perspective, they - *doctors* - were competing against “the unlearned,” who didn’t know any medicine at all. All *they* did was try to relieve joint restriction to relieve pain. If the problem was from only dysfunction, all could be well or, at least, no harm was likely done. But, if the problem came from underlying infectious arthritis, tuberculosis, tumors, and the like, and they were manipulated nonetheless, the results were likely to be catastrophic to limb and life – and there were always such cases somewhere to seemingly support general condemnation.

Such stories about the *bonesetters* were extensively published, especially in England, and detractors, of course, delighted in retelling them, but even under those circumstances, something salutary had to happen often enough for people to be willing to pay and perpetuate the trade. And manipulators, as well, had derisive stories about doctors who had failed when they had not.

The most famous early bonesetter was Sarah Mapp, *Crazy Sally*, a powerful, cross-eyed woman, who was described as "enormously fat and ugly."¹¹² For a time, she was extraordinarily popular, and it was reported that she attended the Queen of England, and successfully treated the niece of Sir Hans Sloane, a physician who had a large practice among the nobility. She was so well known that a play, *The Husband's Relief or The Female Bonesetter and the Worm Doctor* was written about her, and a song, as well:

*You surgeons of London who puzzle your pates,
To ride in your coaches and purchase estates;
Give over for shame, for your pride has a fall,
The doctress of Epsom has outdone you all.*

¹¹²Her story was published about her in the August 2, 1736, issue of *The London Magazine*.

In 1867, Dr. Wharton Hood, a famous physician, published an article concerning bonesetters. His father, also a physician, had treated Richard Hutton, a bonesetter, and relieved him. To reciprocate, Hutton taught the young Hood his trade with the agreement that he would not write about it during Hutton's lifetime. Hutton treated more than a thousand patients a year, and when he died in 1871, it was written of him, "successful he certainly was and it were folly to deny it, in some cases which had baffled the skill of the best surgeons."¹¹³

Throughout this history, there were notable physicians who passionately urged allopathy to return to the former tradition. I had the remarkable fortune to come across a copy of a book by Alva A. Gregory, M.D.,¹¹⁴ *Spinal Treatment, Auxiliary Methods of Treatment - Designed for the use of those who believe in and appreciate the true principle of progress in the healing art, namely, try all things with an open mind, and hold fast to that which is found to be good* - ¹¹⁵

In his foreword, Dr. Gregory wrote:

...For the foregoing reasons, we believe that if the medical profession investigate the work of spinal adjustment, that this too will be added as another auxiliary, and we confidently believe that it will be the greatest adjunct that has yet been offered, especially after it has been in the hands of and improved by this intelligent and able body of physicians, who, we fully believe, will not fail to greatly develop and improve it.

We believe further that the spinal adjustment treatment in the hands of the ignorant (although the method is meritorious) will retrograde and fall, more or less, into disuse.

¹¹³In *Lancet*, one of the English speaking world's great medical journals.

¹¹⁴Graduate of the Medical Department of the University of Texas, President of the Palmer-Gregory College, Oklahoma City, Oklahoma. I quote the 2nd edition published in 1912. Dr. Joseph Keating informed me that Gregory was a D.C., as well.

¹¹⁵Dr. Joseph Keating, a remarkable scholar of chiropractic history, informed me that Dr. Gregory was a D.C., as well. He describes him in his book.

Should educated men outside of the medical profession espouse and uphold this method, they would establish and maintain another distinct system of healing at variance with all others, and an incomplete system... would only engender confusion...

Prophetic. It was the time of which Oliver Wendell commented that were the pharmacopoeia (the authoritative registry of drugs) thrown into the ocean, everyone would be better off but the fish. Its methods killed more than they relieved. Medicine viewed disease as an invader that had to be annihilated even if it took poison to do it. Literally, kill to remove the foreign element to restore health. It was called *Heroic Medicine*, a rather desperate choice of words. While the specifics have obviously been enormously modified, that invasive philosophy still governs the allopathic model today. It is a philosophy requiring that something has to be done *to* the patient. Almost by mandate, the patient leaves the allopathic office with something - a prescription, a decision for surgery. It began as the “Cnidean” school, developed on Kos, an island in the Aegean Sea, concurrent to Hippocrates’ teaching and considerably contrary to it.

The *Hippocratic School* is based on holism which considers the qualities of each individual as possibly being an active part of whatever is happening. It questions what kind of a person gets a particular condition as much as the issues of a disease itself. The two approaches, *Cnidean* and *Hippocratic*, remain in dynamic conflict. Manipulation remained with the Hippocratic school.

When microbes were discovered – *finally, we see the invaders!* - the Cnidean School was empowered. However, it didn’t deserve credit for it because they never searched for them. The pioneers of “the invisible world” were ridiculed no less than the proponents of manipulation were, and still are today. Some of the great heroes of medicine were involved in that fight - Koch, Pasteur, and Semmelweis.

Dr. Semmelweis gave his life for it. Women were dying from puerperal sepsis (childbed fever) after entering hospitals to give birth. Their doctors could not be made to believe in

germs. They carried their scalpels in their pockets, casually wiped them on their lapels and went right back to work - case after case - from the infected to the delivery suite. These were not doctors practicing in remote regions but were professors in universities where that “practice” was the norm. And they weren’t considered quacks.

Dr. Semmelweis pleaded with them just to wash their hands between attending cases, but they persistently rejected him, eventually driving him to final desperation. He cut his hand and put it into the wound of a woman who had just died. Only his death got their attention. He will always be one of the greatest heroes of medicine.

To remove the invaders, Cnideans used purges of all sorts, like calomel (mercurous chloride), to induce “therapeutic” vomiting and diarrhea. "Treatment" routinely continued until the patient was clearly poisoned. Mercury produces an ash-gray appearance of the tongue and pharynx, causes excessive salivation, ulcerations of the lips, cheeks and tongue and gastric pain often accompanied by bloody diarrhea and the loss of teeth.

A touring group in the 1840's, the Singing Hutchisons, found the song “Anti-Calomel” to be their most requested number:

And when I must resign my breath

Pray let me die a natural death,

And bid the world a long farewell

Without one dose of Cal-O-Mell....

Dr. Benjamin Rush, a professor at the University of Pennsylvania, described as the "Hippocrates of Pennsylvania," and a signer of the Declaration of Independence, was the promoter of such heroic medicine. He considered fever *the infection* instead of a reflection of the body's defenses, and concluded that the most direct means to remove it was by removing its carriers, the body's fluids, blood at all. Most patients were bled unconscious because of the "self-evident" necessity to "balance the humors" (even if they were wounded and in shock because of hemorrhage). Such practices are purported to have killed some of our founding

fathers. On the day he died, George Washington was bled, possibly by Rush himself.

It was a medical Dark Age, and continued into the late nineteenth, early twentieth-century, when **Andrew Taylor Still**, a Civil War physician, apparently with little training, no more or less qualified than many of his peers, rejected the practices that had even devastated his own family.

In his autobiography, ¹¹⁶ Dr. Still wrote of his concerns and of soon being rejected. He persisted alone, and after years, with considerable encouragement from those he helped, he reluctantly began to teach what he called *osteopathy*.¹¹⁷ (Considerably more about osteopathy is in its own chapter, - and the same with chiropractic.)

A little-known story illustrates a distinction between allopathy and osteopathy: the Mayo brothers were allopathic general practitioners whose father had started their small office in the small town of Rochester, Minnesota. Every morning, they would line the front of their pot-bellied stove with hot cinders. When someone came in complaining of back pain, they would have him lie down, and then they would apply one of the cinders. When the patient came back still complaining, they put on another. When the patient stopped coming back, they would say, “Cured another one!”

D.D. Palmer, the originator of chiropractic, was not a professional, and the nature of his relationship to Dr. Still is conjectural although one appears to have existed. There is no conjecture about the fact that he was a shameless promoter who took up manipulation with unrestrained zeal and shameless claims, and his son, **B.J.**, even outdid him. In a short time, a flood of poorly trained, hardly literate chiropractic practitioners poured from a proliferation of schools, which sprung up as soon as many learned that it was more profitable to teach than practice.

X-ray was discovered in 1895, just before chiropractic began. Again, scientific inquiry

¹¹⁶ Andrew Taylor Still, author Carol Trowbridge, pub. Thomas Jefferson University Press, N.E. Missouri State University.

¹¹⁷ When it became a profession, its denotation became “Doctor of Osteopathy (D.O.), in contrast to Doctor of Medicine (M.D.)- an allopath

was not seeking it and had no expectation or any vision of it. According to *The Encyclopedia Britannica*, "All physicists were clinging for dear life to the classical ideas of the existence of the luminiferous ether and the non-existence of anything smaller in mass than the hydrogen atom and ion. A great jolt was needed to shake the minds of physicists loose from those ideas." The discovery was pure serendipity. Many had noticed that sheets of photographic film would unexplainably fog, but only one man, Rontgen, had the insight that it was due to their proximity to cathode ray tubes.

But once bone was *seen*, x-ray became the scientific rage, and the "little bones" that had been imagined by lay practitioners were shown not to exist. Supposedly, that provided conclusive "proof" to discredit manipulation. The rush to embrace x-ray became another influence away from the mundane of hands-on therapies. The advance towards *science* had no inclination for the review of manipulation that Alva Gregory had pleaded for.

The discovery of the microbe further narrowly focused medicine's attention. Here was truly the enticing clue to the scourges of disease and epidemics that regularly devastated populations irrespective of personage or borders. On one hand was the excitement and promise of the x-ray, the microscope, and the blossoming knowledge about infectious disease. On the other, was practice largely involving time-consuming hands-on examination, sometimes employing manipulation that had arisen with the shaman and was regularly practiced by the "ignorant."

The choice didn't occur in historic isolation, of course. Within the social stresses of wars, economic depression, women's suffrage, child labor...a number of other disciplines were also trying to develop, with names like eclectic medicine, homeopathy, and Christian Science. Allopathy attacked them all, as well as the manipulators, despite its suffering its own growing pains. Allopathic medicine was *the* profession. No competition would be tolerated.¹¹⁸

The many claims of osteopaths and chiropractors with their differing theories of disease,

¹¹⁸ *The Social Transformation of American Medicine* by Paul Starr, a Harvard sociologist, provides excellent perspective. The interested reader is referred there or to my website.

some of which were absurd (particularly from the chiropractors), made apathy to manipulation even easier. There is only a finite amount of new information that can be absorbed, and, in the priority of things, manipulation lost.

Over a relatively short time, the antagonistic influences that can plague professions amalgamated: power, pride, pecking order, turf, and what was decided as acceptable science. The big money flowed to allopathy. Its schools improved, and its students were predominantly intellectually superior to its competitors. The burgeoning of knowledge birthed medicine's specialties, which further narrowed focus as each sorted out its pile. The increasing differences further divided the camps and came the day when the rut was well entrenched, allopathy's attitudes fixed. The *standards* had been set, and hostility to manipulation was particularly vehement among them. Afterwards, very few who might have influenced change, returned and reexamined. Those who did were ignored, and worse.

Orthopedic surgery was the natural arena of confrontation, and it was reflexively antagonistic. *Imbued with the authority to judge the manipulative therapies, it remains disinclined to become even reasonably conversant about it.* Surgeons operate, and there is no internal influence for dedicated consideration of manipulation despite the specialty's claim to dominance of *all* orthopedics, of which *80% is non-surgical*. "Come up with a new surgical procedure, and everyone will have tried it within a year. If it's not surgical, it might take twenty."

The Fundamental Flaw remains silent as the rut became a chasm so familiar that it was assumed to be a normal part of the scene, with no relation to the alarming increases in the complications and costs of health care.

The pharmaceutical industry, of course, was pleased with the arrangement. It dominates medicine, and when pains came, people were encouraged to take *medications*. Popping pills is its definition of medicine. And there are some pains that just don't go away.

The idolatrous use of x-rays then entered. The belief that it was largely x-rays that

showed the reasons for (or not for) aches. The societal indoctrination was to never to argue with an x-ray. Too many doctors' reputations depended on that. (There will be a much larger discussion.)

Finally, the Fundamental Flaw and the Pain Pandemic faded into becoming the way things are supposed to be. Everything established seemed in order. If some people continued in pain and weren't being helped, what connected that to anything that might be done differently? Alva Gregory's prophecy was fulfilled.

They couldn't be right because *we* had to be. Like so much else that is neglected, the crisis grew exponentially, while no one potentially influential realized there was a crisis at all.

Then came managed care. A vice-president of one of the largest providers emphatically stated in an interview that their data banks tell them what works and what doesn't! He asserted that "Thirty to forty percent of care does not have value." Likely, he is right - statistically. But they have no way to accurately select because there is no data about the Fundamental Flaw. They have no idea it exists.

I consulted on a patient who belonged to one of the most influential health care programs. She was badly injured but still "walking wounded," so she was told she would have to wait over *three weeks* to be seen, *specifically because she had been injured in an auto accident*. Why such a special clinic? Why the three most important weeks so irreplaceable to prevent complications?

CHAPTER TWENTY-THREE

X-RAY AND RELATED PROCEDURES

IMAGES OF SOMETHING, BUT WHAT?

WHAT IS REASONABLE TO CONCLUDE FROM THEM?

FLAWED LAW

We understand human nature when we are no longer surprised by it.

This is wisdom. I wish I knew the name of the author.

- Adverse effects of radiation
- Your indoctrination and the social imperative concerning imaging
- Care less prescriptions for imaging procedures
- The limits of interpretation
- Problems with emphasizing imaging first
- The bizarre demands of the law concerning imaging
- Why order images if the condition is hands-on diagnosable and immediately treatable?

The misuse of imaging procedures is too important for misunderstanding!

However they may be necessary, x-rays brand you *permanently with* radiation whose effects never diminish and cumulatively add with each future exposure.. Regardless, the practice of taking lots of images is epidemic. It is very, very big business.

When Alan Couch repeatedly re-injured his back and precipitously decided to “get it fixed once and for all,” it sadly didn’t work out that way. He eventually had three surgeries, and he was still in pain when I last saw him. I consulted on him after his second surgery. From my report to the Workers’ Compensation company: **“Necessary comment:** Mr. Couch appreciates your efforts in obtaining the surgeons for him. He knows you acted in complete faith. For his case, and for your information, it is necessary for you to be aware of what is herein reported. From my perspective, I am considerably disturbed that Mr. Couch reported to me that at least twice, probably more, he was required to undergo lumbar x-rays with almost each of his

postoperative visits. Please check your billing. If this is true, I believe this is a serious problem beyond the billing. The radiation of every x-ray accumulates and is carried to the grave. It now appears that one of the common causes of breast cancer in women is ‘incidental x-ray exam radiation.’ Mr. Couch has a history of clinical radiation overexposure from chiropractic misuse in Canada.”

CAT Scan (Computerized Axial Tomography) is also an x-ray procedure. When it is needed, it is far superior to plain views, but emits considerably more radiation than regular x-ray. A while ago, I had several kidney stones obstructing the flow from my right kidney. I required a few CT’s within a short time. I was blasted with radiation, but it was necessary. In medicine, there are few “good” choices. It is mostly a matter of making decisions about comparative risks. My urologist needed the studies.

MRI (Magnetic Resonance Imaging) is not a radiation procedure. It works through magnetism. Many desire to believe that the intense magnetization from MRI is innocuous. Others emphatically deny that. *This is neither an opinion concerning that issue nor an indictment!* It may be a long time before that issue is resolved, but there’s no way to take a dose of magnetism back. Like the others, its real danger is that it has become substitutive for a clinical examination.

Each procedure must be a considered act that attempts to answer an informed question, whose answer is not otherwise obtainable.

A major problem, however, is that people have been so indoctrinated concerning x-rays that its uncritical use is accepted as a virtue. Since its discovery as a medical tool, it has been elevated in importance to near absolutism, certainly to idolatry, and the doctor who doesn't order them is easily considered **careless** or **incompetent**, so there is **demand** for them. However, even though there may be some dissidents, it is the unusual individual who is not convinced that x-rays are usually necessary for a complete examination.

As I originally wrote this, in January 1999, *The New England Journal of Medicine* was

publishing an eight-part analysis of health-care in the United States. It reports the U.S. “system” is the world’s most expensive, most complex, *and most wasteful.*” Concerning imaging, it is largely because it is an attempted substitute for an appropriate hands-on examination.

My sister told me she’d seen her doctor for a few pains in her neck and low back. He’d promptly sent her for “studies”. I asked her what her *examination* had revealed. She told me he hadn’t done one. I read her records. They consisted of four MRI reports: of her brain, cervical and lumbar spine, her abdomen and her pelvis. Thousands of dollars were expended on studies for no reason other than vague complaints in a woman who’d had them for years. The reported findings were essentially consistent with a reasonably healthy 70-year-old woman. One line in particular was “charming.” In the study of her neck, the radiologist wrote, “The neural arch *fails* to demonstrate developmental anomaly” (*italics mine*). That is precisely what I am talking about - the near-pathologic compulsion to find something, positive or negative, to somehow “justify” the procedure. My sister’s experience is not isolated. The plethora of such practices blights the system.

Sunday, May 20, 2001: I called 91-year-old mother, of blessed memory, as I did every Sunday. She lived independently in Tucson, Arizona. Her dearest friend demanded that my mother tell me about her recent pain, which had occurred in her low back about a month previously. My mother knows me. She knows this book somewhat. I asked her about the examination. She told me the doctor “took x-rays.” I’ve had this conversation with her before. As I persisted, she began to sound miserable. Finally she said, “I saw a nurse practitioner first. When I told her about the pain, she called in the doctor. He touched my back and said, “Let’s get some x-rays.” She said that he later told her there were some changes in her low back, and he gave her a prescription. She understood. What could she do about it except make me miserable? All over the world, countless times each day. *Fundamental Flaw.*

Again, of course, imaging procedures can be of incalculable importance, but they must

be considered *adjuncts*, and only infrequently, a primary diagnostic authority. Even when they are essential, such as when a fracture is *suspected*, it is idiomatic that an x-ray had better not be considered the final judge. Wise clinicians always treat as fracture what they *suspect* is one, regardless of the radiological findings, because small fractures frequently are not visible early on.

Under any circumstance, the absence of something on x-ray must not be permitted of itself to question the veracity of a complaint. It is perverse to empower instrumentation to diminish credibility, especially if a careful clinical examination has not been done and reasonable time allowed to sort things out. On the other hand, finding something on x-ray does not necessarily assure that it is related to the complaint!

The misuse of x-ray-visible "arthritis" is an example. Many changes are not the result of a *disease* called arthritis, but are changes that happen from the good fortune of living long enough for them to occur, as happens to a long-used tool. Regardless, their appearance may appear to justify any pain in the area, which is why x-ray is one of the most powerful perpetrators of The Fundamental Flaw.

X-rays very often serve "chaplain's duty," as well. Reflect how this may apply to you. It offers a "diagnosis." It relieves anxiety that if "something" isn't there, somebody is going to think the pain is imaginary.

I am awed when an experienced radiologist like Dr. Frank Turner can pick up films and seemingly extract everything from them but the patient's social security number. But as Frank would be the first to agree, that information must wait its turn and remain subordinate to what the tissues themselves can reveal.

At U.C. Davis and elsewhere, when a patient's history was presented in the orthopedic surgical clinic, the residents invariably first went to the x-rays while I went to the patient. By the time they arrived, I was usually well on the way to the diagnosis. I lost the advantages of what I could have learned from the x-ray discussion, and I have always regretted that, but I was compelled to do what I did. I refuse to primarily view my patients *through* their films.

PHOTO

I have learned and well proven that nothing must be allowed to interfere with obtaining maximum information directly from the source *before* one allows the influence of remote, technological information. The first, the strongest impression on the orthopedic surgical residents was just the opposite, which, to me, demeaned the very personal bond of the relationship and the priority to continue to develop clinical, sensitive hands-on skills.

On the other hand, I recall the "old-timer" who saved the chiropractic student's career with just one offhand look at an x-ray. And I remember reading Sutherland's discussions of x-rays whose quality were not nearly today's clarity, but in which he commented on the minor rotation of a rib that allopaths now miss because dysfunction has no clinical significance for them. Many such abnormalities are dismissed as "variations of normal."

X-rays and the law:

When medicine and the law meet, specifically in California workers' compensation, the attempted exploitation of x-rays could legally qualify as proof of insanity. To comfort the judge, the x-ray "evidence" testified to must be "incontrovertible" while "reasonable" so that claims from injury or illness may "authoritatively" be convertible to dollars and benefits. In Biblical times, the courts looked to the priests for transcending expert testimony. Now they look to the doctor, but it is the law that establishes the rules, some of which are so farcical they destroy all rationality.

The following is an example of the obvious discrepancy between what medicine can reasonably provide the law and what the law impossibly insists on, regardless.

When a patient's pain and impairment reasonably stabilize, and the case becomes ready for legal resolution, workers' compensation law dictates that the doctor must declare that the

patient's condition is *Permanent and Stationary* (P&S) regardless of the fact that reasonableness is irretrievably lost and assaulted by those very words. I do not know the history of that phrase, but while its official definition is reasonable, it isn't read often enough, and the term stands largely on its own, having little practical relevancy to what it is supposed to mean.

One of Abraham Lincoln's favorite stories relates to this, and he used it frequently. He would ask, "If a donkey's tail was called a leg, how many legs would the donkey have?"

When his victim said, "Five" the President thrust home.

"Four! You can call a donkey's tail anything you like. It's still a tail!"

This is a bit of a "side bar," but please consider the relevance.

Nothing in this universe is "permanent and stationary." No celestial body is. No mountain is. No healthy person is. But that is the literal label the law conceived to describe people who, if they are seriously injured, will likely have to cope indefinitely with ongoing residuals. That is why I refuse to write it by itself. My reports would read, "The patient's condition is relatively stable and ready for reasonable prognostic statement (workers' compensation phraseology: Permanent and Stationary)."

The statutory P&S reveals a dark side of the law. Since it must *decide*, it needs evidence. *For that, it is willing to make unnatural demands to get something it will call evidence so it may conveniently pursue its perceived responsibilities.* After all, if a doctor is willing to declare that someone has become predictably stable in his or her functional abilities, doesn't that make the work (and reputation) of the court that much more certain? *That rigidity extends to the (ab)use of x-rays and overwhelmingly erroneously depends on them!*

Consider that you were injured at work. You had therapy. Possibly you were another victim of The Fundamental Flaw, but now your case is being adjudicated. In addition to the residuals of your injury, you may have another problem. When your case is finalized, you might become involved in one of the circus arenas of your settlement, the requirement to *apportion* your disability, which, at best, rationally provides a gross estimate. But the law doesn't allow

that.

Apportionment implies that a final impairment rating may be the result of an injury *and* the influence of unassociated conditions whose "natural progression" (absent the injury) would have produced disability of itself *at a specific time*. The process of apportionment is the legal attempt to distinguish those separate influences. The issue can become further fragmented, such as apportioning an underlying disease, like "arthritis," into a component that had progressed purely from "natural progression," and another which was accelerated as a result of the injury.

(You are not alone in your consternation. It is implicit in the charade.)

Then, with a straight face, the law requires that any reference to such a multiplicity of circumstances be declared *"with reasonable medical certainty."* *There can be no suggestion of guessing, estimating, or assuming a hypothetical. In fact, any necessary hedging by a physician with self-respect may even cast doubt on his or her competency! The legal definition of a medical expert in this field is someone who will give absolute answers to those insane questions!* "After all, aren't other doctors willing to make such pontificate statements (with assurance of a fee and further referrals, of course), especially the "most competent" doctors? Don't you consider yourself competent, doctor? Doctor, there are the X-RAYS, doctor. And by the way, doctor, please accurately predict how long this ill patient will live, doctor. Don't you know that's the way it's done, doctor?" Absolutely amazing.

Even more so, some judges openly admire and may lavish praise on a doctor who, *from the x-rays and others' reports alone - **never having touched or even seen the patient*** - will regardless declare the categorical statements the court so fondly cherishes and, in tribute to such perversity, to which confers "expertise."

Thus the law confers the word "expert" upon the doctor whose declaratory statements leave no doubt in the court's mind that through "superior knowledge," commingled with the "absoluteness" of the x-ray, he can provide authentic prophetic utterances: look at an x-ray, and, in essence, state what it looked like at some time in the past, what it will look like at some

determinate time in the future, and what symptoms and restrictions will accompany them. I wish I were joking.

With obvious exceptions, like amputation or recent fracture, the presumption is that a doctor can legitimately look at an x-ray and describe functional behavior - even accurately predict its "natural progression" to a specific date **"with reasonable certainty."**

I didn't want to believe any of it when I was first exposed to it. Then I heard the audiotapes of a well-known judge who teaches apportionment and precisely expressed what I just described as his views.

As an example, the apportionment "expert" could testify that you would have had symptoms "V" by date "U," regardless of any other circumstances, including the effects of another injury that you might have had which is separately distinguishable.

The issue is a very serious matter to you if you are involved in such a case because the more doctors willingly comply with such Kafkaesque charades, the more a legitimate award is likely to be diminished. Money - not morality - not logic - not ethics – certainly not medicine - is the game that is being played, regardless that such testimony is considered blessed by many judges - validating the (*their*) law - from which the court then seeks to legitimize the process and absolve itself by asserting it cannot deny a "truthful declaration."

All of it feeds on human frailty and the professional paranoia that perpetuates the Fundamental Flaw: If the doctor down the street can make such a "valuable" contribution, isn't it reasonable that *I* am able to do the same? And be paid commensurately for also providing such wisdom? Careers have been built and long sustained by complying with this dark comedy. All it requires is some credentials and the (wisdom) (compliance) (greed) (dishonesty) (naivete) (stupidity) to (write) (utter) (profess) words that make the "expert" by definition because s/he declared them under oath.

Apportionment that mitigates damages is obviously dear to insurance companies and employers, but no knowledgeable, honest physician would ever utter such incoherence. None of

this is ever heard concerning patients who do not receive compensation and is certainly never part of a physician-to-physician conversation. That very schizoid fact proves the lie - a sham that is almost always associated with x-rays.

I found a fascinating statement in the reported cases concerning apportionment that refers to a doctrine called, "prophylactic retroactive work restriction," cases in which a doctor (take a breath and relax) has rendered an opinion about a person who had, in retrospect, a preexisting disease that subsequently became symptomatic under work conditions. For instance, suppose you had a previously asymptomatic heart condition and you then (sorry) had a heart attack while at the work place. The doctor might have commented that, had your pre-existing dormant condition been known and you had complied with restrictions before the heart attack, it wouldn't have happened. Therefore, the contention is that it was not a work injury.

There was such a claim, and the appellate court commented that such a conclusion creates a sort of "factual or legal fiction...." It assumed the possibility of an act that had no place in reality, so the court could not condone it. Despite its opposite stand concerning the mythical value of x-rays, in that instance, the court wisely insisted that the conduct of the law requires "factual" inquiry. Fascinating.

X-rays as prognosticators requires timidity at all times. I attended what may have been Dr. John Wilson's last lecture that he delivered a short time before his death. His father had established one of the prestigious orthopedic surgical groups in Los Angeles that reached its zenith during the years after World War II. Each of them had been president of the American Academy of Orthopedic Surgery. He put two x-rays of the lumbar spine onto the view box. Both were virtual museums of what appeared to be identical, dramatically profound degenerative changes that had occurred over many decades. The hundreds in the room were suitably impressed. Dr. Wilson explained that they were of identical twin sisters. One had stayed on the farm and worked hard all her life while the other had gone away to school at an early age and remained sedentary. Both were fully functional women. Neither had ever

reported having back pain. It was no lesson to me, but the air went out of the room.

Under ordinary circumstances, do not let anyone ever tell you that there is a close correlation between x-rays and coexistent pain, or between x-rays and your functional ability. Of course, the converse is also equally true: *You can have extraordinary pain and functional impairment despite normal x-rays!*

There is another factor involved in the interpretation of x-rays: the ability to perceive is an individually unique experience, and that basic truth indelibly marked me.

Louise was one of the clinic patients at U.C. Davis. She had a chronic neck injury, and she persisted in holding it side-flexed to the right. When I asked her why she did it, she said she didn't know. When I asked the surgeons why she did it, they said she was exaggerating, but when I looked at her x-rays, I clearly saw a pie slice-shaped crush fracture of one of her vertebra. But no one else saw it - none of the professors of radiology, none of the orthopedic surgeons, none of my colleagues in my specialty. Every one of them was vastly superior to me in radiology. They had no ulterior investment, but they all gently said that I was looking at a superimposition of shadows that only gave the appearance of fracture.

We didn't have CT scan or MRI in the '70's, but one of the hospitals in Sacramento had a polytome, a special radiology instrument from Germany. The patient was literally clamped onto a table while the film under the patient was spun in one direction and the x-ray head spun with precisely angled coordination above. The result was a sequential series of sharply focused thin slices with everything else blurred. It was an expensive test, but they were kind to me and understood the importance of my becoming convinced, and I appreciated it. I was right. I will never understand why, in that case, they couldn't see what was so obvious to me, but there it was. I felt no satisfaction, no sense of winning. I hadn't. It was one more maturing experience to accept nothing that didn't sit right.

Again, the orthopedic surgeons resented me. When I passed the chief of orthopedic surgery in the hall, he stiffened, his voice an angry accusation, "*OK, what do you expect us to do*

about it? It's been that way for years." I whirled and fired at his retreating back, "***Validate her!***"

Yes, the fracture was old and fixed. That wasn't the issue. Louise had been continuously stigmatized, and it had influenced her care. ***That*** was the issue!

I haven't had such a singular radiographic experience again, but there remains a lesson from it concerning the ubiquitous question: "Doctor, what did my x-rays *tell* you?" X-rays do not speak. X-rays are not a *deus ex machina*¹¹⁹. X-rays are capable of providing reliable information but only to a limited number of questions. X-rays are not infallible testers of truth. *Abnormalities they may show may not be related to the presenting symptoms, or any symptoms.*

While x-ray familiarity has too easily displaced tissue familiarity, when the patient is properly examined, there are few surprises. In a study done in Sweden some years ago, approximately five thousand incidental x-rays were reviewed to determine how often they had provided information that would not reasonably be expected to be obtained through a careful clinical examination. The number was less than twenty-five.

If a condition may be efficiently relievable by hands-on during the initial clinical examination, why should an x-ray be taken first? I have illustrated this throughout. From your standpoint, concerning your pain, with few exceptions, reflect carefully, each and every time if an instrumented procedure dominates your examination.

¹¹⁹ Some Greek dramas would develop into impossibly solvable circumstances until the end of the play. A "god in a machine" would then come on stage and pontifically make all controversies right, all the actors contentedly leaving the stage, their issues having been solved for them.

CHAPTER TWENTY-FOUR

THERMOGRAPHY – VERY, VERY SCIENTIFIC AND

PRICELESS, BUT TOO MUCH A THREAT AND ABUSED

*To bear all naked truths,
And to envisage circumstance, all calm;
That is the top of sovereignty.*

John Keats

*There is nothing more frustrating than being down here when you want to be up there -
Except - being up there when you really want to be down here!*

Pilot's Lament

- **What thermography is – an objectifier of the essential subtle sign**
- **Illustrative cases**
- **How I learned about thermography**
- **How thermography was abused**
- **How the procedure is performed**

What could be more coldly scientific than the fact that people who are alive are warm and when they aren't they're not? Everything has a measurable temperature. Thermography is instrumentation that pictorially displays it.

No other technology so elegantly, objectively visualizes the tissue changes associated with orthopaedic medical dysfunction. It uniquely reveals their subtle abnormalities at their beginnings and their normalization almost immediately after they are relieved. The persistence of an asymmetric, abnormal picture that agrees with a patient's complaints outvotes the denying clinician two to one, and is a trustworthy hone to sharpen diagnostic and therapeutic skills. And, as a literal revealer of the pathological process, it is able to resolve all the conceptual concerns about the Fundamental Flaw.

No one questions that thermography is exact hi-tech, space-age science. Everyone

accepts that it is the standard in all industries internationally that must study temperature by remote means, whether from orbiting satellites or fire trucks. It is well known that vascular surgeons depend on thermographic scanners over their surgical table to objectify real time blood flow as the “heat picture” changes on the screen the instant a blocked blood vessel is opened. While imaging depends on *structural* change, thermography exquisitely shows *function* as pure “living color.”

With that as a given, all that was necessary to keep thermography viable in orthopedics was a measure of humility and honesty. It got neither. As you now know, science is only what the mind allows it to be. *They* “near killed it.”

I was the white knight who couldn’t prevent the final onslaught. The attack was mounted on one flank by those who hate thermography from fear; on the other, by the ignorant who squandered its treasures in their fixed assumptions, while the overwhelming frontal assault was by the masses of exploiters so filled with lust for money that they had no sense or shame about what they were destroying. Never has one instrument offered so much, yet aroused such passionate irrationality because of its virtues. This is the story.

The temperature in any part of the body is largely the result of the neurologically mediated blood flow within it. Thermography reveals the changes in exquisitely detailed predictable patterns. If you are normal, one side of you will look very similar to the other, and if there is injury or disease, the picture is almost certainly disturbed. But unless there is familiarity with segmental biomechanics and physiology, the sometimes subtle changes are often unappreciated. It’s the same as the missed broken twig on the hunt or a flake of gold ore among the rocks. For any who don’t know what to look for, the essential signs, like the small symbols on a navigational chart, might as well not be there.

Of critical importance: *thermography is not a diagnostic instrument!* While it very precisely shows a *process*, it cannot name the *precise agent*. The distinction is critical. A pilot flying over a forest fire can provide vital information: Where? How hot? How big? Direction?

But don't expect the pilot to name the culprit.

I saw thermography for the first time in 1972. Dr. Travis Windsor was on the USC medical faculty and the founder of The American Thermographic Society. He invited me to do consultations for him in his Wilshire Boulevard office, which had once been one of the gracious homes in Los Angeles history. It had large, high-ceiling rooms, and one of them was near-filled with a huge erector set-like contraption. The patient had to lie motionless on the table within it as the scanner noisily labored slowly back and forth, exposing one thin line at a time across the film. It took about an hour to obtain just two crude Polaroid photographs, but I understood the implications immediately.

The big leap began later in the decade. Heat-seeking missiles were developed for the military. Subsequently, when the Russians stole the plans for the Red Eye missile, a Canadian physician persuaded the government to declassify the technology, and clinical thermography was born.

I first saw the new instrumentation in 1980 at The Annual Meeting of the American Academy of Physical Medicine & Rehabilitation in San Diego. It was in the first booth just inside the exhibit hall, to the right of the main entrance. The room-sized dinosaur had been reduced to a small, agile, tripod-mounted scanner wired to a control box, and a TV color monitor nested cozily on a small table. I literally went straight up. The president of the company (*AGA*) saw me leave the ground and remarked almost sarcastically, "I've seen enthusiasm, but this is ridiculous!" That truly surprised me. "You don't understand," I told him sympathetically. *"Now I have my third eye. That instrument will be in my office for a trial the day this meeting ends!"*

For careful work, a special temperature-controlled, draft-free room without windows is necessary, but I used what I had then, and it was a fated day. While exercising the evening before, I'd pulled my hamstring. I dropped my pants, turned the thermographic monitor onto the back of my thigh and was thrilled to see how spectacularly the inflammation lit up the screen.

Galvin was my first patient that afternoon. I had performed my initial consultation on him only a few weeks before, and I was awaiting authorization to treat him. He was a bus driver for the Southern California Rapid Transit District. His habit was to reach across his body with his left hand to pass out the transfers, and a passenger had maliciously grabbed his outstretched hand and jerked it, twisting him viciously. Galvin was hurt. He couldn't sit for more than a few minutes without developing intense pain in his left chest area, and he had to go on disability.

The company sent him to physical therapy, but it didn't help. He was then sent to one of "their" orthopedic surgical consultants, who declared that since the x-rays were normal, and Galvin was able to bend and touch his toes, nothing could be wrong, so he was ordered to return to work. Galvin couldn't. He was forced to see an attorney, who referred him to me. On my examination, I diagnosed serious dysfunction throughout almost his entire left posterior thoracolumbar tissues. The cutaneous hyperalgesia was remarkable. Several thoracic vertebrae and ribs were dysfunctional.

I submitted my report which included measurements of the size of the dysreflexic area, and requested that the insurance company immediately authorize treatment, especially because the situation was compounding. I spoke with the claims examiner. He explained to me that he was in a bind because he had two specialist reports in complete conflict.

Now I was aiming the scanner at Galvin, and his whole world of pathology was all lit up precisely where I had described his injury in my report. I submitted my supplementary report, including copies of the thermogram. Galvin's case was authenticated and care was authorized.

PHOTO

It was the first time thermography was used to settle such a dispute in a workers' compensation case. The orthopedic surgeon went into a panic. I was sent a copy of his subsequent report. In the first paragraph he wrote, *"I don't know what's happening in Los*

Angeles.”

With just one shot, the frontier was pushed back, the dimensions of subjectivity diminished. *Now* I expected allopathy would finally reconsider segmental dysfunction, and soft-tissue injury would be better appreciated - that “findings consistent with the complaint” would be respected.

A short time later, I had the opportunity to demonstrate thermography’s value to the legal system when I introduced it into the California Superior Court (*Kavalovsky v AP Liquor Store, Sacramento Superior Court, 247410, March 1977*) and into the Federal Court system.

Sally Kavalovsky had been referred to me from Sacramento, the state capitol in northern California. She was a depressed, very nice young woman who had sustained an unusual injury. She had gone to a liquor store to pick up a six-pack. When she reached into the refrigerator, she was severely jolted by an electric shock, and in a short time, she was having serious pain problems in her right arm and back.

No positive physical findings were reported, and the treatment she had received hadn’t helped. On my exam, her right little finger was cold and the finding was dramatically visible on thermogram. The process extended up her arm and across her posterior chest to her upper spine. Those photos became part of a teaching poster set I exhibited around the country. Sally won her case, and some of her emotional burden was lifted.

PHOTOS

The instrument cost \$50,000, and, of course, I bought it and performed many hundreds of thermograms during the eighties and early nineties. I eventually did a study comparing my thermographic with my physical examination results in 90 patients who had no hard-signs in which I reported a 97.2% positive correlation. It was published in *Acta Thermographica*. When I re-examined the one patient in whom the thermogram was abnormal, and my exam was

normal, I found the dysfunction that had been there hiding and was able to relieve it.

Just before I obtained my instrument, thermography had come under the aggressive influence of a radiologist who had obtained the instrument for breast examinations. When thermography lost out to mammography, he had the instrument on his hands, and, with no clinical experience in orthopedics, he decided to go into the musculoskeletal business. He candidly told that one night, he had opened a *Ciba Clinical Symposium*, a pamphlet all doctors receive. That issue featured low back pain. That was Charlie's only source of orthopedic documentation, and with it, he went to work. I visited him early on, and he showed me his "rules" on how the procedure needed to be done. When I showed him errors, he changed those "rules" on the spot. Soon, he was teaching weekend courses to large classes of doctors, all eager to get "into it." He issued "Certificates of Competency," and he wrote a book. Virtually every day for months, he would call me and start with the same question, "Sooooo, what do you think about thermography?" He became nationally famous and was widely considered the guru. A commentary on thermography featured him and appeared in *JAMA*, *MEDICAL NEWS* 1982; 247: 3296 after he had attended a meeting in Bath, England.

I responded in the February 25, 1983, issue of *JAMA*, in which I pointed out numerous errors that were of fundamental importance. His most grievous was that thermography stands on its own as a *diagnostic* tool. Because I am resented by the surgeons, he was invited to discuss thermography at one of the large national meetings. He ended his remarks by stating that if any of the surgeons had any problems, they should send him the thermograms and he'd resolve them. I was in the audience and read a list of about fifteen errors he'd made during his presentation. In the end, for short-lived notoriety and dollars, he did inordinate damage to the acceptance of a priceless device.

For obvious reasons, thermography entered the court system rapidly, and as poorly trained thermographers, who had no understanding of dysfunctional injury proliferated, too many were misled and too much was missed to encourage dispassionate examination of its true

value. The medical literature exploded with many in a rush to get something published.

Thermograms were alleged to show pain. A system of contact plate thermography was advertised with, “Have you seen a picture of pain?” It isn’t necessarily true. A pain free paraplegic has gross thermographic asymmetries. The same mistakes made with x-rays were repeated, extensions of interpretation far beyond their legitimate boundaries. Just seeing *something* seems to be so relieving. .

The notoriety became a deluge when, in what became a notorious case, a man was injured on a New York city subway. I read his case, and undoubtedly he was injured, I guessed maybe \$25,000 worth. But when the jury was shown a dramatically colored enlarged view of a thermogram of the man’s neck and head with the color scale manipulated so the “pain” was in red, his attorney got a judgment of over \$7 million! I don’t know why there was no reputable refuting testimony. That was the day thermography got the insurance industry’s attention, the kind it didn’t need. And ,of course, the farce was successfully appealed, but disaster was already ominous.

Early on, thermography became a favorite among chiropractors. In 1984, when I taught at their Harvest Moon Festival Recertification Seminar, in Los Angeles, thermography was onbe of my subjects. Before I lectured, I walked through the exhibits. Already, there were chiropractic “textbooks” in which every single shading on an alleged thermogram had a diagnosis attributed to it, even the smallest. My presentation was appreciatively received, but the damage was being done.

Orthopedic surgery’s reaction to thermography was a catastrophe. They considered one of their own an expert. He “studied” a number of patients by comparing their lumbar myelograms (a dye is injected in the spine), CT scan, and thermography for cases suspected of having a herniated disc. All his cases had some gross finding on physical examination. He concluded that thermography is “as sensitive as the others in showing an abnormality” about the region. Two of the patients had thermographic abnormalities only. The other tests were normal.

The surgeon threw out the cases as “flukes.” He simply couldn’t acknowledge that the thermogram had revealed an early process that was altering the physiology before any structural abnormalities had developed. He presented his findings at a national meeting in Chicago. He was listened to.

Thermography’s demise at the *International Society For The Study of The Lumbar Spine* meeting came from the same reasoning. Dr. Alf Nachemson,¹²⁰ an internationally known orthopedic surgeon, told me emphatically that when the paper showed that thermography cannot *diagnose* herniated disc, it was dead. He refused to understand it as a unique *process-revealing* technology, whose findings need to be correlated, the same as with other procedures, like electromyography.

Basics of performing the procedure:

The patient is prepared by standing nearly naked in a draft-free cool room.

The visualizing technique is not just point and shoot. The reading scale on the instrument has to be set so that the range of temperatures emanating from the body can be viewed. Because different body areas have different spectrums of temperature under different circumstances, the range has to be moved until the presentation is appropriate.

By convention, any particular setting scans a range of 10 degrees centigrade. Each degree has its own color. The color scale is arbitrary, but is constantly viewed on the screen. If the picture is of the entire back, there is no problem, because both sides of the back appear on one film. The neck and back reflect their influences into the extremities. Their examinations may require multiple views. *Once the instrument is set for one particular view, it must not be changed when the comparative view is examined.* The requirement of examiner integrity became one of the fatal issues.

Those who used thermography with the intent to “prove” that a condition was present

¹²⁰ Alf and I have a long history together, which I will discuss in Chapter Twenty-Seven.

that wasn't, would manipulate the controls to "show" the abnormality. Only a slight shift alters the picture sufficiently. The instrument itself is as honest as a camera, but, too often, the human interface wasn't. The patient didn't have to be complicit.

There are other tricks to attempt to defraud. Small areas of skin can be "sprayed" with heat from a hair drier, or made cold with a spray, or application of a coolant, like alcohol or ethyl chloride. Regardless, nature's gradient is subtle, and anyone with a trained eye can, at least, suspect mischief. In at least one "mill," thermographic rooms were set up "back to back", and everyone who came in the door was "shot" with all the convenient "cosmetic" touchup necessary. That one facility reputedly billed close to \$1 million a year. Too many saw a new gold field and wild, wild times were had. Thermography was victimized and medicine wept.

In the end (for now), with rampant exploitation from within and without, orthopaedic thermography died in the gutter. And it was accused of being unscientific, as well.

CHAPTER TWENTY-FIVE

OSTEOPATHY - HIPPOCRATES' HEIR

Persecution, wherever it occurs, establishes only the power and cunning of the persecutor, not the truth and worth of his belief.

H.M. Kallen

There are, in every age, new errors to be rectified, and new prejudices to be opposed.

Samuel Johnson

“Time betrays all revolutions.”

Not anonymous, but not recalled

- **How osteopathy developed**
- **Dr. William Garner Sutherland – The hero of Osteopathy in the Cranial Field**
- **Osteopathy’s theoretic premises**
- **Osteopathy’s battle for survival and the costs**
- **The 1962 D.O./M.D. amalgamation in California**
- **The duck race at Ursa**

I’ve already written considerably about my association with osteopathy. Osteopathy developed within 19th century medical ignorance, when common practices more reliably maimed or killed than did neglect. When orthodoxy rejected Dr. Still's ideas that body mechanics affects health, he was increasingly encouraged to teach his methods, and he accepted the destiny of a maverick. He began demonstrating his methods in 1892, in Kirksville, Oklahoma, and five years later, won legal protection from the Missouri legislature. Soon osteopathy’s battle with organized medicine would begin and increasingly intensify.

I will introduce osteopathy through one of its most unique and continually controversial contributions. You now know about Osteopathy in the Cranial Field. This is how it happened.

Very few singularly important medical discoveries are the result of the insight of just one individual. Dr. William Garner Sutherland is one of those rare heroes, and through his story, the ideal of the osteopathic perspective is distilled. He is unknown in allopathy, and, even within

osteopathy, many are loath to appreciate his contribution, because its implications are too frightening. They break too many boundaries. If there is clinical significance to the bones of the skull moving, however minutely, where does it all end? They make osteopaths *too* different in too many eyes.

The core of the controversy is in the overpowering implications of cranial manipulation, as in Richard's case. Imagine the impairments that would have haunted his life. Consider the possible interrelationships of injuries like his, for instance, learning disorders, headaches, and visual problems (remember Esther Sutton).

Dr. Sutherland was born in 1873, a year before osteopathy started, and he died in 1954. He had an acutely analytical mind and was impressed by Dr. Still's comment that *"the human body is a machine run by an unseen force called Life."* He left his job as a newsman and enrolled for the two-year course in osteopathy, six years after the school's first charter had been obtained. Two years later, as a senior, on his way to class, he stopped by a display cabinet and was looking at a Beauchenns skull, a human specimen in which its sixteen bones and almost fifty joints are disarticulated but mounted in close proximity, like an "exploded view" drawing.

Dr. Sutherland described what happened to him at that moment. "As I stood looking and thinking in the channel of Dr. Still's philosophy, my attention was called to the beveled articular surfaces of the sphenoid bone. Suddenly there came a thought - I call it a guiding thought - *'beveled, like the gills of a fish, indicating articular mobility for a respiratory mechanism.'*"

It startled him, and he rebelled at its radicalism. The thought kept recurring and wouldn't allow his mind to rest. Medicine immutably teaches that, despite its anatomy, the skull is an unmoving protective vault. The conflict of fundamental fact versus universally accepted dogma can be terrifying, especially to intransigent minds, a classical case cognitive dissonance. Flat earth all over again. Dr. Sutherland ran from the insight for twenty years before its persistence finally wore him down, and he spent the rest of his life studying it.

I had my own very limited experience with this in medical school. While the professor was describing the skull's solid protection, I sat there puzzled as one of the bones in the skull I was handling wobbled in my fingers although it was a rather gross movement because all the soft tissue had long been removed. The professor was saying one thing, but my hands were telling me the opposite. Later, I dropped it, and it largely disarticulated.

After Dr. Sutherland's death, his wife wrote her story about him, *With Thinking Fingers*. The Prologue begins with this story:

"In a hotel room in Des Moines, on a day in October 1947, six men, intent and grave, listened to the words of an older man --- their colleague in the practice of osteopathy. On a cot lay a teen-age boy, his eyes blackened and swollen, his face badly bruised. His condition, it had been explained, was the aftermath of an argument that occurred during a hunting expedition in which he had been knocked down in an unguarded moment by the blow of an angry companion. X-rays had revealed no fractures. A cranial diagnosis had been made and agreed upon. A remedial technic and the logic underlying it had been outlined by the older man who was saying, 'The cranial implications here are serious and we don't expect to perform a miracle, but the technical procedure I have advocated is anatomically sound, and it has something specific to offer. You know your cranial anatomy. When you place your fingers on this lad's head they must think, feel, see, and know the anatomical picture that lies beneath them. Don't get away from that for an instant.'

These men knew this boy. His physician-father was present in the room. They knew him as an attractive lively teen-ager with symmetrical features and a well-shaped head. but (sic) this day, as a result of the force and direction of the blow he had received, his features were in distressing malalignment. The two sides of his face definitely were not paired. His mouth was drawn upward on one side and his eyes were not at their accustomed level; outward manifestation of the pull of serious cranial tensions within.

These osteopathic physicians, especially trained by the older man in a new approach to anatomy and physiology of the skull, could look beneath these significant surface indications with analytical perceptiveness and visualize the abnormal strains, distortions and restrictions that were being imposed upon the entire cranial structure. The excessive tension upon membranes and their attachments, the undue strain upon ligaments, the restraint these placed upon

normal motion of cranial articular mechanisms. The consequent interference to normal activity of the cerebrospinal fluid, the resultant disturbance to nerve tracts...these, and other anatomical-physiologic details entered into their mental picture as they silently acknowledged the gravity of the challenge they faced. Yet they were heartened by the realization that through the dynamic contribution of this older man to his profession they were equipped with an added therapeutic approach --- the cranial component of osteopathy --- with which to meet the challenge.

Pointing to a member of the group, he directed, 'Come over to this side of the cot. And you,' designating another member, 'go to the opposite side. You are to apply the multiple-hand technic that I outlined.' As those who were so directed placed sensitive '*thinking*' fingers at specified areas on the boy's disfigured face and commenced the gentle application of the technic that had been advised, an intensive hush engulfed the room. While one technician with utmost caution lifted on the left frontal bone (the forehead) and sphenoid bone (a complex bone through the head from side to side with its surface extensions at the temples), the technician at the opposite side applied equally gentle and perceptive pressure near the lambdoidal suture (a paired joint towards the back of the skull) on the right side of the boy's face, the objective being the directing of nutrient cerebrospinal fluid (the fluid which bathes the brain and spinal cord) to the area of the left frontal bone which now was guardedly lifted. This combined technical effort, according to their understanding of what should occur, would initiate the first step in freeing up the serious membranous tensions that had been imposed within the cranium by the force of the blow upon it. They believed this should, within reasonable time, restore structural balance, free body fluids to operate normally, and allow return to proper physiologic function. As the technic was applied, the voice of the older man occasionally broke the silence quietly reminding 'gently, gently ---don't force anything ---remember, the fluid is there working for you.'

Suddenly, unexpectedly, the boy's voice interrupted. Wearily, but unmistakably relaxed, he whispered with the quality of a drowsy sigh, 'Something moved just then...like something released inside my head...that awful pull seems to be gone...it feels better. I was scared...I thought I'd gone wacky.'

Immediately preceding his comment a movement of the facial bones upon which the technic centered, had occurred. Although so minute as to be almost infinitesimal, it had not escaped the trained observation of those who watched. This was, they knew, an outward indication of the inner release of which the boy spoke. But even more convincing and corroborative was the discernible improvement in facial symmetry, contour and expression, evidence to them that

freeing up processes within the cranium actually had been initiated and that healing forces now could resume their restorative services. Restoration that should remove the very real threat of mental or perhaps permanent physical impairment which, for a while, had existed.

Admittedly, results in this case were unusually spectacular in rapidity and in scope...."

The "older man," of course, was Dr. Sutherland. His work is a pure extension of the application of palpation and force to assess and adjust tissue tensions with the intent to restore balance and maximize function. Nothing else can provide such therapies except "thinking fingers." Osteopathy in the Cranial Field is arguably its most refined form, but it is the fullest expression of the integrity of the scientist studying the body with appropriate respect.

To learn cranial techniques, Dr. Sutherland had, at times, distorted his own skull with furniture clamps, experienced the devastating symptoms from the structural abnormalities, and then learned on himself how to relieve them! That is the essence of the scientist!

Dr. Sutherland's legacy continues to be advanced by the Cranial Academy,¹²¹ as practitioners continue to study and expand the spectrum of conditions amenable to what his insights inspired. The highest tribute I can pay to the osteopathic philosophy is that an individual such as Dr. Sutherland was so powerfully influenced by Dr. Still, who maintained that illness/dysfunction might be reparable by therapies directed at restoring proper tissue relationships.

"Quit your pills and learn from Osteopathy the principle that governs you....Learn that you are a machine, your heart an engine, your lungs a fanning machine and a sieve, your brain with its two lobes an electric battery."

Homespun and allegorical, but it offered a mechanistic picture about essential functions that made sense to many people.

Osteopathy's distinguishing premise is: Your body functions (also) as a mechanism, which requires fundamental study that must be applied to your symptoms. Regardless of the

¹²¹ 8202 Clearvista Parkway, Suite 9D, Indianapolis, IND 46256 (317) 594 0411

clinical presentation, in addition to virtually all the appropriate allopathic approaches that osteopathy advocates, the *ideal* of osteopathy fully attends to the influence of the physical state of your body, as well, and attempts to improve it.

Instead of seeing disease purely as an invader, osteopathy emphasizes that the state of the patient's health may be an active contributor to the disease. Osteopaths ideally ask: "What is it about a disease that can get into a person?" and "What is the status of a person that allows the disease get in?" The approach is neither inherently antagonistic nor revolutionary except that osteopaths asked them, so allopathy made it so. The osteopathic affront was that it gravitated towards practices that radically confronted traditionalism.

Then, as scientific discovery erupted, the fascination of the microscope and x-ray deflated any inclination to reconsider what seemed so ordinary. "Science" seemed to be on allopathy's side, and its conviction that "*mine is better than thine*" further discouraged discourse.

Prestige, money, and influence followed allopathy its academic standards improved along with its faculties and facilities that increasingly attracted the more intellectually able students (Some, like Sutherland, were certainly exceptions). Besides, allopathy was intent on monopoly, a motivation that overbearingly influenced everything else. So, osteopathy was routinely ridiculed and challenged everywhere by the broadening power of allopathic institutions whose domination assured its authority. To the allopathic mind, the fact that "they do" and "we don't" became self-evident evidence of manipulation's "fraudulence" (or else we'd be doing it).

The palpable mass associated with a joint dysfunction was originally given the name "osteopathic lesion." It was "a rose by any other name," as good as many, but nothing microscopic could be seen, so it became further fodder. The unending accusations about osteopathic allegiance to the antithesis of science never ceased.

Regardless, the osteopathic patient base slowly grew. It was further aided by the flu epidemic of 1917, as I described earlier, when word got out that osteopathic patients often did

better than those under allopathic care. Regardless, though they were licensed as physicians, osteopaths were not allowed to receive commissions as military medical officers during World War I and had to serve as enlisted men.

I had another exposure to their pain when I studied with Loren "Bear" Rex at his facility in Edmonds, Washington. He calls his organization the URSA Foundation. It was where he cured my elbow. Ursa is Native Indian for bear, which he, in fact, resembles (the teddy kind). We were in his Jacuzzi when he candidly told me that just because he let me come didn't mean he necessarily liked me (or trusted me). On his turf, it was I who was one of the enemy. He believed that as soon as allopaths learned the methods, they'd immediately forget their origins. I promised him I'd never allow that, and I have kept my promise.

By then, because of all this and more, my allopathic colleagues had hurt me also. To have to be different - because one needs to be - and move in close - and come away with the game ball too often draws jackals. I was getting tired of it.

Bear had a large indoor swimming pool. Every year, during one of his courses, he had an annual "duck race" - the battery-operated remote control kind. I learned too late that Bear accepted anything in the pool and let it be called a duck. It was the only time he disappointed me. I went overboard. I had a plastic hull fabricated for the propellor mechanism. Then I took a Mallard duck decoy and cut the bottom out so it fit onto the hull. I cut off the head and glued it coming out of the other end, its eyes blazed with blinking red lights as it made a real wake through the water, as it quacked to the touch of a button. I put toilet paper in its mouth, and a banner on its head. "Alloquack" came in second. When it was all over and I added up the costs for venting my outrage, it had cost me over \$600.00.

It was during my early years in general practice, in 1962, that the infamous amalgamation happened in California. The California Medical Association (CMA) and the California Osteopathic Association had been working on it for years. The "understanding" was that osteopaths could trade in their D.O. licensure for an M.D. diploma on a one-time - basis, for

a short time, for \$65.00. Eighty-five percent of them stampeded to it. After decades of abuse, all they wanted was “out”. A minority remained, like Dr. Viola Frymann, who refused the trade. She stated that she was taught that a degree is conferred and not purchased. She is one of the heroines of medicine and a major exponent of total osteopathy, including the cranial field.

The alleged anticipation was that traditionalism would then be infused with osteopathic concepts.

The trap was sprung: the amalgamation, a sinister attempt to destroy osteopathy in California. Even the agreement that D.O. specialists would be fully certified was not honored. In a sense, the stampede “justified” traditionalist prejudice about osteopathic inferiority. The power-driven prejudice on one side and the scars on the other were too deep. Manipulation was the brand that had been seared into osteopathic flesh. They’d been persecuted with it for too long, and neither side was capable of neutrality.

Knowing for years that the amalgamation would happen adversely affected osteopathic training in their one school. The students knew what was going to happen, and in the last years of the California College of Osteopathic Physicians & Surgeons (COP&S), students were literally throwing paper airplanes out the windows when manipulation was being taught.

I know this because I was intimately associated with many of them while I was in high school. Most of the students were there because they hadn't been considered good enough to be “RD’s” (real doctors). Some graduates, who later became prominent in allopathy, attempted to further distance themselves from their previous “inferiority” by declaring that manipulation was worthless. Their allopathic colleagues listened appreciatively, and since the “former” osteopaths were considered authoritative, their comments inordinately increased the damage.

The “plan” that the California College of Osteopathy was to be converted into an allopathic school within the university system while maintaining special interest in osteopathic principles was a ploy. The current reality is the purely allopathic University of California Medical School at Irvine.

As soon as the interlude of “amalgamation” was over, allopathy filed suit in the California Superior Court to bar osteopathy forever. But osteopathy won. The College of Osteopathic Medicine of the Pacific accepted its first class in 1978, and graduated its 1,000th student in 1993. It is now part of a much larger complex, The Western University of Health Sciences.

Those osteopaths who traded their D.O. degrees shouldn't be judged by anyone who didn't endure what they did. In 1969, I presented a paper at a Far West Medical Association meeting in Sun Valley on the value of manipulation in emergency medicine. When I was finished, a physician approached me, his face wet with tears. I know that I am effective speaker,¹²² but that was a new experience. He hugged me, and his reason for weeping hurt me deeply. He explained that he was a former D.O., and that he knew manipulation was important, but he could no longer bear the mortification. When he changed degrees, he swore he would never manipulate again. He had never thought he would ever hear a "congenital M. D." praise its practice. I had acknowledged his fundamental training, and, at the same time, I had ignited a small spark in his conscience. I hope he eventually returned to good medicine.

In 1964, I was on the staff of Bay Harbor Hospital in Harbor City, California. It had been built as a D.O. hospital, and I was one of the first "congenitals" allowed on staff. As more came on, I saw the pain in the old-timers' faces. Their scars were permanent. I did more manipulating there than any of them. It was there that I performed the cervical manipulations under general anesthesia after Ozzie Hansen's cure.

The D.O. degree is now accepted, and graduates, overall, are equivalent to those from M.D. schools. Osteopaths are accepted into allopathic specialist training. The American Academy of Osteopathy offers courses in manipulation for M.D.'s and some attend. Michigan has two medical schools, one allopathic, the other osteopathic where courses are available, as

¹²² False modesty is another form of hypocrisy – Goodley

well. But no formal movement within allopathy has reconsidered manipulation.

One reason may be that, in the real world, too many osteopaths strive to emulate allopaths. It is more expedient to write a prescription or order a procedure than to spend sometimes considerable time hands-on when insurance companies resist paying fairly for it, despite its efficiency.

Osteopathy is growing and increasingly challenged by its success. A 1997 survey by *The Journal of the American Osteopathic Association* that revealed that of 1,055 osteopathic family practitioners, “only about six percent said they treated more than half their patients with osteopathic manipulative treatment (OMT). Nearly one-third indicated they used OMT on fewer than five percent of their patients. *One of the reasons stated was “insufficient training, not only in OMT, but in other osteopathic practices, such as palpatory diagnosis.”* In osteopathic institutions, I have witnessed the poor abilities of such graduates. One was taking a basic course with me decades ago trying to learn it.

Today, osteopathy has lost manipulative practice as its symbol, and there is a visibly widening gap between osteopathy’s initial vision and practice.

CHAPTER TWENTY-SIX

CHIROPRACTIC – FROM DELINQUENT ADOLESCENTS

It is never too late to give up your prejudices.

Henry David Thoreau

- **Chiropractic's beginnings**
- **Medicine from a chiropractic patient's perspective**
- **A chiropractic commentary concerning possible complications**
- **A major chiropractic complication from a "maintenance" manipulation**

More comprehensive description of medicine/chiropractic issues

The "Yet" disease

Over treatment

How I became involved with chiropractors

"KEEP THIS GATE CLOSED AT ALL TIMES"

"OBS! ENDAST TOALETTPAPPER FAR SPOLAS NED ITOALETTEN!!!!!"

Chiropractic perspectives about practicing medicine

Chiropractors practicing medicine

Medical dereliction in not opposing it

The Supreme Court case of Wilk vs. AMA

Possible M.D./D.C. cooperation – hampered by the Fundamental Flaw

What does chronic mean?

Pediatric chiropractic

The chiropractic tendency to use only one technique on all patients

Cases why patients go to chiropractors because of medical "care" More about my experience with Horine and Lawson including comments about our "contract"

Chiropractic advertising

Chiropractic comments by Professor Keating

1992 comments by Kerwin P. Winkler, DC, Chairman, ACA (American Chiropractic Association) Board of Governors

Allopathy, osteopathy, and chiropractic are not now what they were. Chiropractic began

particularly badly in 1896.¹²³ Various stories vaguely relate D.D. Palmer, the originator, to Dr. Still as one of his patients, or as a short time student, or that they were members of some organization.

Except for a reference to the Palmer Gregory College, with which the esteemed Dr. Alva Gregory associated himself with, I found no redeeming motive for chiropractic's origin, as clearly existed for osteopathy. There is no controversy that D.D. Palmer was "wild" and cantankerous. Apparently, there was no condition for which he did not endorse chiropractic. From early on, he was at war with his son, B.J., who was also an intensely polarizing person. He succeeded in taking over the school and publicizing himself as "The Developer" of chiropractic. That further infuriated his father, who fought back by establishing other schools.

B.J. Palmer is credited with the following:

Q. What are the principal functions of the spine?

A. To support the head, to support the ribs, to support the chiropractor.

Such was the stuff that fed allopathic antagonism as chiropractic got out of hand very early.¹²⁴ The issue of what should be manipulated, how much good it may do, how much is enough, or too much, whether prophylactic manipulation may be beneficial, what type of manipulation is appropriate, and all sorts of related questions do not easily have precise answers. Manipulation's reputation weaves through all of them. Since manipulation is chiropractic's reason for being, excuses for its use came easily:

*"If all you have is a hammer, everything begins to look like a nail."*¹²⁵

¹²³ The generally accepted date is September 18, 1895. Dr. Keating relates that the historical record suggests that Palmer did not "adjust" his first patient until the spring of 1896. "The first published account, written by patient Harvey Lillard and published by Old Dad Chiro himself in the January 1897 edition of his advertiser makes this clear."

¹²⁴ An excellent book on this history is: B.J. of Davenport – The Early Years of Chiropractic. The author is Joseph C. Keating, Jr., who generously added much to my understanding of this issue. ISBN number 0-9659131-0-4. 341

¹²⁵ Author is not known

Eventually chiropractic required legal definition. Various legislative acts enabled chiropractic care so long as it was "justified" by something visible on an x-ray that "required" manipulation. Such conforming thinking only extended the exploitation and the controversy around the skimpy training and dearth of ethics.

Often, all that was necessary to enter a chiropractic school somewhere was to pay the admission fee. Today, while medical schools are largely funded by research (which too easily produced its own evil - generations of doctors indoctrinated to reflexively write prescriptions) while tuition is a secondary source of their revenue, chiropractic schools have been essentially reliant on tuition, which opens wide the door. It was unquestioned that, among the professions, the gradient in chiropractic from the exceptional to the incompetent and criminally negligent started considerably earlier and descended most steeply. (There are still chiropractors around who "coerce." They insist on a signed document in which the patient agrees to the obligations of a prolonged course before "care" is given. That is not ethical. It may not be legal.)

The schools proliferated. Scams were common. It was a charlatan's dream, and manipulation caught it again. As with the other professions, legal licensing was only an embryo, and chiropractic lagged furthest in cleaning its house.

Allopathy consistently discredited everything about chiropractic practices. It seized every opportunity to emphasize any chiropractic deviation and thus damaged manipulation with it. Stories abounded about the malice of chiropractic advertising and intention. Exposés were broadly published concerning how D.C.'s were taught to build their practices.

A favorite involved the *Yet* disease, attributed to an allegedly enormously successful chiropractic salesman" to whom droves would flock to Texas each year to be taught that a new patient could be examined with the appearance of great care and concern, after which the chiropractor could exclaim with obvious relief, "Thank God, it's not cancer...yet!" And if the patient would assuredly come in for (thirty?) treatments it assuredly would not be.

The story was told about a woman who was furious when a chiropractor told her that. She'd returned to her physician who had been unsuccessful in relieving her symptoms, but who had not told her about the terrible jeopardy she now believed herself to be in. She accused him of dereliction, and the poor man was driven to distraction performing all sorts of additional examinations in his attempt to reassure her. Whereupon she had returned to the chiropractor, who had reexamined her and upon hearing her story had wide-eyed told her that, wondrously, though it ordinarily does take (thirty?) treatments, miracle of miracles, he had gotten it with the first treatment! And the way the story goes, she believed *him*. Such stories were passed around regularly through the medical community and relished.

The American Medical Association published a book, *At Your Own Risk* that issued a blanket condemnation of chiropractic as part of a carefully conceived campaign.

Responsible chiropractors do not defend the history or the unscrupulous exploitation that continues and to which I was brutally exposed in 1997. The temptation to treat with manipulation is ongoing. "It pays the bills." And the "manifest destiny" of some chiropractic factions to expand beyond borders of acceptable practice seems a constant.

When I practiced in Phoenix for a short time, a young chiropractor took me to dinner. His many offices were advertised on billboards and radio. He unabashedly boasted that he held the record for patients manipulated in one day as he stated some astronomical number far exceeding one hundred with totally assured pride and expectation that I would be impressed - as indeed, I was.

Since there are so many nice, naive people who can be "sold," so there are too many who indiscriminately "line 'em up and crack anything that moves" in assembly line procedures, everyone getting the same perfunctory jolt regardless the potential benefit or harm, whichever might coincidentally come first. And such people don't acknowledge ever thinking about the potential harm. Virtually every one of them has told me they have never seen a complication.

Over-treatment occurs in any profession. Unfortunately, I have examined numbers of patients who had been repeatedly, unsuccessfully treated by a chiropractor. One was manipulated for two years for a tendinitis that promptly responded favorably to cortisone injection. The passive poor trusting patient had just kept going back.

Any practitioner with such predatory predilection is a danger. While chiropractors may more easily refer a patient with a frank herniated disc, who may well need surgery, there can be a paranoia about losing *their* patient for "only an injection" or for "only a small fracture." (And the other side of that coin, of course, is the predominance of allopaths who fail to refer for manipulation, but there is at least one vital difference. Chiropractors most often know about injections, but most allopaths, as yet, have no idea about the indications for manipulation.

From such a history, the stuff of allopathy's antagonism got out of hand very early. Since manipulation is chiropractic's reason for being, excuses for its use came easily: As manipulation's overextension as a virtual panacea deservedly incurred medicine's condemnation, *it fed the falsity that chiropractic and manipulation are synonymous.*

Still, chiropractic largely became the criteria for manipulation's worth. All chiropractors are not skilled, and it is my experience that most chiropractors use only one method of manipulation while "different strokes for different folks" is more the rule than the exception. Of critical importance is that the specific treatment of soft tissues is not a routine part of chiropractic thinking.

Born in controversy, attacked in infancy - and deserving much of it - chiropractic survived a delinquent adolescence, from which it is now impressively emerging. It is keenly aware of its history, and aggressive work is being done in some quarters to remedy it and reinforce its quest for generally accepted professionalism.

It is one thing to learn the issues about chiropractic as a member of my profession. It is entirely another to experience the perspective from patients in a chiropractic office.

In the many consultations I have performed in various chiropractic offices, I was a minority seeing it from the other side - seeing people relieved, sometimes merely because they

were cordially receiving some treatment. I saw people who would never willingly again seek allopathic care.

One young woman, in particular, was referred to me by a chiropractor for a special examination, an electromyogram of her arm. When I asked her, offhandedly, if she had also seen a physician, she unleashed a vitriolic torrent that increased in pitch and decibels as it went on and on: (as I flipped the switch on my tape recorder): *"I'm not going back on meds again. It's too hard to get off them. All they did was give me pills for years and habituate me! They ruined my stomach with them! They never touched me, just took tests for nothing. They gave me some physical therapy, which was kind of a joke. The massages were very sweet and nice. I could go to sleep with them. Nothing was done but more and more Darvocet®, Motrin®, Darvocet, Motrin, Darvocet, Motrin --- and tests --- that's all they ever did...."*

Somewhere deep inside, the doctors involved had to helplessness, and if they allowed themselves to tune in what was going on in that deep, deep space inside, they would likely find a fund of fear about being so ignorant about musculoskeletal therapeutics. Fundamental Flaw. *On that other hand, for far too many chiropractors, "chiropractic" manipulation is perennially doled out, just like those pain pills.*

I was referred a patient by a chiropractor immediately after he saw him for the first time, a forty-eight-year-old man who had injured his neck in an auto accident in mid 1992. He'd seen different chiropractors for a number of months. No one manipulation or treatment had provided noticeable relief, but for some reason, even just the passage of time, he had gradually improved over about five months. Obviously, the same might have happened from what is called, "judicious neglect." He'd gone on the road for his business for a few weeks and did well, but he told me that the chiropractor told him to return for a "maintenance" treatment. When he did, he manipulated his completely asymptomatic low back "as an incidental." Instantly, he experienced intense, radiating pain into his left leg. Over the ensuing three months, his torso increasingly developed such a dramatic lateral shift that when I dropped a plumb line from his upper spine, it was two inches to the right of his midline. He had all the clinical evidence of a major lumbar herniated disc. If his story was truthful, the signs had been ignored.

He said the chiropractor had said something about having some of his associates look at him, but nothing was done.

When I discussed the case with other chiropractors in the group, the senior member said he had been told in school that such incidents couldn't occur. He claimed “20,000” manipulations without any complications whatsoever, a very nice round number.

I closed my last solo practice in the states in 1995 as one of the early casualties when managed care stormed into California after decades of careful preparation. I was told I would have to see a patient every twelve minutes. I refused. I hadn't spent my professional life developing my reputation for diagnostics to become a functionary.

For a time, I worked for two organizations providing consultations largely for litigated cases. I was at the end of an enormous referral funnel in which I eventually saw myself as a bee sent out to gather nectar and deposit it here. Some of the most important cases in this book are from those consultations.

One of the organizations used chiropractic offices. They were inexpensive because the contracts offered the possibility of the referrals receiving treatment there. For me, it was another exposure to chiropractic practice in the trenches.

My last chiropractic experience, in 1997, ended exceedingly bitter. It was in Visalia, California, where I was able to help Diane Gates. For me, in the scheme of things, that was justification enough.

I had been encouraged to respond to an ad for a physician qualified in musculoskeletal care to be the medical director for an alleged, new, multi-disciplinary, multi-specialty group. The ad did not specify “chiropractic.” It could have become a standard for medical doctors and chiropractors working cooperatively, a culmination to my medical career. Instead, it was part of a national racket in which chiropractors brought in neutered medical doctors to exploit their licenses for excessive billing. In my case, they made a big mistake. I was with them for three months that ended near-violently. During that time, they were in court twice, trying to defend \$10,000 billings. They, of course, lost both cases.

Nationally, many people were hurt and the billings unconscionably astronomic. I was involved in litigation against them for a few years while attempting to instigate a federal investigation. I was eventually visited by an FBI special investigator and another federal agent assigned to medical fraud. From no data, I had estimated that the fraud across the country could be in the neighborhood of \$150 million annually. After more an hour of discussion, they told me it was too little for them to devote their limited resources to. They told me that they had just settled a fraud case with one of the largest private hospital chains in the world, for peanuts - \$850 million.

The full story is not for here, but Dr. Ron Halstead was the national main perpetrator. He was sentenced to ten years in the penitentiary in 2006, nine years after I reported his activity, which I learned was well known by then, but dereliction was wide spread. “Everyone” knew. No one acted.

I can’t be assured I will finish *Goodley Intentions* to tell the fullness of this story, so for the protection of other physicians who may become involved, I include the following. The final break came after the few months that I vainly awaited for their inducements to happen that had persuaded me to come while, at the same time, enduring the reality.

A young woman was injured in an auto accident. She had sustained a concussion with other injuries and had to be carefully observed. When she didn’t keep her appointment, I learned they had told her that they had assumed all her care and not to return to me. Then they billed her insurance unconscionably in my name. When I called my first staff meeting, they cleared the office of all personnel and called in thugs.

My contract was with a *corporation* and called for arbitration of any issues. That was in the “small print” after the contract clearly expounded on everything I needed to read. Among other positive statements, that I would assume full medical control over all patients. It even stated that I would have oversight of the billing.

The “arbitration” awarded me virtually nothing. The lawyer who “conducted” it told me that had I gone to trial, I would have summarily lost, regardless of the criminal activity. The decider was my being an *employee* of their corporation.

Despite all the clauses in my contract concerning my overbearing authority as physician and medical director responsible for all patient care, when I told members of the office staff that by hiding patients from me they were participating in criminal activity, I gave my “employer” the legal right to fire me. For opposing such criminal activity against my patients, my only resort was to resign (and desert my patients). Just displeasing him would have been enough. “legal” justification.

Specifically - my contracts read (I am the EMPLOYEE.): “The parties acknowledge that EMPLOYEE throughout the term of the Agreement will retain the right to exercise EMPLOYEE’S independent professional judgment as to all matters relating to medical care rendered to patients by EMPLOYEE.

As medical director, EMPLOYEE shall oversee and have final authority with respect to all billing, insurance and otherwise, that is prepared by any agent of the *CORPORATION*. (This capitalization and italics, mine)

As medical director, EMPLOYEE shall have final authority regarding the hiring and firing of staff who will be directly involved in the delivery of health care services to patients...”

I had not considered until I typed those words from the “EMPLOYMENT AGREEMENT” that medical director is obviously in lower case letters and EMPLOYEE upper case. It was ominous, and I didn’t know it. I assumed, and no one told me differently, that the contract confidently provided me with the authority I needed to do my job. BUT, because I was an.EMPLOYEE, my authority were worthless. While my contract authorized me to provide care with all the protections of my professional oath to my patients, in law, the EMPLOYER has almost total rights. The EMPLOYEE’S “right” is to quit.

I was driving to my cabin in Big Bear Lake at one of those times when the radio station is perfect to need. I was listening to KPFK, and a woman associated with Harvard Law School began speaking about the ”Master-Servant Act.” It was written into British law several

centuries ago, is the basis for U.S. law, and establishes the very limited rights of employees that I just alluded to. My criminal chiropractor EMPLOYER had every legal right to fire me.

That law is evil. The law an ass. In my judgement, it was written to protect privileged people from personal responsibility. It pits aggrieved people against a purposefully obstructive construct.

My intense experience with chiropractic began in 1978. Cynthia L. Preiss, D.C., was President of the Board of Chiropractic Examiners and a patient of mine. One day, she coyly asked me if I would lecture at a Los Angeles Chiropractic College (LACC) Continuing Education Seminar that year. I accepted conditionally that I would not be inhibited in my comments, which I commenced by telling them why, from my perspective, they were having problems relating to medicine. I spoke of issues I describe here. They gave me a standing ovation, and I was grateful, and then the teaching was fun, and it was great.

I met Dr. Frank Schoenholtz because of that meeting. He was on their Board of Regents, and he had just looked in for a moment to see who the M.D. was who had the chutzpah to be there just when I was projecting a special slide onto the screen.

A few years before, I had flown to Santa Barbara to attend a course on alternative methods of healing. As I closed the pilot's gate, I looked down at an enameled, expensive sign mounted on it:

*KEEP THIS GATE CLOSED AT ALL TIMES*¹²⁶

I took a photo of it. It is symbolic of much of this. What is written, especially on a sign, seems imbued with special authority that suppresses reflection. We tend to suspend critical thinking that should alert us to absurdity, and such passivity is hardly likely to advance

¹²⁶ If you didn't get it, don't feel bad. Many never do. But realize how you likely have been indoctrinated.

anything. It is so easy to acquiesce to the thoughtless because somewhere inside we decide that "authority" could not be so nonsensical to have done such a thing. (*But it can.*)

Behind each toilet at Sattru Bruhn, in Sweden, where I was on a visiting faculty for the University of Uppsala, was a sign:

OBS! ENDAST TOALETTPAPPER FAR SPOLAS NED ITOALETTEN!!!! [Warning! Only *toilet paper* may be flushed down this toilet!!!!].

Sometimes, when I have spoken before an audience that I sensed felt (too) superior, I have used the "Gate" slide to restore some balance. It would be projected as I approached the podium, and by the time I got there, I invariably had them in my hand. If no one chuckled, my point was made, and I let them know it. The audience was more respectful thereafter.

Frank understood the implications of the sign instantly, and we became friends from it. From our relationship I was able to gain a much better perspective on this issue. Frank has since retired and chiropractic lost one of its great and honest men.

During my association with LACC, a \$2 million research grant was awarded to the chiropractic profession for the study of manipulation and funneled to them. Chiropractic leaders from the United States and Canada were called to a meeting in Pasadena, and I was honored as the only M.D. invited to be part of the investigation. Unfortunately, it was later cancelled when irregularities beyond their control were discovered. One event, in particular, from that initial meeting stayed with me.

I was introduced to a young man they considered among their best and brightest, a professor of one of their Midwest schools. As we conversed, he told me candidly that he felt chiropractors should be permitted to do such things as prescribe antibiotics for "simple" ear infections. Then, if it didn't work, they could refer the case to a physician. He was as serious as I was surprised.

I responded with a number of questions like, how would he distinguish that the condition was specifically an ear infection - or simple? Where would he get the training into its nuances

and how to reliably use the instrumentation? What training did he have in infectious disease and selection of antibiotics - and the recognition of their complications? And more - all fundamental. He neither blinked nor blushed, but unhesitatingly and without any change in his inflection responded, "Those are problems, aren't they?" And that ended our conversation. The issues cannot be comprehensively settled until the scope of chiropractic practice is ethically defined.

During that same time, I was asked to consider doing some teaching at LACC. As I arrived to discuss the possibilities with them, leaflets were being handed out to the public announcing free medical type exams: chest, heart, abdominal, electrocardiogram, urinalysis, etc. *Why would a highly rated chiropractic college be advertising medical exams?* They weakly tried to dismiss it by saying they were only offering "simple screening." I was alarmed. It implied an untrained flirtation that skirted acceptable chiropractic practice, and it was happening at an institutional level.

If I thought diabolically, I could conclude its purpose was to desensitize the public to the distinction between medicine and chiropractic. I saw the word *physician*, as in *chiropractic physician*, and I asked about that. I was told it was just "to clear up some misunderstanding the Medicare regulations." (It has become much more common since.)

The phrase "*Chiropractic Medicine*" is appearing. Especially in professional work, definitions and essential distinctions are mandatory in society for essential communication. If the captain of an aircraft requests, "Is there a doctor available?" should a dentist reasonably respond?

Obviously, there were some about LACC who were thinking (plotting) that if a chiropractor of the "new breed" could listen to a chest, walk around the clinic wearing a stethoscope - and get away with it - the insinuation of chiropractic into primary medical care might take hold. But a professional's "opinion," whatever profession is represented, that something is "normal" or not, carries credence for the unsophisticated patient: It is considered

authoritative whether it is or not. There is a legal issue here, as well. A chiropractic entry of medical normalcy into a report implies not only a competent examination (which almost certainly did not occur), but it disrupts the entire premise on which professionalism depends. Trust and gullibility are exploited. The act is hidden, and the practitioner is unlikely to inform the patient that the examination is only dabbling. Acceptable professional training and licensure must not be mocked.

Manipulation does have potential influence beyond the musculoskeletal. But to assume the possibilities as a base from which to blur the outlines of their profession and attempt to invade areas such as systemic disease (diabetes, infection and the like) is an extraordinarily serious matter. It is one of the main activities that impairs allopathy's being able to come to reasonable terms with chiropractic and review the manipulative philosophy that is inherently in the package.

(Specifically, I am not referring to general health issues, such as nutrition. Few allopaths know the first thing about it. My one afternoon's "indoctrination" to it in all my medical training was a pathetic joke. Chiropractors have every right to advise in this essential, if they are professionally qualified to do so.)

It is from such objections that the AMA was given considerable evidence for its decades long campaign against chiropractic. I have in my file a thick folder sent to physicians years ago in which numbers of indictments are included, all of which tended to intensify my profession's adversarial stance.

In my opinion, continued blurring of the borders can't be condoned. They question the sincerity of those who propose them.

During the '70's, one of the chiropractic groups had Senate Bill 439 (Amended in Senate May 23, 1973) introduced to make it a crime in California for an M.D. to manipulate. It died in committee, but I saw my naiveté. While I was considering (the nobility of) teaching chiropractors, some of them were out for my blood.

It was because of such issues that I decommissioned my consideration about teaching at LACC.

Chiropractic is not homogeneous. Roughly, they are divided into the "straights" and the "mixers." The straights are of the old school and tend to confine their activities to manipulation (of the spine). My understanding was that the mixers also manipulated the extremities, but the distinctness of the two groups expanded far beyond that into the mischief of so-called medical exams.

Attempted extension into medicine is ongoing, and it has many faces. I would frequently would see full medical type reports from chiropractors:

"EARS: The otoscopic examination proved generally negative.

Tympanic membranes were found to be intact and translucent, bilaterally. No evidence of gross auditory defects was detected...

HEART: Normal sinus rhythm without murmurs, and no palpable cardiomegaly.

LUNGS: There was good respiratory excursion. Breathing sounds were normal to auscultation, and percussion revealed no dullness over the lung fields."

In this particular report, the first diagnosis was, "*Acute Posttraumatic Anxiety*." Certainly a legal psychiatric diagnosis is totally outside chiropractic scope and authority, but consider its potential for confusion.

To compound the opportunities for exploitation, computer generated reports "worthy of Harvard" are now available. A few keystrokes can spew an encyclopedia of clinical tests (and results) in an instant. A tip-off is when there is no selection. All are listed. No medical doctor would be so foolishly indiscriminate. It should seem obvious that such reports would be highly suspect.

The "exam" may be extended to even include the ordering of blood tests. After all, the numbers that appear on automated forms seem so unambiguous. They never suggest the possibility of error that should be retested for, or that associated and essential information was

erroneously presumed in the investigator. Numbers don't lie, do they? Understanding the basis for the numbers isn't important if they fall "within the normal range," is it? Yet, the presentation of the report gives an added semblance of legitimacy, doesn't it? Just the ability to order and obtain the tests makes a powerful point.¹²⁷

Nevertheless, submission of chiropractic/medical reports seems to be proliferating, especially in the medical-legal field. I cannot understand why organized medicine or governing authority did not appear motivated to do anything about it.

In 1984, I was invited to teach at the Harvest Moon Festival, one of chiropractic's largest annual seminars for licensure recertification, sponsored by the California Chiropractic Association (CCA). Over a thousand attended. My topics included: "Practical & Ethical Considerations for Patient Referrals" (to physicians).

My contention, as I have already commented, was that there can be no discourse between our professions until they bring theirs into a form that is recognizable and clearly defines its professional purposes within the limits of its training and licensure. I discussed the problem of so-called medical examinations and the multitude of efforts to expand anywhere for expansion's sake. When I stated that those efforts were an offensive and unjustified impediment that was not credible, I was gratified by the general applause. From there, as at LACC, it was a great day of teaching.

All that stated, chiropractic won big in the courts. For almost fifteen years, a few chiropractors fought against the concerted AMA campaign against their profession. Even the most rabid chiropractic supporter didn't think they had no chance to succeed. They did. The case of *Wilk v. AMA et al* was decided in favor of the chiropractors and widely reported, including, compulsorily, in JAMA. As reported in *The American Medical News*, January 20, 1992, "More than 15 years after it began, one of the most protracted legal battles in AMA history has come quietly to a close."

¹²⁷ In this editing, more than a decade after this was first written, chiropractic training has advanced, as I have stated. A chiropractor I respect justifies it. (But he also finished medical school.)

In 1976, Chester A. Wilk, D.C. and some associates sued some medical groups which they claimed were violating federal antitrust laws by conspiring to boycott chiropractors. One of them joined the suit because he had referred a patient to a neurosurgeon. "He threw the patient out of his office" when he learned the referral was chiropractic.

In 1987, the judge ruled the boycott indeed existed and issued a permanent injunction barring the AMA from any future such action that would prohibit physicians from associating with chiropractors. The AMA appeal ended in November 1990 when the U.S. Supreme Court

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refused to hear the case. In the final negotiations, the court did not force a marriage between medicine and chiropractic," but the legal counsel for the AMA commented, "I suspect that, just as they have in the past, physicians will come to their own conclusions on what the benefits of chiropractic are for patients."

The article commented that *Rand Corporation* found evidence for the efficacy of spinal manipulation as a treatment for acute low back pain. (During the same period, however, *The British Medical Journal* found that it had not been convincingly shown and that more study was needed.) One of the chiropractors who filed the suit described the improvement of relations between the two professions that had evolved during the time the suit was in the courts. His personal referrals, and medical acceptance of referrals from him, had increased.

The Fundamental Flaw persists. Allopathy does not educate its students in the biomechanical approach. So, when an allopathic referral may be made, most likely it is with ignorance of manipulative theory and after a number of allopathic approaches have been unsuccessfully attempted, including the patient's lack of response to medications (and time) - and the bills have mounted - and the duration of a condition that is amenable to manipulation may have persisted sufficiently to encourage or establish chronicity.

Chronic, incidentally, is an interesting word. There is a lag between its dictionary definition, "of long standing," and common usage from which patients sense they have been

¹²⁸ JAMA published my letter: Chiropractic and Judge Getzendanner's Injunction. Sept 23/30, 1988 – Vol 260, No. 12.

sentenced. It implies incurability, a barrier through which the rest of the person's activities will have to be filtered. This issue of any factor that enhances chronicity, or diminishes its possibility, is extraordinarily important, and manipulation is often central to it.

Out of the Wilk decision, one of the criticisms chiropractic accepted, yet which I suggest must be kept in reasonable proportion, is the consciousness of need for more research concerning manipulation. I believe that is true according to the general principle that should direct all medical disciplines, but not more so. Nothing hangs on it concerning manipulation's validation. The question is not if, but when, how, and with what should it be used.

Pediatrics is important to this issue. Dr. Frymann concentrates her work to the young, where the greatest long term potential for some manipulative methods may be realized. As example, birth can be a major trauma. Some cranial vault injuries can cause persistent projectile vomiting and cause death. Dr. Frymann developed her commitment to treatment of the young when she later learned that her own child, who had died from such a condition, might have been saved. Many claims are made concerning the benefits of manipulation for the young, from irritability to mucous discharges.

Pediatric chiropractic is now being aggressively promoted, an effort that is not above suspicion, including because it smacks of "getting them young." The published studies that appear to justify such treatment require careful study of their methods and certainly need repeating under neutral conditions.

I am impressed with some recent chiropractic graduates I have met. With me, they expressed the desire to work cooperatively in providing care, but the temptation not to refer is constant. At one facility, I was "honored" so long as I was perceived as an asset to their purpose.

When I insisted that patient welfare dominate in each case, our relationship did not last long. During the time I was with this group, however, I was able to help many, sometimes

conjointly, sometimes "having to put up" with the repeated manipulations that were the essence of what was essential to the financial viability of their practice.

In one office, each chiropractor used only one technique, and the naive patients would sometimes be cryptically guided "through the grapevine" by a sympathetic employee hoping to find the practitioner whose approach might best satisfy their need. Interestingly, in retrospect, when I used a different manipulative technique that sometimes dramatically improved the patient, not once did any of them ask me how it had been accomplished, the same as with my orthopedic surgeon colleagues never asking me to show them how I had relieved a patient who they hadn't.

As I have previously described, when I finished my residency, some attorneys who represent the injured in workers' compensation claims asked me if I would see patients for them, as well. When I accepted, my referrals from the insurance companies stopped until, after a few years, they realized that my reports hadn't changed. My focus and purpose had remained on my patient, but what changed was my being appalled at the poor, even abusive, care that many of them had received from the insurance company doctors.

Now, among chiropractors, the same circumstance was reinforced. At one facility, four of the first six patients I examined the first day claimed they had been badly treated at allopathic offices. I examined them and their records. Two had been to one of the most prominent HMOs. In fact, both were employed by it when they were hurt.

One of them sustained a skull fracture when a light fixture fell from a ceiling knocking him unconscious. He awakened in the emergency room. He claimed they did not hospitalize him for observation, even overnight. The other began to experience unusual right leg and back pain as she worked in housekeeping. Her treatment, without examination, was a series of different pills over months. I prescribe drugs regularly. But this was a woman who had been given them, not as an adjunct but as a complete substitute for care. Using pills only to cloak undiagnosed pain demeans the meaning of medicine. For the doctor, it's a sin. Then, getting

away with it almost invisibly desensitizes, and too easily can become a habit. The excitement of diagnostic pursuit dies. It's a hard fate when medicine is so crassly abused.

While I was associating with that office, I allowed one of them to manipulate my low back because of a freak accident when I arose after taking a nap on a manipulation table with my sacroiliac joint over one of its edges. As I had rolled onto my side, I felt a deep "click" inside where I shouldn't have, and knew I was in trouble.

Foolishly, I had allowed him to use a rotary technique, which was not precise and re-injured my lumbar spine. I had to travel to Los Angeles three times that week for epidural (spinal) cortisone injections. I'll discuss them with the injection therapies.

In January 1999, a chiropractic ad appeared in a local newspaper. I think it is clear that it was commercially prepared and sums the perspective of one influential camp:

"What is Chiropractic Care?"

Since the discovery of Chiropractic in 1895, it has become the largest drugless, non-medical healthcare profession in the world. Rather than just treating the symptoms, chiropractic focuses on treating the causes of physical problems. Nerves leave the spinal cord through openings between the vertebrae (spinal bones). Misaligned vertebrae produce pressure on the nerves, thus causing irritation to the nerves and resulting in pain. You will find that the chiropractor can illustrate to you how the pain starts back at the spine with misaligned vertebrae producing pressure on the nerves that lead to where the pain is. Your body will be better able to heal itself if your spine is functioning normally and you are living a healthy lifestyle.

What the Chiropractor Does

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The doctor of chiropractic locates and removes the misaligned vertebrae in the spine that are creating imbalance and putting pressure on the nervous system. Spinal adjustments are used to remove the structural misalignments (vertebral

¹²⁹ I certainly hope not.

subluxations) which were found in the spine. Your doctor of chiropractic works to restore the health of your spine...”

In the October 1992 issue of the *Journal of Chiropractic*, an editorial was published by Kerwin P. Winkler, DC, Chairman, ACA (American Chiropractic Association) Board of Governors:

"In a letter dated June 11, 1992 to Dr. Louis, Edward Corboy, Jr., M.D., JD, stated: 'As we close out the last decade of the 1990s, I think it is time that people in all walks of health care begin to re-think the boundaries that have been set up, somewhat artificially, by prior generations of health-care professionals who preceded us. The world today and the FUTURE (emphasis added) is ours, not theirs, and the ultimate goal of any health care system is to help people... I am glad to be alive at a time when new ideas, unencumbered by past squabbles and disagreements, can go forward to write new chapters in the history of good patient care.'

After reading this statement, I was struck by the wisdom of this phrase - *The Future is Ours, Not Theirs*, and considered its application to where we are in the chiropractic profession right now. We appreciate and have no desire to change the foundation that our predecessors established for us. We must, however, mature to the point of realization that NOTHING stays the same. We have a responsibility to not only strengthen that foundation, but also to build upon it....

Rousseau said, 'There is nothing more difficult to take in hand, more perilous to conduct, or more uncertain in its success than to take the lead in the introduction of a new order of things.'...

It would be most unwise to leave guidelines on chiropractic quality assurance up to the federal government, the medical profession or the third-party pay system.

The future that is ours will also challenge us to return to ethics, if we wish to survive in the second century of our existence as a profession.

In his book entitled *Visions*, Ty Boyd stated, 'Ethics, values, and integrity are what Americans are demanding of their leaders.'...

We now have a Guidelines for Practice document to work with. The next important step will be the return to ethics and integrity for this profession.

Admittedly, this is a delicate subject, which will, no doubt, generate a very lively debate within the profession over the next decade. It is not to our credit that we have waited until we were injured by those with a lack of principles to start, as a profession, to debate the issue.

In closing, I would like to leave you with another statement by Ty Boyd: 'If you aren't making decisions that keep even your staunchest supporters wondering if you've gone too far this time, then you may not have what it takes to. lead in the 21st century.'...."

In summary, there are excellent and dedicated chiropractors. The gradient, however, from those who honor their profession to those who tilt it towards darkness starts sooner, and is steeper, in my experience, than among medical doctors. Regardless of chiropractic problems, allopathic ignorance about manipulation makes professional association with competent chiropractors one of the solutions for the Fundamental Flaw catastrophe. In fact, there are places where it is happening.

From my experience, even assuming honesty in all the parties engaged in such a negotiation, a wholesome association of M.D.s and D.C.s requires extraordinary maturity and preparation. Deep personal issues of status will spice situations daily. It could be the "I'm *the* doctor" or the "*I'm a doctor, too*" syndromes. If the association is on the chiropractor's turf and where ways have been set, it can be all the more an issue.

Regardless, chiropractic is now an established major player in health care. Medicine failed to avoid it. Alva Gregory's ghost lives.

CHAPTER TWENTY-SEVEN

ORTHOPEDIC SURGERY

Of all the manifestations of power, restraint is the most notable.
Thucydides

The only reason doctors are furious with Paul is because they know he's right.
Gordie Breitman, M.D.¹³⁰

- **This chapter must be read as part of the whole!**
- **Orthopedic surgical responsibility for the Fundamental Flaw**
- **Society's deference to orthopedic surgery**
- **The orthopedic surgical mind**
- **Orthopedic surgical confessions**
- **The power of orthopedic surgery in the courts**
- **The legal penalty for having "only" a soft-tissue injury**
- **Asking orthopedic surgery to reconcile its interests with its *responsibilities***
- **A "Twilight Zone" experience**
- **Splints and carpal tunnel syndrome – an example of "habit think"**
- **Dr. Alf Nachemson**
- **Back schools**
- **Personal issues with some orthopedic surgeons**
- **Orthopedic surgery's increasing subspecialization**

The orthopedic surgical mind obviously nurtures *surgery*. It is athlete prone, and the competitive spirit dominates its thinking. When has exerted itself against challenge but failed, as it did repeatedly against scoliosis, it acknowledged the failures without equivocation and

¹³⁰ Gordie and I were in pre-medicine together at USC. He stayed there for medical school, specialized in Ear, Nose and Throat and practiced in La Crescenta, California, close to Glendale where, for a year, I was Medical Director of Rehabilitation at Glendale Adventist Medical Center. He surprised me when I heard him make this comment during another of my battles. I decided to use it here because so many of my encounters happened from reflexive resentment by orthopedic surgeons, which was especially concentrated during the last year of my residency at the University of California Davis Sacramento Medical Center.

exerted again. As any human endeavor, orthopedic surgery can also err, however it may be realized only in retrospect. The July 11, 2002, issue of the *New England Journal of Medicine* (NEJM) concluded that one of its most heavily invested and popular procedures, arthroscopic surgery of the knee to treat osteoarthritis, is a sham.

I begin this chapter in this way because a huge, bloodied field needs to be leveled. Orthopaedic surgery has been imbued with what is generally perceived as unimpeachable authority in the totality of its specialty. *But 80% of orthopaedic conditions are non-surgical, as this book unimpeachably bears witness to!* This predilection for orthopedic surgeons to dominate, yet disparage what they disdain to become involved in, is the prime cause for the Fundamental Flaw. This issue has to be acknowledged or the Flaw will never move towards resolution.

Whereas neurology and neurosurgery matured conjointly as mutually respected, dynamic specialties -, as did general surgery and internal medicine - orthopedic surgery grew alone with no medical specialty to balance it, with only “uneducated” lay bone-setters to challenge them.

With all great and appropriate credit to orthopedic surgery for its contributions, this book cannot allow continued obfuscation.

The personification of the surgical/athlete psyche is synonymous with the denial of pain. In its generalized mind, only an *acceptable* reason for the complaint gets its attention (such as the radiological presentation of knee osteoarthritis). Pain is part of competition, and ignoring it is expected. The orthopedic surgical image is comfortable with those rules and gives no quarter to “unsubstantiated” complaints that don’t play by them. As found in an English journal published almost two hundred years ago, they describe themselves as a rather “cocky” lot.

Important note: *Again, for fairness, this book must be read as a whole. I can see the possibility of my surgical colleagues first perusing here, and I ask them not to do that. And, as before, I ask again that this be read from our patients’ perspectives. They are the ones who need defending, whose advocacy needs to be heard. Please consider the evidence. Be fair and dispel*

emotions this may reflexly generate, at least for now, for the critical importance of what this is about. There will be plenty of time after to heat up the tar (again) later.

The common, historic experience about orthopedic problems is deference to what orthopedic *surgeons* say about it. Theirs is the kingdom, including the well-known aphorism: develop a new orthopedic surgical procedure, and everyone will try it within a year. Come up with a non-surgical idea, and it may take twenty years to make the rounds.

When Dr. Vert Mooney, formerly Professor of Orthopedic Surgery at the University of California, San Diego, honored me with his review of this book, he wrote, "I have been an orthopaedic surgeon for 35 years, and despite its responsibilities, I have sadly seen my specialty become more and more surgically oriented. There were 502 presentations at the 1998 Annual Meeting of the American Association of Orthopaedic Surgeons. Not one of them discussed a non-surgical orthopaedic subject. If there is one book that will shake this tragically skewed situation, this is it."

Orthopedic surgeons generically do not resonate about "mundane" issues that don't allow them to put a high tech instrument into their hands. So, I must relate to you candidly all that I will. You cannot choose your doctor wisely until you realize the whole truth of this paradox. When you visit an orthopedic surgeon, you must be consciously aware that almost always – with few exceptions today, such as Dr. Mooney - you are being seen exclusively through a *surgeon's* eyes, which, in fact, may be most appropriate. *But, as I have emphasized, approximately 80% of orthopedics is non-surgical!*

In *Orthopedics Today*, Vol. 4, Number 4, Robert P. Nirschl, M.D., Chief Medical Editor, wrote with courageous candor, "*Orthopaedic medicine is statistically a major segment of orthopedic practice. With so obvious a reality, I am astounded that our orthopedic training programs offer so few opportunities for residents to learn the concepts of orthopaedic medicine, rehabilitation and fitness.*" (Italics mine)

I re-published Dr. Robert P. Nirschl's comment extensively. I think he might have taken

some flack and regretted his candor. I hope not. A more honest commentary could not have been expressed.

In the September 1984 issue of *Orthopedics Today*, Robert E. Leach, M.D., orthopedic surgeon, was interviewed in "The Thrill of Being Olympic Head Physician". In answer to a question concerning how the urgency of treating athletes during the Olympics affected his clinical judgement, he answered: "I think that you're inclined to over-treat a little bit. *You use more hands-on and massage and personal things than perhaps you do in normal practice, because you recognize the benefits of the hands-on, even the talking and the working of various muscles and so forth.*" (Italics mine)

In that single confession, Dr. Leach also eloquently expresses the full dilemma by attempting to dichotomize where none exists – the orthopedic needs of the athlete vs. anyone else - and then being forced to tackle the inconsistency while struggling to come to grips with it.

With that, I return to the core of the propagation of the Fundamental Flaw. With the power and authority conferred and accepted by medicine and society, orthopedic surgery must accept the responsibility for all that transpires because of it. Orthopedic surgery was central to traditionalism's rejection of manipulation. So, it is central to the resolution, as well.

The issue has permeated so deeply, it will be heavy work for a considerable time. Even the fledgling attorney knows how effective it usually is to cross-examine a non-surgeon witness before a jury with a pejorative intonation, "You're not an **orthopedic surgeon... are you?**" To such an intended, unknowingly ignorant affront, the appropriate response by an orthopaedic physician is stated throughout the pages of this book. A brutally honest counter-accusation would be, "*Orthopedic surgery, you didn't apply yourself to the study of orthopaedic medicine, to manipulation, **did you?** Regardless, you judged, **didn't you?***"

Because of that, the nuances and subtleties of "soft-tissue injury" became so demeaned that to try to sue for "only soft tissue injury" became a bad joke around the courtrooms many years ago. No "objective findings" dominate as the truth, the whole truth and nothing but the

truth, because an *orthopedic surgeon* said so! Then, "subjective findings only" - like soap and water - was shoved down the throats of anyone who cried out in protest in what became a vicious, heartless game.

Soft tissue injury sufferers are among the most unfortunate of the Fundamental Flaw's victims. If you do not have a fracture, or damaged nerve, or some visible equivalent injury, yet you continue to complain of pain and functional impairment despite alleged treatment, you may have to bear your sorrows "without a country." You lose your status. Like a passport, you are stamped "in-valid." And so you are passed on and may wander lost, seeking justice in a legal system that mocks you largely for lack of something substantial on x-ray, or some such.

"Only a soft-tissue injury" ignores all the ligaments that may be near-shredded and shrieking, just managing to hang on. With all that, most orthopedic surgeons would acknowledge, were they approached when they were in a disclosing mood, that they truly have no interest in such matters, and the constant demands upon them to study their surgical advances easily commands their available attention.

This issue is so vitally important, orthopedic surgery must harness itself to examine its history and resolve fundamental questions: what are its committed perspectives? By its self-limiting focus, has it caused great harm?

Fracture care is orthopedic surgery's domain of authority. It is, in fact, its prime reason for being. In 1972, I was still in the first year of my Physical Medicine & Rehabilitation residency at the University of Southern California. It was not a good year for me, and as I was looking for something to learn, I drifted into the orthopedic surgery section for lower extremity fractures.

I cannot exaggerate. I entered a Dark Ages *Twilight Zone* experience. Ward after ward was filled with beds occupied by young men whose fractured femurs, mostly sustained in motorcycle accidents, were suspended motionless in traction. Each ward was a mausoleum of once-viable legs whose soft tissues had been intentionally neglected until they became bloated

yellow-green, wax-infested, "limboid" masses sloughing grayish scales into piles on the bed sheets, the grotesque demarcation drawn as if with a ruler about four inches below their groins. Everything - the skin, the subcutaneous tissues, the muscles and tendons, fascia and nerves were entrapped into functionless, mucilaginous bogs, the debris of rigid fixation in thinking.

The status of the *fractures was all that mattered!* No motion whatsoever was allowed until the exaltation of the *x-rays* was satiated . Only then would those ravaged limbs be dared to attempt to restore their function through months of exhaustive rehabilitation.

At the same time, such treatment to the upper extremities was not conscionable. A prime orthopedic principle is to preserve the viability of the hand at all costs, but the short connection to another limb had not yet been made, and the consummate contradiction totally escaped the entire specialty. This was, of course, well into the time of "advanced" medicine. That was the way it was done. No controlled studies.

I was appalled. I went to the chief of the department and asked permission to do a study, even just to move the patellae, if I promised I wouldn't disturb the fractures - anything to begin to restore some movement early on. He looked through me without expression and tonelessly asked me to submit a proposal. I did. Twice. I never received a reply. I wasn't a surgeon. And then I was gone. Ten years later, Continuous Passive Motion (CPM) was introduced as a major advance in which the limb is set on an apparatus that provides very slow ongoing movement.

That year at USC became one of the heaviest challenges of my life because of its consequences. I didn't survive the residency. In retrospect, I will always be thankful for that. My year at UC Davis was one of the most rewarding in my professional life, but in the one year interim, before it opened to me, I was persuaded to join the faculty of the new Department of Emergency Medicine at USC.

During that year, which incidentally is when the opening story of this book happened, I was also exposed to the residents from close-by Orthopaedic Hospital, which sent its residents to us for trauma experience. They tended to arrogance, and my use of manipulation was an

obvious target. I'd offer them a proposition. The emergency service was busy. Sometimes during the night, someone would come in. I'd ask the orthopedic surgical residents to do an exam. Then I would, and I might manipulate. If I did, and the patient improved and their objective findings changed, would they then be willing to admit that maybe I'd accomplished something? Usually, before the night would be over, they'd be asking me to teach them.

From long before that time, I carry a grateful memory from Orthopaedic Hospital. I visited there when I was still in medical school and enamored with orthopedic surgery. One of the great privileges of my professional life was sitting at rounds next to Dr. Charles L. Lowman, the founder of Orthopedic Hospital. As each patient was presented, he quietly shared his gems concerning what I should be looking for as he described their orthopedics, neurology and rehabilitation - the wholeness of the issues – some in ways I have not heard since. He was a remarkable man. I have known other great *physicians*, who, as orthopedic surgeons, did not discard their foundations and who maintained their breadth of perspective. This book is dedicated to two of them. They are the ones to be emulated.

There was nothing to emulate when I attended an orthopedic surgery staff meeting at the world famous Rancho Los Amigos Hospital, with which USC was associated, while I was still with the Department of Emergency Medicine. The late Dr. Verne Nichol, then chairman, was boasting how unprejudiced he was when, that morning, they were resurrecting the reputation of the Simes amputation of the foot, a procedure that had been discredited about a century before. I asked him why, then, he wasn't reconsidering his attitude towards manipulation. His response was harsh and emphatic: "Those who know the back cold say it doesn't work: *So it **doesn't!***" He didn't like it when I asked him who knew the back that "cold."

Dr. Jacqueline Perry was also at Rancho. We were already acquainted. She came over to me, and we discussed Dr. Nichol's hostility. She said, "Paul, orthopods don't like the word 'manipulation.' If you'll only call it something else. Call it something like 'transverse sheer force' and then we'll listen to you."..I replied plaintively that I couldn't dishonor history. "Jackie,

a hammer is a hammer," to which she replied with a wink, *"That's why we call ours a mallet."* *Touché.*

Orthopedic surgeons can be entrapped in their own myths

Carpal tunnel syndrome (CTS) is common. It happens when your median nerve, which runs along the volar aspect of the forearm, the palm side into the hand, is compressed under the ligament that runs transversely across the wrist, creating the tunnel.

A common trial treatment for the condition is wearing a wrist brace. In this case, however, the common cock-up approach is counterproductive because it tenses the entrapped nerve even more. The splint should be slightly *"cocked-down" - flexed*. Regardless, many patients with CTS are prescribed the brace, which is usually bent in the opposite direction for their specific need. There are a number of old-habit-based procedures whose principle was lost. Again - *"First decide the principle. Then decide what to do about it."*

In *The History of the Peloponnesian War*, in the 4th century BCE, Thucydides wrote, *"Most people will not take pain to get at the truth of things and are much more inclined to accept the first story they hear."* Professionals are not immune. It happens many ways. It might be only four words repeated like a mantra so often it becomes its own truth, especially when someone of reputation professes it.

My first such orthopedic puzzlement persisted in me for twenty years. All through medical school and onto the wards, from so many orthopedic voices, in many places, I heard the words, "Tight hamstrings cause lordosis."

Lordosis is excessive anterior/posterior curvature of the lumbar spine. The angle of the lumbar spine with the sacrum becomes excessively acute as the normal gentle curve in the low back becomes exaggerated, as vertebrae compensate to maintain the body upright. In the process, the pelvic ring angles excessively down in front and up in back like a seesaw stuck down on one side.

Each time I would hear the phrase easily roll off so many tongues, it just didn't make sense to me. Yes, the hamstrings are tight, but why? They run from the back of the knee and attach to pelvic bones at the back half of the lever that would be the up side of the seesaw. Their tendency would be to pull the pelvic ring *down* and restore the balance and diminish the lordosis, so how could they be *responsible* for the condition? Yet, that is what was taught in medical school and onward, and so many unquestionably reputable orthopedic surgeons said it.

One afternoon at the University of California at Davis, where I completed my residency, I was working in a clinic with Dr. Dick Riggins, the Professor of the Orthopedic Surgery Department, who, later on, was Pat Hansen's surgeon, and he said it. I hit him with my quandary, and you would think I had pole-axed him. He paled and began to sweat a little, turned back and continued to work with the patient for a few minutes. When he turned back to me, he reversed the mantra almost as a question. Would I accept that lordosis *causes* tight hamstrings? And that shaking reversal of only two of four words ended the gobbledygook. As one side of the seesaw inexorably goes up, the "rope attached to it and just keeps right on tightening." It is so easy to get trapped in what, often enough repeated, becomes doctrine. Orthopedic surgeons are error-prone people, just like the rest of us.

I do not relate this to condemn but to humanize what is a crisis. Authority and responsibility are immutably grafted. While we all can become entrapped in habitual thinking that has been unwittingly passed down, and, only later, if we are fortunate, may we become aware of the error, but no absolution comes with the revelation. If we are conned that the emperor has no clothes, we cannot hide in innocent obliviousness. There is a price that must be paid.

I had other experiences at UC Davis besides Pat Hansen's that couldn't help affecting me. I've already alluded that I wanted to work closely with the surgeons when I'd arrived, but I was disappointed.

Early on, they learned that I had developed skills they hadn't - skills that succeeded

where they hadn't been able to. They knew I wanted to share, but their resentment was obvious, and I only lasted a few weeks attending their clinical sessions.

Months later, Doug Allerdice, one of the residents, who, I learned long after, didn't finish the program, asked me to critique his presentation on soft tissue injuries of the shoulder at their weekly meeting. I demurred because I didn't want to be an agent for antagonism again, but he insisted and told me it had been cleared. As the chips fell, I sat opposite the professor emeritus from Mayo Clinic, a man I had thought was quiet and of southern breeding.

When Doug began his discussion about inflammation of the *supraspinatus tendon*, a tendon on top of the shoulder, he asked me to discuss how I would treat it. I described an injection technique I had learned from Dr. Cyriax, whose injection techniques were impeccable. He used a tiny needle and very small amounts of cortisone and local anesthetic injected in a particular way.

The professor suddenly threw his head back and guffawed, sarcastically responding that he would just take a 10 cc. syringe, twenty times more than I had described, fill it with cortisone and local anesthetic and "shoot it everywhere." Virtually the entire staff was there. The air emptied from the room as I heard myself reply, "Since the tendon is only one quarter inch wide, what's all the rest for?"

He choked and sputtered that he hadn't meant to imply over-treatment, but the damage had been done to and by both of us. I was never invited back, and, during the ensuing months, his complexion would ashen whenever we'd pass in the hall. I regretted that. I wish he had invited me to dinner, and we could have talked. It never should have happened, and did as a scent of the disdain orthopedic surgeons can have for one not of their own. I've encountered it in many aromas, and none were pleasant. I very much regretted having to leave such a lingering odor, but it did have a healthy effect in the department. The arrogance had been deflated. A few days after, when the hand surgeon, who had ignored me in the past, as had the others, walked past me in the corridor, he respectfully murmured, "*Good morning, Paul.*"

Two weeks before I left the Sacramento Medical Center, the orthopedic surgical residents asked me out to dinner. I was puzzled, but, of course, I accepted. They were totally silent and glum as we ate our pizza. Near the end, one of them finally stood and said that he expected I was curious about the invitation.

He told me that all year they knew there were things I knew that they didn't, and they knew I wanted to work with them. But, "*damn it,*" he said, "*we were told that when we entered orthopedic surgery we would never have to consult outside our specialty, and what you've been doing galled us. Before you left, at least, we wanted you to know we had the guts to apologize.*" He sat down. That was total of the glum evening. Not another word was spoken. No one looked at me. No one shook my hand. I left the funereal emptiness that I wish wasn't there and went into the darkness that, for me, was only literal.

At a ward rounds, that day conducted by a newly minted surgeon who practiced in the area, at a patient's side, he casually commented with a smile that orthopedic surgery is like a garbage pail - you just had to keep picking around (emphasizing his distaste with his hand as if he were reaching into disgusting stuff) to see if you can find something that interests you. The residents didn't respond. He obviously thought I was one of them. Whatever they might have taken from it, the stench is still there.

There is one orthopedic surgeon, in particular, who chose to be a most vocal prosecutor against manipulation. Dr. Alf Nachemson's opinion is internationally quoted and considered gospel by many. From that, our initial confrontations were bloodied until our relationship happily evolved.

Because Alf is so influential, I must name him.¹³¹ Alf's ill-considered statements concerning manipulation and thermography have caused inordinate damage because he elected to extend his authority beyond his understanding.

¹³¹ In my defense, I sent Alf this manuscript years ago for his comments, and he sent me a kind letter because now we are friends, but he chose not to read it.

Especially since he is so reputable, he has commensurately increased responsibility. I had heard him speak at the first meeting on The Research Status of Manipulation¹³² at the National Institute for Neurological Disease (NINDS) in Washington, D.C., but our first personal encounter was a short time later, in 1978, at a meeting in Long Beach, California when the same subject was discussed. He was sitting a few rows in front of me when he stood and emphatically declared, *"We got rid of bleeding patients, and it's about time we got rid of manipulation, too!"*

Then I was on my feet, my response dipped in anger and frustration: *"Medicine never got rid of bleeding patients!"* I emphasized that every time we put tourniquets on the extremities of someone in sudden congestive heart failure (to trap blood in the extremities), or bled a patient with polycythemia (a condition in which too much blood is manufactured), every time a spontaneous nose bleed occurs in an out-of-control hypertensive patient (which could possibly reduce systemic blood pressure), the patient is being bled. My final thrust was that instead of getting rid of bleeding patients, *we had learned to use it, and that we have the same obligation with manipulation!* Alf had no response because there was none, and he rushed off as soon as the session ended.

A short time later, we both were speakers at a UCLA orthopedic surgical meeting at Harbor General Hospital/UCLA Medical Center, in Torrance, California, where I had interned about twenty years before. He tried the same thing, and again I had to bloody him.

In February 1979, Alf was on a program concerning low back pain, in Reno, Nevada that was conducted by Dr. Wally Treanor, one of the great and passionate physiatrists who, along with Dr. Herman Flax, were the only orthopaedic medicine minded role models I found in my own specialty. As I entered our hotel restaurant for breakfast, Alf was seated across the room. His eyes widened, pupils-dilated, as he recognized him, but by the end of the day we were friendly, and he most generously invited me to be his guest at the Sixth Annual Meeting of the

¹³² At the second meeting, which convened thirty years later, the moderator and I were the only ones who had also been at the first.

International Society for the Study of the Lumbar Spine, in Gothenberg, Sweden, where he was inaugurated president that year. In his address, Alf mentioned that manipulation needed to be better researched, and I was gratified. We last met outside an AAOS meeting in Las Vegas. We saw each other from a distance, and as we approached it was big smiles all the way, and I was grateful, and it was good.

Alf later advocated ergonomically oriented "back schools," teaching people how to avoid accidents by using proper techniques in a safer work environment. It is certainly a wise adjunct but is a fundamental of another order. In some studies (and disputed in others), training people how to walk, stand, stabilize, sit and work with postural efficiency *statistically* diminishes *subsequent* injury rates. *Regardless of whether or not that is correct, procedurally sending someone in pain - with joint dysfunction - to school - as total therapy - because of statistics, is a fullest expression of the Fundamental Flaw.* One whole human being is in pain. That individual must be the recipient of individualized therapeutic decisions. *I have never met a patient who would prefer to try to learn to live with a rock in his shoe if the rock could be removed.*

A major disadvantage of therapies that ignore anatomical reality is that they tend to reinforce the preconception that the back works like a spring, is a unitary structure. People can improve from general functional activity, like exercise, and sometimes pain is relieved. An entire program at the University of Florida is based on exercise and stretching, but it can't replace hands-on when it is needed. It would have been ridiculous to send an Ozzie Hansen or a Norm Cordle to school, yet that is exactly what was being done.

When the practical implications of the back's real movements are not part of clinicians' thinking habit, therapeutic intent easily sinks to absurdity. The status of the segmental mechanism and its discrete predisposition to injury must be in the first order of diagnostic thinking. Everything else without it is Fundamental Flaw, and Alf's (previous) highly critical conclusions concerning manipulation continue to reverberate. I hope he eventually fully converted. As I stated, Deyo quotes him for his authority.

Incidentally, I sent Alf an early copy of this manuscript. He responded with a letter congratulating me on writing my "opus magnum," but he stated he would not be able to read it because of his many travels and teaching schedule.

At a later time, I returned to Sweden as a visiting professor at the University of Uppsala. During one of the sessions, I raised the possibility of dysfunction occurring within the small bones of the wrist when the bones of the forearm had been fractured. If it happens and is not corrected before the cast is applied, unnecessary stiffness and pain can result, which will require prolonged rehabilitation.

The chairman of orthopedic surgery was sitting in the front row. He stood, turned to me and matter-of-factly responded that such things don't happen. When I asked him why he would say that, he responded relentlessly, "*If they did, we'd see them!*" Of course, that is not true. The condition doesn't come with neon signs. It isn't self-evident. If a condition is not specifically considered, not only can it not be diagnosed, but, as in his mind-set, "it simply can't exist." But it does. Obviously, he considered all subsequent prolonged stiffness of the wrist as a self-evident consequence of the natural history of the fracture. When he assumed his seat, the people who had already been exposed to me smiled with me. Maintaining "logic-tight" compartments in the mind is one of the mind's strongest defenses. We'd likely go insane without it. When it is powerful in the medical mind, however, it refuses the flow of what is sometimes essential information. Then, the doctor never "gets it." Irrationally separating treatments, whether of legs or hands, for athletes and the rest of us - or failure to distinguish good medicine, as well as good surgery from bad - is not good.

All soft-tissue injuries that are diagnosable and treatable by manipulative means - the aches and pains which, while not causing major disability, certainly impair quality of life - need to become part of habitual standard care.

The increasing popularity of sports medicine will hopefully assist to help resolve these problems. Again, what is good for an athlete is, with few exceptions, good for everyone. If

performance is adversely affected by “small” changes, how can the same so-called soft tissue type injuries be so casually dismissed in the general population?

The overbearing issue is that orthopedic surgery is overwhelmingly interested in its surgeries. It is a specialty of surgeons with surgical personalities. Its central fascination is the application of high tech instrumentation. The "hardware" exhibited at its annual meetings are all impressive, all are expensive, and all are highly profitable. With such dazzle, mundane hand therapies cannot successfully compete for a surgeon's attention, and understandably so.

Under any circumstance, so long as the manipulative approach remains outside orthopedic surgery's respectful interest, it will likely remain suspect to them. Even if they only learn to appreciate orthopaedic *medical* principles, progress will assuredly be made - and every one of its subspecialties will be considerably improved by it.

Orthopaedic surgery cannot legitimately have it both ways. It cannot assume allopathic authority in all things orthopedic and, at the same time, denigrate what is not within its area of interest.

“MedScape” is a popular internet medical forum. Over a few months, I'd submitted some comments to the orthopaedic surgical section. Someone was impressed. I was invited to write a weekly contribution, and a pleasant year passed, during which I received a satisfying number of gratifying responses. It was during that time that this story will unfold, but the day eventually came when an educational program was published that featured, as recommended practice, issues that this book categorically refutes. I had to respond, and though I diplomatically didn't name the program, it had to be obvious to an inquiring mind. That ended my relationship with “MedScape Orthopaedics,” which didn't surprise me, but I've been called The White Knight, and I have a reputation to maintain. I still continue to receive complimentary correspondence from doctors who read my contributions.

The story now returns to the days when I was still an active contributor. I received a friendly phone call from an orthopedic surgeon who told me he is the editor of a book titled

Musculoskeletal Medicine, that had been published in 2003 under the auspices of the American Academy of Orthopaedic Surgeons, the American Academy of Family Physicians, and the American Academy of Pediatrics. He was pleased to tell me that it represents his specialty's contribution to what I call orthopaedic medicine. He was anxious that I understand that orthopedic surgery is, in fact, deeply involved in this work. He sent me a copy with the request that I respond with a comment.

He also told me that one of his associates was in Israel and wanted to meet me. We spoke and I scheduled time to drive into Jerusalem one evening to spend some time with him.

The book is shiny hard-cover, hefty, and very attractive- 490 slippery pages - with about sixty contributors. I opened it, perusing its contents, looking for its guts.

I rarely use the word, "unbelievable." I don't like it. It's too common, too loose. In usual usage, I think a word like "incredible" is more descriptive of the intent, but I'll use "unbelievable" here.

The entire examination of the back - neck and low back - nothing on the thoracic spine - was on only two facing pages, mostly covered by seven photographs of the gross movements of the neck and two of the low back demonstrating flexion and extension. The appended words could come out of a grammar school primer.

Example: "Neck flexion and extension - What to do: With the patient standing, align the neck with the trunk **(A)**. Ask the patient to flex the neck by bending the head forward and touching the chin to the chest **(B)**. Then ask the patient to extend the neck by looking up at the ceiling **(C)**..." [Of course, then, it's impossible to do the examination outdoors.]

The letters were there: A, B, and C, but the entire book didn't have the foggiest hint of the ABC's of a professional, reality examination. I was numb. [DEMO]

I emailed him that the book was like a cruise ship without an engine room.

I drove into Jerusalem on the night of the appointment. It was one of those rare times when snow was falling. It was foolish to be on the road, and I just missed being in two

vehicular accidents, but I was obligated. When I arrived, I couldn't find the address on the street. I called him. There was no answer. I drove home.

Is it conceivable for there to be a more explicit declaration of the

Fundamental Flaw?

CHAPTER TWENTY-EIGHT

PHYSICAL MEDICINE & REHABILITATION –

A MIXED BREED

“Medicine is concerned with all that is constant and grave in the affairs of men.”

Anon

- **PM&R’s history**
- **The role of the physiatrist**
- **My history with the Academy**

From the website of the Academy of Physical Medicine & Rehabilitation (PM&R) -
“**PM&R physicians** are nerve, muscle, bone and brain experts who treat injury or illness non-surgically to decrease pain and restore function.”

The official definition only mildly suggests the possibility of curing the patient.

PMR specialists are called physiatrists. Increasingly now, they are among the physicians you may see because of your pain problems. Some are completing fellowships in pain management, sports medicine, and other disciplines related to musculoskeletal conditions, but the Fundamental Flaw remains untouched. There is no systematic manipulative training in the one specialty that theoretically could balance orthopedic surgery.

Discussing the specialty I temporarily became a member of opens a mountain of memories that influence my thinking about how to accomplish here what I desire for you. *Release From Pain’s* purposes flow in a few currents, the first, to help you navigate the reality of the health care system for your own needs. Another purpose is not to lose touch with the crucial question - *why isn’t orthopaedic medicine a dominant influence in medicine?* Herein, in this chapter, is one more answer in the tangled web that lies in PM&R.

My efforts were the first wave to break the bastion’s barriers to restructure its foundation. I tried for eleven years. I didn’t succeed. I left the Academy in 1985 after the final,

cynical betrayal, while eventually being credited with having made it easier for others who followed, though they didn't go far enough.

When Dr. Ian McLean, a complete gentleman, became aware of what I was attempting, he sat with me at an Academy lunch and he told me candidly that, if I insisted on persisting, I would live a life of frustration. He became president in 1993. I was gratified to read his inaugural speech in which he declared the sunset of the old guard. He said that physiatry's future rested with its younger members.

Ideally, there should never have been the need for battle. What I proposed is self-evidently essential to a specialty that has responsibility for the treatment of musculoskeletal injury. But PM&R did not have the ingredients to be receptive because it was not historically comprised of doctors who *sought*, but largely of doctors compelled to try to *hide*. They were genetically incapable of walking into the middle of an unfamiliar room and confidently talking medicine with a mainstream doctor.

In categorical contrast to orthopedic surgery, which evolved with men whose nature's exuded the acclimation of assertiveness, most who formed PM&R lacked any semblance of that attribute. For decades, including when I began my residency in the specialty in 1972, paranoia haunted its halls.

How I started my residency at USC after twelve years in general practice is another story. I had been there only a few weeks, massively enjoying my prospect of specializing while largely unaware of the underside of the specialty that I am alluding to here. I was sitting writing a report when a PT came over and asked me a question. To me, it was an incidental moment between colleagues, and I was able to answer it. He left, and I returned to my writing when I was suddenly struck so forcefully on my back it almost drove me to the desk top. The professor was shouting in my ear. He was ecstatic! He was exploding with pride! "*Boy, you really told him! You really did! You showed him we know something! Boy, that was great...*" He went on and on before leaving gleefully. I was incredulous. What was going on?

While some important events happened during that year, the department overall was the personification of the paranoia. Dr. Elizabeth Austin, who recruited me, suddenly left. The new department chairman was Rene Cailliet. He had fame and was known for his charm. It was his facade. He was a poor clinician and, early on, so disgraced the department in front of Medical Grand Rounds, the premier medical meeting each week, that the effort for the department's finally having an inpatient service permanently vanished. From the first, years ago, it was only an outpatient service.

Because I was a witness to what he had done, and for a number of other reasons, he began to hate me. The result was an intense, escalating jealousy. He knew that I am genuine. In retrospect, for my great eventual good, he fired me at the end of my first year and exerted himself for years trying to destroy me. The residency closed a few years after I left, but the last resident who completed the program told me that when he arrived he was told he could do virtually whatever he wanted to (formal training was essentially non-existent), but there was one thing he must never do! He must never mention the name *Goodley*.

I couldn't get another residency in Southern California. Cailliet was too powerful. A year later, I was told there was a residency available at the University of California at Davis, in Sacramento, the capitol of California in Northern California.

When I was interviewed, Cailliet had already gotten to them. Dr. William Fowler, bless him, chairman of the department, started off that I'd been fired from my first year of residency, then fired from the Department of Emergency Medicine. He'd heard lots of bad things about me. What was I doing there? From such a barrage, I thought my career as a specialist was over. A Viking dies with his sword in his hand. I went right back at him with facts and left the meeting dejected. Shortly after, I was told not to lose heart, that they'd been impressed with how I'd responded.

The fullness of the rest of the story is sweetest, but not for here. I had to sign a letter that my residency was day to day. If I did anything untoward, such as acupuncture or manipulation,

or if I moonlighted in that area, I would be immediately terminated. My family stayed in Southern California. I returned for the weekend every three weeks to see patients in my minuscule office, fly to El Centro, near the Mexican border, fly back, see more patients, and rush to the airport for the last Sunday flight back to Sacramento. (From this distance in time, that encapsulation makes for an exciting synopsis.)

After a few months, a man came into the clinic in considerable pain. After I examined him, I went to Dr. Fowler's office and told him about the patient's problem. When he asked me why I wasn't treating him, I reminded him about the paper I had to sign when I arrived. He had it in his hands in an instant and was tearing it up as he spoke. He told me that was when I arrived. Now he knew me and gave me carte blanche for as long as I would be there. It became one of the great clinical years of my life. Except for my ongoing conflicts with the orthopedic surgeons, which was my usual experience everywhere else, I had the run of the hospital and general respect. I was able to demonstrate an appropriate approach to orthopaedic medical problems, and it was generally admired. Bill's letter of commendation to me when I left is one of my treasures.

PM&R vaguely began during the early 1930's. In 1938, a diminutive group established itself with the name The Society of Physical Therapy Physicians. Their name was sadly accurate and would feed its ghosts, and increasingly afflict them over the ensuing decades. There were already physical therapists (PT's), of course, and they obviously were not medical doctors. The doctors were essentially administrators in the hospital departments where PT's were employed. Those early doctors were rarely skilled clinicians. Too often, they were only the unavoidable medical link that legalized PT activity. Prescriptions had to be written.

Bearing a burden of self-perceived - and real inferiority - too many of them sought solace and some sort of self-respect by attempting to conceive the therapists as robotic technicians totally submissive to them.

It was the time of decades when orders were reflexively written teutonically, for instance, for ultrasound: *Ultrasound 1.5 Watts for 7 minutes; cervical traction, 12 lbs for 15 minutes, tid* (three times a day), or whatever, as if the numbers came immutably from a Higher Source.

During those decades, PT's passively did as they were told, legitimately resenting their relegation to laborer status when most of them were considerably more skilled than their "masters," who were known to not even visit the PT department and study their patients while they were being treated. The reports they received, mostly on procedural paper forms, were their acceptable access to the patient's "progress."

PT's had their own issues with how they were being trained, but as they resolved them, the bitter seeds of bondage eventually bore their fruit. Beginning in the '70's, the simmering rage erupted in self-righteous revolt. The physiatric response for a few decades was to perceive itself, *a medical specialty*, in a literal life and death struggle - *with physical therapy*! Incredible! I entered PM&R as it was happening.

PM&R's impetus to specialty came immediately after World War II, when commanders of military hospitals received orders to detach one of their medical officers for reassignment to New York to care for amputees. The transferees were not the commanders' favorite people, and it was they who became the founders of PM&R. For years, they passed its presidency among themselves. While there were some extraordinary physicians among them, it was a matter of numbers, and the sum was weak. The general medical community didn't even view them as shadows. The name is conjoined because they couldn't even agree on a name.

PM&R did not thrive and became a, "What's that?" specialty as in,

"What do you do?"

"I'm a physiatrist."

"What's that?"

"A specialist in Physical Medicine and Rehabilitation."

“What’s that?”

When my children were in grade school, one of them was penalized on her paper because the teacher insisted she had misspelled the name of her father's specialty. Obviously she was fixated on "psychiatrist."

In February 1993, the editorial of *The Physiatrist* expressed the public puzzlement:

“So Just what IS a Physiatrist? Or, AS MY MOTHER STILL ASKS after 23 years, 'Just what is it you do, dear?

My mother has no trouble comprehending what my husband, an orthopedist does, but she, as well as many of our physician colleagues, patients, legislators, and insurers, has no idea what a physiatrist is or what the field of Physical Medicine and Rehabilitation encompasses..."

I relate all this in response to the crucial question: if PM&R is a non-surgical specialty that is responsible to treat injury¹³³, why didn't it rise to the task? I've answered that question in part.

Another aspect is that physiatrists are trained in electrodiagnostic procedures - electromyography. Some practitioners are superbly competent. Many physiatrists largely derive their incomes from performing the tests on patients referred by others. Some neurologists are trained in the procedures, as well. There is competition. Orthopedic surgeons refer a lot of tests. Offending them in any way would threaten to sever the chain of referrals. (As I have too often had to experience it, they resented my treating “their” patients.) The physiatrists weren't equipped with competence, anyway, but the issue was usually resolved with fearful genuflection, which, of course, cast further disrespect on PM&R, especially in the West, where many rehabilitation institutions, including Rancho Los Amigos, refused to have them.

I was in the fifth class at UCLA Medical School. Initially, there was a physiatrist on the

¹³³ PM&R encompasses many disciplines besides musculoskeletal conditions, such as burn rehab, brain and spinal cord injury, pediatric rehab.. It's a long list. The core training of the residency must therefore touch on all of them. There is insufficient time to focus on essential skills that need to begin in medical school, which, of course, must have skilled instructors.

faculty. He didn't have the wherewithal to achieve respect, and he was gone before I arrived. When I read the school's list of specialties that I might consider, PM&R wasn't on it. For decades, applications for training were largely from foreign medical school graduates.

Bill Fowler became president of the Academy the year after I left his service. He knew what I wanted to do, and could, and he appointed me to form a special committee. He made only one request - that I not embarrass him. I told him I'd die first, and I meant it. What happened before I left the Academy involves far too much for this catharsis, but a few more stories will garnish my argument:

Bill's invitation became the impetus for what became the SIGs (Special Interest Groups). The Board's admonition was that only a few major ones would be approved. I immediately gathered a group, and ours was the first. We named it *Orthopaedic Medicine*. It got the immediate attention of the old guard. Decades of slave mentality, however self-imposed, don't relish any homage to the orthopedic surgeons they crawled before. They pledged their full cooperation if we would change the name. We did - to *Musculoskeletal Medicine*. Score: cooperation, 1; reciprocation, 0. They lied - and it was worse. To assure we were weakened, they violated the Board's edict and splintered our group into small categories despite my objections. Then they scheduled the various meetings at the same time, far from each other.

We were *allowed to* put on a few programs. At the Academy meeting in Los Angeles in 1983, we taught the first course of hands-on diagnostic and manipulative techniques. The registration immediately over-filled. A mass of members who weren't registered literally crashed through the door. It became an afternoon of wall-to-wall teaching.

I didn't know we would have a "monitor" in the room. They chose Dr. Randall Braddom. I just Googled him. He's matured and has a pleasant smile. He didn't then. In fact, I never saw him smile. He reminded me then of the personification of a disappointed Sunday school teacher. He never left his seat on the side of the podium where I had a clinical table set up and taught the procedures using a model. For the rest of the afternoon, whenever I glanced at

him, his face was pale, his mouth agog, his eyes glazed. He'd never seen anything like what we were doing. On my part, I was in my element, and the room was electric.

I devised a plan for the participants to study in groups of three. One would be the patient, one the clinician, and the third would concentrate on my demonstration and then coach the table. Then they would rotate. It was so busy, we desperately needed more instructors to circulate among the participants, but there weren't enough, we thought, until the hidden osteopaths came out of the closet, helped, but then disappeared as if they hadn't been. But they are there.

The next morning, when I came down for the meetings, a group of the younger members rushed to me clapping and shouting "*Bravo!*" They were starving for a place in the midstream, and they knew where it is. Randy Braddom wasn't among them. When I saw him, overnight, his face had become narrow-eyed flint.

Because of the massive response, I was invited to present the concept at the next annual meeting. An entire morning of the general session was scheduled. Joe Honet, Chair at the University of Michigan, George Waylonis, on the faculty at Ohio State University, and I would each have an hour.

A friend from my pre-med days (I mention him in Chapter One) was in the movie industry. He'd moved to Ashland, Oregon and had a studio. I told him what I needed, and he invited me to make a video. It took three days, and it was good. There was high praise when it was over, and Joe and George asked if they could have a copy to train their residents. Mark Twain once said they he could live three months on a good compliment. Their request was one of my few sustenances from the Academy.

When I applied to teach the next course, one of "them" complained "Paul, we *let* you put on a program. Why won't you just wait until we *let* you again?" He couldn't say it to me eye-to-eye, but only as he hurried away without looking at me, at all.

At an Academy meeting in Atlanta, the general session business meeting in the huge

banquet hall was packed. Joe Honet was president that year. One of the members stood and declared that we should go on record that all chiropractors do is quackery. Rage slowly started to percolate in me. I was the “official” photographer that year, and I was standing up front. I raised my hand, and Joe acknowledged me. The rage singed every word erupting from me. I synopsisized what you now know, and I ended that our specialty was derelict for its apathy. Bill Fowler, sitting close to the front, “whooshed.” The only sound that followed was the rush of air as people began to breathe again. No one approached me afterwards.

There was a once-upon-a-time a few years before when I thought that, finally, I might break through. It happened totally unexpectedly. The Academy was meeting in Houston, and our big social was a night of Texas rodeo. We rented the arena and filled the stands of likely the largest rodeo in Texas.

I brought my beloved Leicas, two bodies around my neck, six lenses and a strobe. I sat with some friends in the bottom row at the middle of the arena where, on both sides, were the only breaks in the netting that ascended from the rail up to the rafters. I thought it would be a good place to sit because I wouldn’t have to photographically contend with the netting.

Brahma bulls are dangerous. Monty Roberts writes that horses enjoy the bucking, but bulls are pure wild. I wanted to get some shots of them breaking from the chute, so I went all the way down the narrow walkway close by the gates and worked the lens through a hole in the netting.

One of the first riders out was a lean, good-looking teen-ager of about sixteen. He rode well, but suddenly everything went terribly wrong. He wasn’t able to release his hand from the strap, and every time the bull bucked, his hump viciously smashed the boy’s chest like a jackhammer.

There was a collective gasp from well over the thousand all around the stands, followed by moans and a few screams as the pummeling persisted. Finally, he released himself and slid to the ground. He stood there morgue gray and dazed among the cowboys who had run into the

arena and then just stood there looking at him. He was a Texan boy among Texan men, and his beginning manhood was on the line. Left on his own, he just had to stand. there.

I looked all around the arena and realized incredulously that no one was moving toward the open rail areas to enter the arena and care for the kid. It was disheartening. Deep inside, they were meek, not apathetic, but the finality was that they remained limp, just sat numb - awaiting the fate of the gladiator.

He had to be treated for shock *before* he collapsed, when the situation can really deteriorate. It's jeopardy time when victims are victimized from "magical" thinking that "someone else" will take care of them. Fainting in a crowded elevator and unable to fall, or while sitting at a table and just slumping onto it, can become a line in an obituary. Anyone in shock has to get flat fast. As I hustled back, my cameras swinging, I saw his condition deteriorating while no one was up and moving.

Unexpected events open a short special space in time that exposes an essence, at least as it is at that time. A right gesture – a reaching out - an apology before hurtful words have hardly left the lips - something - or nothing. Whatever, it's an unmistakable message. The special time was passed. I was finally at the opening, got out of my camera equipment climbed over the rail and ran.

The boy and all around him were still standing there, still silently frozen looking at each other. The closer I got, the worse he looked. His eyes were dull, and he was sweating some. I supported him and checked his pulse.

My arrival jolted them. One of the cowboys, a large muscular man, came at me barking angrily for me to get the hell out of there. I whirled, my finger in his face, "*Take your Texas macho and shove it up your ass! This kid's hurt! I'm a doctor!*" He backed off, and I relaxed a little and asked if a family member was there. A quiet man with about the same slim build came to the boy's side, and someone said he was his father. I never heard him utter a word. He stood there respectfully as I explained to him what was happening and how shock can be progressive

and things can go bad real fast. I asked them to trust me, and we took the boy back under the scaffolding. He did what I asked and lay down in the dirt.

Surprisingly, there was no medical service. No one else came. After a while, he stabilized, and I urged his father to immediately take his son to the hospital

Everything in the arena had stopped. The only way back out was the way I came, across the middle of the arena. The allegory about the “middle in the room” that the old physiatrists feared was, out-of-nowhere, bared naked. For eight years, I had pleaded with the Academy to leave behind being a sideline specialty, claim orthopaedic medicine and move straight into medicine’s midstream. Now fate had dramatically personified it and presaged my Atlanta condemnation of the Academy.

I tried to generate some hope in me, in retrospect, fruitlessly, that their watching me “walking the walk” might ignite in them just enough inspiration that they would move the pillars a few inches. I fantasized that now they would listen, but the fantasy dissipated only a little later than the dust settled in the arena. Some smiled at me initially. One looked at me sheepishly and commented that I had done what they all knew they should have. Another, who had taken his Board exams with me and knew the politics, had just previously offered me some advice. “If you aren’t a revolutionary before you’re in your twenties, you don’t have a heart. If you’re a revolutionary after your twenties, you don’t have a head.” He smiled and surrendered. All he said was, “I saw you running.” When we left the arena, most shied away from me. By the next day, the self-repair work of the night had been done. The sullen expressions among the controllers let me know I would not be forgiven.

The "Physical" of PMR is expanding in thinking and procedures that might eventually lead to balance the aspect of the specialty that deals with musculoskeletal conditions. The other sub-specialties, such as spinal cord injury, head injury, etc., have no direct stake or responsibility in orthopaedic medicine, in this multi-fragmented specialty. A number of new members have headed towards pain management, others to “sports medicine.” If, on their own,

they are on their journey towards orthopaedic medical skills, it will be a blessing.

I don't know if I've helped you here except to subliminally suggest that there are physiatrists out there who are skilled. I hope that maybe this chapter will be a goad for some of them.

In the scheme of all of this, I recently did a consultation on a new patient - an intelligent, articulate, handsome, twenty-one year old, left-handed young man who has been in Israel for about seven months. He's a Brooklyn boy, the same as me.

He was playing baseball two years ago. He'd lost his coordination a bit as he swung the bat and felt something slight happen in left side of his lower neck. He continued playing and thought nothing of it, but, after a few weeks, symptoms slowly progressed and caused an ache in his left upper shoulder at the angle of the neck. He was referred to an orthopedic surgeon who took x-rays, repeated them and told him nothing was wrong. Because he had pain, he was given a prescription for strong anti-inflammatory pills. They were temporarily relieving but resolved nothing. Another victim of the common con, the young man demanded an *MRI*. In his circumstances, the odds of its revealing a significant abnormality is one in thousands. He lost, but contributed to the legendary "cost" of medical care.

He was sent to a physical therapist. The treatment was mostly stretching and exercises that increased his pain, which continued its march and migrated into his right shoulder area, then back into his mid-neck. He now has to increasingly hold his head with his hands or rest it on his desk because it becomes too painful to keep erect. *Two years!*

On my examination, he now even has some abnormalities in his tendon reflexes, an unusual neurological manifestation of an unattended dysfunction. From what began as a minor incident in his neck, which had not been diagnosed until today, the injury is creeping into his nervous system.

CHAPTER TWENTY-NINE

PHYSICAL THERAPY

Every science begins as philosophy and ends as art.

Will Durant

- **Physical Therapy in practice**
- **The evolution of training**
- **The legal issues of P.T.'s manipulating**
- **The physical therapy revolt**
- **Practical issues**

“Physical Therapy” (PT) is not a generic term, like cottage cheese. When I am told someone had “it,” I need specifics before I can relate to the statement. A good hands-on therapist, who individually evaluates and alters therapy accordingly, is a blessing. Prescriptive, repetitive, ritualistic “*shake 'em, bake 'em and ultra-violate 'em,*” is also called physical therapy. PT is not exempt from the proverbial economic imperative. Maria, whose story is in Chapter Twelve, received ineffectual PT for an entire year in a medical university setting.

Only a few decades ago, PT academicians, instead of well-attending to the craft of PT, were infatuated with proving PT’s “professionalism” by predominantly teaching the manipulation of electronic dials to. There is better balance now, though manipulative skills are not usually included. There are a number of reasons for that.

First, like PM&R, PT training requires many focuses, such as stroke care, pediatrics, arthritis, burn care, as well as orthopedics. Time has to be allotted to all of them in the curricula. PT evolved within traditional medicine. Its formal origins began in the late 19th century and became established in the U.S. during WWI. Its treatments were traditional. As I previously

described, PT subservience became more a forced issue when PM&R became a specialty immediately after WWII.

When the essentiality of manipulative skills was realized by some, groups began to seek training and promptly conflicted with chiropractic, which jealously holds exclusive rights within its scope of practice.¹³⁴ The issue eventually became an ongoing series of semantics-loaded skirmishes and court battles, with PT contending that it was licensed to perform “passive movement.” Some P.T.'s avoided the legal challenge by becoming chiropractors, as well. Incidentally, chiropractors cannot perform “Physical Therapy.” In California, they can only advertise that they use physical therapy “modalities.” Each state has its own laws. Additionally, in the real world, anyone who administers what is billed as “physical therapy” is not necessarily licensed.

With the founding of the International Federation of Orthopaedic Manual Therapists (IFOMT) in the Canary Islands in 1972, during a month-long training session attended by about forty U.S. PT's, a foundation was established, from which the relatively small number of PT's who were skilled in the manipulative approaches began to increase.¹³⁵

Somewhere in the '70's, PT commenced legal actions in various states to elevate their professional status, even to being able to see patients independently. At the same time, they strengthened their academic credentials, almost all obtaining Masters degrees, some Doctorates.

There are jurisdictions where PT's are still obligated to comply with a medical prescription, so long as it is safe, and, as they increasingly asserted themselves, blind-binding “prescriptions” became a relic. The effective relationship between physician and PT must be based on mutual professional respect focused on each patient's needs. No question, good P.T.'s know much more about their art than do most medical doctors, and they are superior to

¹³⁴ Except for physicians who can legally perform any acts they consider are of value to their patients.

¹³⁵ A large number of PT's and some physicians from Europe attended. I was the only physician from the U.S. That is where I first encountered the intensity of the PT's rebellion within the U.S. participants. Elements of hostility towards me, despite my long-time support for them, occasionally slipped in and became a clear statement.

chiropractors for conditioning and stretching muscles.

My experience with training institutional PT's, who are obligatorily required to learn manipulative techniques, and has been unsatisfactory. Manipulation is a special skill. It takes work, driven by desire to learn. Like any other general population, PT's' attitudes and aptitudes for any particular skill vary considerably. Some want to learn. Others don't.

On your part, I advise that if you are being treated and you sense that each treatment is repetitive, that there is a failure of the practitioner to observe and adjust, it's time to suspect that your required individualization is not being attended. You have the responsibility to assert what you perceive is in your interests. Remaining passive is the trough of bitterness. That is a general rule that emerges here. It applies to any care that you may accept from any source.

CHAPTER THIRTY

QUESTIONS YOU MUST ASK ABOUT YOUR CARE

Which profession is more likely to help you?

Whom can you trust?

Which therapies are appropriate?

Excellent and essential questions. The best answers I know are the content of this book. If I have succeeded, then you now understand how the health care world today is a confusing conglomerate. **ONLY YOUR KNOWLEDGE CAN PROTECT YOU. BE BROADLY EDUCATED IN THESE PRINCIPLES SO THAT YOU WILL BE ABLE TO APPLY THEM TO YOUR CIRCUMSTANCE. *ONLY YOU MUST BE ULTIMATELY RESPONSIBLE FOR THE CARE YOU RECEIVE.***

However much it is desired, this book cannot provide you with individually reliable answers to all your particular problems.

- **AS AN OVERALL RULE, during a course of treatment, if you can habitually predict what is going to be done to you, and your improvement is not notable, you might want to think about if you are really being thought about. It takes ongoing assessment to know what to do, or not, according to your changing circumstances.**
- **Do you feel as if you are a passive piece on the table, as if on an assembly line?**
- **Are you sequentially improving, or do you feel good only during the "treatment" session and, perhaps, for a little longer, week after week?**

- **Is there an understandable reason for what is being done? Is it a mutual decision if you are “treading water” for a time?**
- **What if a treatment causes increased pain? Is that reasonable? Is it attended to? If it was from a therapist, was your doctor notified?**
- **Can your clinician (particularly your physical therapist), shift the therapy, or area, if something is happening that might require it? In other words, is there a consultation relationship between your doctor and physical therapist?**
- **You might want to look at the documentation prepared on you. In fact, it would be a good idea. *Does it truly relate what you are experiencing?***
- **IN SUMMARY, *is your therapy honestly valuable to you?***

I would not *necessarily* judge by whether your care is combined with ancillaries, like in-clinic exercise. It may have some value, but many injuries have been compounded when exercise is the primary treatment. Physical therapists are sometimes “jocks” who push you. Under any circumstance, exercise should not be disguised as medical care for someone else to pay for. Exercise should largely be your responsibility.

CHAPTER THIRTY-ONE

POLYAXIAL CERVICAL TRACTION

AND A GOODLEY STRETCH

NEW PRINCIPLES

Do not be angry with me if I tell you the truth.

Socrates

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- **One of the neck's major functions**
- **How the neck does what it does**
- **A new concept in cervical traction**
- **The controversy of traction**
- **Dr. Sayre and his sling**
- **The exploitation**
- **The infamous “threshold force”**
- **The Goodley Polyaxial Cervical Traction/Mobilizer System**
- **A Goodley Stretch**
- **Goodley Stretches**

If your neck is injured, you might receive cervical traction. There are times that it should not be used, but when it is, most often it is paradoxically performed as a hazardous ritual because the clarity of the traction concept has been lost. The equipment that became the standard is neither sound in principle nor safe in practice. It offers no relationship to cervical biomechanics, and its acceptance is another evidence of the wounds of the Fundamental Flaw. I will relate the story shortly. The crux is whether a device truly offers *cervical* traction - traction *onto* the neck, and in a manner that is consistent with need, and is safe.

HOW THE NECK WORKS

Your neck relinquishes stability for mobility, which inherently makes it more liable to injury. One of its major functions is to provide the sense organs in your head an intuitive

pivoting platform, so they may find assured reference to the horizon. Only then, may you successfully negotiate your environment. To accomplish the neck's multiple purposes, a myriad of complex reflexes throughout the muscle and tendon fibers must harmonize and stabilize tonal balance and synchronization every instant you are upright. Ordinarily, the ongoing adjustments in tension are imperceptible unless injury or excessive stress disrupts their precision. When that happens, the reflex disruption causes dyscoordinate nerve irritability that begins the cascade of spasm and radiating pain. The "swamp effect" discussed in chapter six comes into play and further impairs tissue maintenance. When the delicate tissues actually tear, the problems compound even further. The longer that reflex irritability and tissue dyscoordination persist, the more chronicity is encouraged.

MY CONCEPT OF TRACTION

Sound traction's primary purpose is to stabilize the damaged tissues with gentle and assured alignment and rest. The unchallenged reflexes begin to rest and repair, and the quiet soothes the spasm. Scarring and contracture are minimized, and healing is enhanced. With the restoration of tissue and tone, strengthening is beneficial and homeostasis¹³⁶ restored.

If gentle manual traction relieves, timely traction may be essential, and while it is not often total therapy, often enough, it is the essential adjunct that facilitates healing. Small force - *as little as one pound!* - properly placed, may be all that is needed to shut off the "spasm switch." To accomplish that, cervical traction needs to be applicable anywhere along your neck's linkage. The force, duration, and frequency of successful traction need to be variable according to need. *Only the neck knows.*

THE CONTROVERSY

The device that feeds the controversy and massively exposes the Fundamental Flaw is

¹³⁶ The normal, balanced activity of all related tissues

called the *Sayre sling*. If you have had traction, it is probably what was used. Its harness circles under the chin and the back of the head, thereby pulling only the *head*. Likely, the tension would have prevented you from opening your mouth.

Such traction obviously has no *direct* influence on your neck since all the force is transmitted non-specifically *into* it, where it indiscriminately follows lines of least resistance, regardless of where therapy may be needed. Sayre-type traction is usually provided sitting, so the neck cannot reflexively relax. From such incompatibilities, injuries compound.

The Sayre-type chinstrap obviously delivers its force through the temporomandibular joints (TMJs) and their associated tissues, vital structures that are especially susceptible to injury. Sayre-type traction is historically the second most common cause of malpractice suits because of TMJ injuries.

One of the Sayre sling's heaviest disadvantages is that it facilitates the convenient fantasy that the spine moves as if it were a *spring*, rather than how its moving parts are constructed - a linkage of intricately articulating, neurologically mediated joints, each of which contributes to the *appearance of* unitary motion.

The Sayre sling was never intended for cervical traction!

Dr. Sayre was an orthopedic surgeon in the early 1900's. He designed the sling for use in his study of *thoracic* scoliosis, curvature of the spine. Old photos show him outside his office by the side of a high tripod, like an uncovered teepee. The patient would stand under it with Dr. Sayre's sling on. A pulley arrangement would hoist his body sufficiently so that the spinal deformity straightened. Then his chest would be wrapped in plaster and the sling promptly removed.

With the advent of the automobile, neck injuries increased. "Whiplash" became a household word, and over time, its treatment became very, very big business. The painful rub is

that traditionalism is untrained to knowledgeably treat it. *It is reported that the overall cost of this injury is over \$29 billion per year in the United States alone.*¹³⁷

With such a rush of injuries in a Fundamental Flaw world, the promotion of the Sayre-type sling was a gratefully received boon. It was at least something tangible to give the patient. Without ever having gone through the challenges of a systems analysis or controlled studies, the Sayre sling became ubiquitous and exploited. In an attempt to compensate for its inherent inadequacies, increasing “rules” began to circulate concerning its proper use, but they made no difference.

Incredibly, as injuries from the Sayre sling increased, the general reaction was to condemn the concept of traction itself, rather than the device. Many doctors have been trained that traction, at best, is worthless.

Tru Wilhelm, an enterprising salesman, made over-the-door units for home use in his garage and built an industry on it called *Trueze*. Because of the Fundamental Flaw, all studies in recent times that purport to study cervical traction employ this device, which reinforces its “authenticity.” *Incredibly, even osteopathy and chiropractic accepted it when allopathy did.*¹³⁸

Over-the-door Sayre traction is cheap and easily available. It is what Ozzie was told to use through his interminable nights of misery. Statistically, it helps some but with its discomfort and risks, compliance is poor, and they tend to end up in the closet, which is the safest place for them.

I had an unforgettable experience with it medical school when we were invited to a fraternity dinner hosted by the doctors in practice. A discussion about cervical traction’s

¹³⁷ The estimate is about ten years old.

¹³⁸ I showed Dr. Frank Schoenholtz my invention early on. (Frank is the excellent chiropractor I introduced previously.) He was fascinated. Then he asked me to try the mechanized one he had in his office, that had a Sayre-type sling attached to the edge of a wheel. I lay back, and he put it on me. As the wheel rapidly rotated, the sling sequentially loosened then suddenly hit me with fierce uppercuts as if I were back in the ring! It was incredible. I couldn’t fight back! As I tried to open my mouth to tell Frank to get the damned thing off me, it kept hitting me again.

I don’t know if Frank ever used it on anyone else, but I didn’t ask him. I’m sure he was alarmed, and I was too shocked and grateful to have it off. The machine sold for thousands of dollars, and people obviously bought it.

problems started. One doctor stood and stated emphatically that he had no problems with Sayre-type traction because he instructed his patient to sit facing *away* from the door. Another doctor rose to his feet to declare that the patient has to *face* the door. A third didn't even stand up as he loudly retorted, "You're both wrong. The patient has to sit facing *along* the door." Then anger really flared. I didn't know the issues at all, but obviously something was seriously skewed. Fundamental Flaw.

Of course there were presumptions about how traction works, and the consensus developed that effective traction must be forceful enough for x-rays to be able to demonstrate that joints were visibly distracted, which assumes nerves were being "pinched" and had to be released. The force necessary to widen the joint space was then deigned the "therapeutic threshold."

Dr. Sam Colachis, a physiatrist, then at UCLA, wrote the "definitive" paper." To establish the "threshold force," he applied the Sayre sling to *asymptomatic young people*. Poundage was increased with hanging weights until x-ray demonstrated joint widening. From that, less force was concluded to be useless, and the times became even more predictably hazardous as the injured tissues in real patients were regularly subjected to such excessive force.¹³⁹

Consider the case of someone who unfortunately smashed his hand. If it was then promptly subjected to being pulled until its joints were distracted, what he did to the offender with his teeth and other limbs would be reasonable self defense.

The "visible distraction" myth needs to be trashed, but it is powerfully embedded. Even a 1993 publication by a physical therapist considered an authority on traction, stated that any force below the magical visible distraction is "unscientific."

As a proviso, heavy force carefully applied is reasonable if it relieves the discomfort in

¹³⁹ Tru Wilhelm was interested in my traction and was ready to communicate with me. He trusted Colachis and asked him about it. For whatever his reasons, Colachis responded that my invention was worthless, which aborted my relationship with the man who had the capability to have brought real advance.

“old cold” cases when inflammation is long extinguished, when comfort may be derived only from stretching scars, and when the TMJ’s are protected as much as possible.

THE BEGINNING OF CHANGE

I rejected Sayre Sling traction when I was still in general practice. As Dr. Still, the originator of osteopathy, could not reconcile his father's medical versus his ministerial conflicts, I could not reconcile rational medical care to the way traction was done. On one hand, I was pouring myself into learning how the neuro-musculoskeletal system really works and how to use my hands more precisely. On the other, I was expected to accept a traction whose action resembles lifting a crate from a wharf.

For years, I continued trying to provide traction with an old method using a Turkish towel as a simple sling. The patient would lie face up, and the middle of the rolled up towel would be placed at a site along the neck. I would then teach a significant other how to stand behind him and rhythmically deliver the force by gently pulling the towel.

The towel sling had the great advantages that there was no TMJ jeopardy, and it could be placed at any site along the neck, *as well as deliver the traction with rotation or side bending*. When I had suddenly realized how potentially valuable the rotational versatility is, I was commensurately surprised that no one had previously proposed it.

Traction is usually provided on a time schedule because the clock, not the patient’s need, usually dominates, but it is far more valuable when given for *need*. Whenever pain, spasm, and restriction occur, the prompt application of relieving force can terminate the irritability and restore the healing phase before the secondary changes of injury - the “swamp” - can begin to develop.

The problem with the towel traction is that it requires someone to do it, and I learned over the years that I tried to use it that the need remained an insurmountable problem. No matter how carefully I explained and pleaded, there was never reliable compatibility.

Compliance was essentially zero. People are busy. There was always something.

In 1980, I was treating a Hispanic young man who had injured his neck. As part of my routine examination, I assess the application of manual traction, and, for him, the answer was clearly positive. I asked him to bring someone with him to the next visit, the same as I had so many discouraging times before. He returned with his mother, a woman obviously overburdened beyond her years. I understood, but I had no choice, and I began my plea for attention to the necessary detail. *"Por favor, senora, escuche bien. Por favor, es muy importante...."* all the while knowing it was doomed as I looked down at him on the exam table.

Then my mouth dropped open as there it was - just waiting for my eyes to see. I will insist till the day I die that the light in the room changed as I fell back against the wall uttering, *"It can't be that simple!"* over and over, but instantly I knew it was.

That night, I cut it out of an old sheet, and it worked as, of course, it had to. This is the traction that so dramatically cured Richard in less than a week after he had been catastrophically injured and subsequently declared permanently, totally disabled with lifetime benefits and medical care.¹⁴⁰

The first person to use my traction was Gloria Lee. I had treated her previously for a low back injury. In the hour prior to my applying my traction on her neck, she had almost died because of Sayre-type traction. Gloria was my only patient, ever, who a hospital admitted for me without my order. It happened at Memorial Hospital of Glendale, and the staff acted correctly.

Gloria's injury was the most uniquely catastrophic cervical disc herniation I have ever encountered. One minute she was symptom free in her kitchen, and in an instant she was in agony from a cervical disc suddenly "exploding" in her neck like a hand grenade, from which she was rapidly losing strength in her arm. It was Sunday, and as they were trying to reach me and the neurosurgeon I usually referred my cases to through our telephone exchanges, they

¹⁴⁰ Chapter Fifteen

instituted established emergency procedures. When the nurse spoke with me on the phone, she told me what had happened and apologized profusely for their almost losing Gloria.

Gloria had been placed in Sayre-sling traction as a matter of routine. Her pain intensified, so they had administered narcotics. Sedated by the morphine and with the Sayre strap pushing up on the floor of her mouth, Gloria couldn't swallow. Her mouth filled with saliva and almost asphyxiated her.

I raced to the hospital about thirty miles from my home. I had “coincidentally” invented the traction earlier that week, and an Armenian tailor down the street from my office had sewn the first prototype out of a Turkish towel. It was in the car, and I asked Gloria if I could apply it.

I hung only two pounds of weight, and the incredible happened. *Gloria smiled magnificently totally relieved of her pain.* She obviously still needed the surgery, which was performed a few hours later. I almost always have a camera with me, and I took a picture of her, which I obviously treasure. She was the first to validate its effectiveness, especially in an emergency situation. For the photo record, I reapplied the Sayre for a few minutes.

_____ Six months after I invented my traction, I received a call from Peter Edgelow, my physical therapist friend who practices near San Francisco. He had repeatedly treated a young woman for a neck injury incurred in an automobile accident. She was a sales representative for a pharmaceutical company, and her job required considerable driving. Every time he had released her and she got back in her car, her symptoms promptly recurred.

On my examination, she had no neurological deficit or significant orthopaedic problem. She was slender, like a ballet dancer, with a long “princess” neck. Her pain extended over her posterior neck and radiated like a cape onto her thoracic area. I discussed my traction with her and what I wanted to attempt. She agreed. I hospitalized her for three days in continuous 2 lb.

traction, and she was cured. The three of us were obviously impressed and grateful. Another brick was laid in the foundation of rational traction.

One more case. My daughter, Diane, asked me to see a woman she had recently met. Johnnie Huddleston was a very sweet seventy-eight-year old lady who joined the select group in whom sound traction can be complete care. She stayed in contact with Diane, and I learned later how successful she had been. I asked her about it, and this is the letter she sent me:

May 31, 1993

In 1958 as I stood at my desk, a stabbing pain went down my neck. After x-rays, the technician was surprised that I hadn't had a whiplash; the fifth disk was degenerated. I have had all kinds of physical therapy throughout the years. Therapists have used many types of treatment with equipment from weights to back braces. But the pain always returned.

It was in 1987 when I met Dr. Goodley. I was having excruciating pain in my neck and head and was wondering how I could ever pack for moving. I mentioned it to Dr. Goodley. He told me he was a specialist for neck problems and was kind enough to examine my neck. He suggested the Goodley traction and gave me a prescription to purchase one from a therapist in Orange County. It brought me the greatest relief I had ever had. When I used it, I was so relaxed that I often fell asleep lying on the floor. It hasn't been necessary to use it for about two years. I don't have neck pain anymore.

THE GOODLEY POLYAXIAL CERVICAL TRACTION/MOBILIZER SYSTEM (GPCT/MS)

The traction is biomechanically sound, so it is safe, specific and so efficient that, heretical but true, it has completely relieved severe pain with only *one pound* of force. While I simplified the original harness even more, both have their advantages. The systems are both

small, light and their costs is equivalent to one or two physical therapy sessions. You recline for your traction, the posture of maximum relaxation.

I will describe the original first.

The *harness* molds about the head like a turban or cold-weather ear protectors, widening to cover the back of the neck and fastening in front above the hairline. The TMJs are totally spared. *Wearing the turban alone is pain relieving in about thirty percent of users* because the mild elastic of the material molds to splint the injured tissues.

The *traction strap* attaches onto the harness at any level along the neck. Its ends hook onto each end of a *mobilizer bar* that is the first link in the traction and provides *midline or rotational* force.

The *traction webbing* attaches to the mobilizer bar, passes through the *pulley and down to your feet*. *You provide your own force, the same as you do for your toothbrush or your comb*. Your force is rhythmic and gentle, simulating waves coming onto the beach and receding into the surf. Or, by unhooking the long strap to the feet, the unit converts to hanging traction.

The *pulley* is constructed for virtually universal attachment, most expeditiously by exploiting a door hinge space as a vertical clamp as you lie on the floor. It can be used in bed by attaching it to a strong hook on the wall, with an accessory device on the bed. It can be secured to virtually anything stable.

How often? How much? *Your neck knows*. There is only one ultimate authority concerning what makes your neck feel better. It is *you*. You learn to use it in a few minutes, and in a few sessions you *know*.

A scale is built into the webbing considerably as a concession to doctors who demanded it because they are so hooked on numbers because they lack understanding. Regardless, for good reason, just as there is no scale on a fishing rod, a toothbrush or a comb, a scale is not warranted on my traction. Being required to apply repeated constant force is not physiologic because the tissues change and accommodate as soon as any force is applied. Also, instead of

being to relax and close one's eyes and apply "what comes naturally," concentrating on a scale impairs relaxation.

The essential purpose of the scale is as a *protective buffer* that eases the traction force into your neck. Without something stretchable along the line, if you are startled while the traction lines are tense, the sudden increased tension might cause injury your neck.

Cervical mobilization

Goodley traction was the first to offer *asymmetric force* so rotation could be added to the traction, which effectively converts it to a *mobilizer*. All it required was drilling a few off-center holes in the spreader bar! So simple, yet it had never been done before. The advent of rotation (and side bending) to maximize efficiency can be the difference between success and failure. When you rotate your head in one direction, the joints on the opposite side of your neck tend to open. Adjusting the traction level and rotation to mobilize a particular site maximizes its effectiveness.¹⁴¹

Hanging weights

It is my experience that applying more than three pounds of force immediately after injury easily irritates. When the traction is self-applied with the feet in a normal individual, force is not sensed until it reaches about nine pounds, which is far excessive. Hanging weights early on is an immutable rule. The storage bag becomes the receptacle for whatever is used as a weight.

There are times when traction should not be used. For whatever reason, if a trial increases pain then it should be discontinued. I call it a "Fishhook Phenomenon," which I distinguish from a "Tight Ring," when you sense that continuing to slowly work at it will bring relief.

¹⁴¹ Sometimes, however, immediately going for the brass ring increases the pain because the tissues are so tight and irritable. First rotating *into* the tightness can desensitize the situation and then allow moving to neutral and then away from it.

The current attitude about traction

Because of the long controversy about cervical traction, traditionalism today is generally between antagonistic and apathetic toward it. That's human nature, to eventually fatigue from fighting a fruitlessly. At the same time, in one of their rare alignments, many practitioners and managed caretakers don't want "neck pains to be a pain in the neck." They want cost-effective therapy that won't add to their problems.

The logical question still pertains and has already been asked, at least, subliminally. If my traction is so good, why hasn't it already resuscitated traction's reputation and become the standard? The question is legitimate. The answer has to be multi-factorial, but my only accurate answer is that only G-d Knows.

Effective self-care traction is vitally important therapy! It empowers you. It gives you a means to relieve your pain. It is immediately available at your need. It materially shortens your healing time. It can prevent chronicity It saves money! It helps resolve the problem medicine imposed on itself, for which you pay and pay and pay.

My traction's usefulness, incidentally, transcends formal medical need. To illustrate, when I was demonstrating it to a company that did take it and with substantial promises that were not fulfilled, their vice president for international sales had just arrived from Europe. As he entered the room, he was immediately curious. He wanted to try it immediately because of how he was feeling after the long flight. He reclined on the floor by the door. I attached him to the system, and he was sound asleep in a few minutes. He awakened as the meeting ended asking me if I'd hypnotized him. He said he was feeling fine.

Regardless of their, and other promises, my misadventures in the business world as I attempted to get my inventions successfully commercialized are more for Kafka stories than here. Early on, I was told that while my traction is the best that has ever been invented, I had to understand that now I was among the sharks. It would become worse than that.

I am proud of the stack of testimonials and recommendations that accumulated. There is no surprise here. Like a wheel or a piece of rope, it is perfect for its purpose. One company that I licensed it to for awhile spent \$25,000 having its effectiveness researched at a nationally known testing laboratory in Boston. Their conclusion was that, except for cosmetics, it can't be improved upon.

On the dark side of compliments, an osteopath who had bought a unit once confided to me that (again) my traction is the finest ever. *“But if you think I’m going to let my patients get one for themselves, you’re crazy! They have to come to my office to use it! Do you know how much money I’ve made from your traction?”* I could only look at him with sorrow. What a wretched life he was living.

A GOODLEY STRETCH

Traction is important for people with TMJD¹⁴² because almost all of them have cervical dysfunction as part of the syndrome. Polyaxial's simplification resulted largely from a comment by a dentist that their lack of training in neck disorders made them too apprehensive to make even the few adjustments Polyaxial requires. Could I come up with something even simpler? It took me awhile, but one day I sat down and it simply fell together within minutes.

I call it *The Goodley Stretch*.¹⁴³ It's a combined unit in which the harness, like a Turkish towel, is unified in one piece with the mobilizer bar. All the rest is virtually rope, knots, and, again, a universal pulley. The essential elastic that provides the buffer is inside the sling-like harness itself under a lamb's wool cover, so it even more naturally configures to the neck. It embodies all the principles of the Polyaxial and provides most of its functions. It works well.

¹⁴² Temporo-Mandibular Joint Disorders

¹⁴³ I was consulting with some engineers at the *California Manufacturing Technology Center* in Hawthorne, California and Jim White, a “Strategic Planning Consultant” was a bonus. Jim started me thinking. He appreciated the broad applicability of the simpler device, and he advised me to change the name. I was calling it, “Simply Traction,” but he suggested that “traction” could have a negative connotation for some, and why did I want to unnecessarily burden myself? He was right, especially because it's a general relaxer for the stressed out. So I renamed it.

In fact, a number of people who have used both devices prefer *The Goodley Stretch*. It is more compact, can sell for considerably less and is even more obviously useful for general stretching and relaxation.

Personal experience

I needed my invention with the suddenness of a placid snowy slope suddenly exploding into an avalanche. I had been marathoning another re-editing of this book for too long. I needed to extend my neck a little to be able to focus on the computer screen when, about the eighth hour, there was a click in my upper neck immediately followed by pain that shot from the right side of my head to my scapula. It so disabled me that when I tried to lie down, I had to hold my head with both hands because almost as soon as I left the vertical, my neck felt as if something in it was about to break. It is an awful experience. It was so intense, I took a heavy analgesic, but after two miserable nights, I saw Larry Poland, the chiropractor I think so highly of. Larry's diagnosis was a "levator scapulae syndrome." The levator scapulae is a long thin muscle that runs from the superior medial angle of the scapula up to the skull. It is a small muscle, and long, so it is particularly vulnerable. According to him, my straining had provoked many of the muscles, and that one took the brunt. I disagreed. I felt I had sustained a sudden dysfunction and the muscle reaction followed.

Larry provided me with prompt partial relief, but it didn't completely clear, and for the next ten days it migrated to the left side of my neck, then down my right arm. It was one of those times when I had my tail by its tiger, and I couldn't/wouldn't let go. I was on a deadline to finish, and I hope I wasn't being stubborn, but I didn't use the traction.

I saw Larry about five times, but my neck restriction persisted, and I still couldn't lay my head down without first holding it.

My predicament was not intended to be a contest between Larry's manipulation and the traction. It just happened., and, in retrospect, I'm grateful for it.

Finally, I tied the Stretch to the railing of the stairway and got into it. After the first fifteen minutes, my range of motion was restored. After the second treatment, I didn't have to hold my head while lying down. I used it for about fifteen minutes three more times over the next few days, and my neck was normal for the first time in almost three weeks.

In the early-mid 20th century when gasoline cost less than twenty-five cents a gallon, **Burma Shave**¹⁴⁴ signs strung out along America's highways and byways. Each small sign had one line of a limerick-like advertisement. Traveler's awaited coming upon them. They made Burma Shave famous.

Here are a few typical ones:

- Train approaching
- Whistle squealing
- Stop
- Avoid that run-down feeling
- Burma-Shave

- Hardly a driver
- Is now alive
- Who passed
- On hills
- At 75
- Burma-Shave
-

I began my own campaign:

GOODLEY STRETCHES

Wanderin' 'bout the paths of life
Sadly, often we find strife.
Tension, pressure, stress and pain
What's to do to keep you sane?

Goodley Stretch

If your neck could talk
And you would hear
Then you can bet

¹⁴⁴ Burma Shave was a men's shaving cream.

You'd treat it dear
Goodley Stretch

Along the road
Your neck gets tight
Just lie on down
And treat it right.
Goodley Stretch

Fun.

CHAPTER THIRTY-TWO

THE GOODLEY LIFT

NEW PRINCIPLES IN LOW BACK TRACTION

“PEOPLE WHO DON’T SIT DON’T HAVE BACK PAIN.”

"New facts, new findings force us to change our ideas, and that is the pleasure of being a scientist."

Commentary during a NOVA program on archeology about the beginnings of man in the Americas.

First decide the principle. Then decide what to do about it.
Anon

- **A new discovery about lumbar traction**
- **The concept**
- **The economics of low back injury**
- **Sitting is unfriendly to the spine**
- **The Goodley Lift**

While teaching at USC, I was concluding my care of a man who had ongoing low back pain. He was grateful for my help but saddened about the persistent residual: he still couldn't comfortably sit long enough to take his wife out for dinner and a show. It was one of those helpless moments when much had been done, but not enough. I asked him if he was having any pain right then as he sat on my examining table, and he responded that it was beginning to build.

I don't have a rational explanation for what I did next. I walked behind him, placed my hands on the sides of his rib areas and asked him to tell me if I was accomplishing anything as I began to gently lift. *After only about ten pounds*, he told me he didn't know what I was doing, *but the pain was gone!* I was incredulous, and we repeated it several times, each with the same result.

There was nothing about such a procedure in the literature. The traditional reasoning concerning lumbar traction is that since the ligaments are so powerful, joint distraction cannot occur. Thus, according to the lore, traction's only purpose is to keep the patient in bed. I learned that "as fact" from one of my most respected orthopedic surgeon professors at UCLA, a man who had well earned his excellent reputation, but who, like most of us, could not escape the permanent influence of his early indoctrination.

I'd stumbled onto something new. Some time later, while I was trying to make a practical device to apply the principle, I injured my back. When I left the hospital for bed rest at home, I had a traction bed delivered to my home along with sixty pounds of weights in five-pound bags..

If only gentle lifting can relieve pain, why not try traction that way? I was in considerable pain, put on the harness and had the weights hung slowly, one at a time. Until twenty pounds, there was no difference in my pain. *At twenty-five pounds, it was instantly gone!* It began to recur at thirty pounds, and by forty pounds, the pain was excruciating. *Up and down the scale, again and again, with exactly the same results!*

Once more, I was incredulous. After that, I was certain that something extraordinarily illogical is interfering with our understanding of the fundamental biophysics of what traction is all about. There is a critical therapeutic range in traction far below what traditional thinking takes for granted as fact, which, in reality, is largely dogma.

ADVANCE was a magazine directed to physical therapists. The April 13, 1992, issue carried an article, *SPINAL TRACTION Still Plays a Role in Treatment of BACK PAIN*. In it, the writer quotes Duane Saunders, a physical therapist of national reputation, concerning traction.

"There are a lot of misconceptions about traction because of the old bed traction practices", explained H. Duane Saunders, MS, PT, a Minnesota therapist who specializes in spine-related conditions. "In bed traction, patients are placed supine in bed and hooked to a traction unit activated by a weight

attached near the foot of the bed. Low weights typically are used, making the method generally ineffective”, Saunders said.

“There is no scientific way that low-weight traction can stretch the spine effectively,” the PT said, citing studies which found that at least 40 percent of a person’s body weight is required in pull force to execute an effective stretch.

“When you put a patient in bed with traction of 20 pounds, in my opinion, you’re in the ancient and unscientific realm of leeches and bloodletting. It’s totally unscientific,” said Saunders...

But, as I have already alluded, bloodletting is not necessarily unscientific.

During the next two years, I sequentially studied fifty patients with similar complaints, first at USC, then at the UC Davis. *Eighty percent of them were either significantly or completely relieved of their sitting pain within three minutes from less than fifteen pounds lifting force being applied.* Over time, it became clear to me that it is a general rule for all parts of the body: *traction for acute conditions is primarily neurological therapy, not orthopaedic.*

THE ECONOMICS

Back pain is obviously common and extraordinarily costly. In economic terms alone, the estimates range in the neighborhood of \$100 billion annually in the United States alone¹⁴⁵. Back pain from sitting has special significance because it alone can totally disable someone whose job requires it. Truck drivers are in particular jeopardy because of the vibration. *Sitting in a vibratory environment is the only circumstance that is scientifically proven to precipitate degenerative osteoarthritis of the lumbar spine.*

The common story is that truckers who don’t have back pain will have it. Their common conversations are about three things: their women, their rigs, and their backs. Persistent low

¹⁴⁵ 1990’s figure

back pain ends careers early, and is a significant portion of the national disability bill.

A possible explanation for the damage that people, like truckers, are subject to is that the shake eventually overwhelms the reflexes that persistently adjust the spine to carry the body in balance. When they fail, the shake effect amplifies unimpeded and attacks the supportive tissues that integrate the spinal elements. Eventually they loosen, and the shake then works directly on the bones, weakening the ligaments even more, causing further laxity for which the body attempts to compensate by laying down more bone to spread out the pressure, fill in the gaps, and stabilize the instability. Fairly frequently, the attempt fails overall because the bone that is laid down is excessive and irregular, obstructing the intervertebral canal from which the spinal nerves exit, entrapping them. It is never advantageous when the original normal design is tampered with. Too often, painful disability results. The best solution is to avoid the problem.

The concept of the Lumbar Lift has general application. *There is good evidence that sitting is not normal for anyone.* The spine was not built for it. The chair may well be a cumulative culprit. *Societies that squat, instead of sit, don't know what back pain is unless somebody had a serious accident, like falling from a tree.*

I knew I had discovered something important, but it would be years before I realized how important. The pressing question, then, was how to make the principle practical, but the difficulty is that the mind doesn't work to easily achieve the simple. Seemingly, as a law of nature, thinking easily sinks into the crevices of self-defeating complexity. Simplicity in a design is such a rare event that scientists have a special name for it. They call it "elegant." Achieving it took over three years. After the first, I knew I needed help. I was stuck on pulling *up*, as my hands had done, and that, of course, can't be done.

I presented the problem to Al Shemet, a dear friend and engineer. We worked through a number of "Rube Goldbergs" for almost another year, until one Sunday morning in 1982, 180°

accomplished it all. The solution was to go *down*.¹⁴⁶

The Goodley Lift¹⁴⁷ is so simple. Its action is similar to pontoons on a seaplane or flying buttresses on a Gothic church. A belt holds pads on the rib areas from which adjustable struts *descend* to the sitting surface to relieve the “straight-down” static sitting load of the body by spreading the forces, “breaking” full contact with the seat. The vibration and jostle of driving are diminished as the torso is stabilized against the forces that are exerted from the curves and shocks of the road. As a totally unexpected surprise and gift - that is the soul of the therapy - the Lift is *dynamic!* *If you sit on a bathroom scale while wearing it, you will see a continuous fifteen to twenty-five pound weight change during each respiratory cycle!*

Constant spinal compression from sitting progressively compresses the discs and subjects the spine to unremitting pressure. This initiates the degenerative cascade. It appears that the Lift institutes a dynamic “pump” that *tidally exercises and may hydrate the disc mechanism*. Body fluids flows in and flow out. The effect is profound.

Wearing The Goodley Lift, people who sit for long periods, especially while driving, regularly report that they continue to feel rested. We made the first Lift from war surplus aluminum struts attached to chunks of rubber. It was crude but sound. I bought six high school football player’s protective rib pads to which a machinist devised adjustable struts. They were complex, heavy, cumbersome, and the strut length adjustments soon failed, but they worked, regardless, because the physics of it is sound and the device simple in essence.

We had six of them made. I kept one. Al needed one. He had pain driving, and he said that the trip to and from Hughes Aircraft “killed” him. With the Lift, it didn’t. He was always tinkering with it and learned that, at least for him, using just one strut was usually enough. The other four devices were promptly paid for by insurance companies because my patients,

¹⁴⁶ There’s a marvelous line in *Fiddler On The Roof*. Tevya’s horse is sick, so he has to pull his cheese wagon. He throws up his hands to heaven in abject resignation and complains that he’s tired of pulling the wagon. “I know. So *push!*” And that was the way it was.

¹⁴⁷ U.S. Patent 4,583,533

previously totally disabled because their jobs required sitting, were able to return to work the next day.

“Lou” Maiorana. is one of the sweet people of this earth, and her experience with the Lift became the classic case. I treated her in 1983 after she sustained a disabling back injury. She couldn’t sit for more than a few minutes, so she could only work part-time as a bookkeeper at Virgil’s Hardware, in Glendale, California. She was invaluable to them, and they made every concession to enable her to come in periodically and work standing. She tried the Lift one day, and she was back at full-time work the next day.

I had treated a man first for a neck injury, who returned after he injured his low back. He did well, except that the pain flared when he had to sit for a prolonged time. His work required driving about three hours to a distant city a few times a month. The trips were so disabling that he would sometimes be bedridden for a week. Wearing the Lift, he remained completely pain free. It broke in half after about ten years , but he taped it together and continued to use it. When I saw him years later, he showed it to me. I don’t know if I was more impressed or amused at its state of disintegration while remaining fully functional.

My famous Alan Couch of the other stories was a “million miler” trucker. Alan evaluated the Lift and became my “poster boy.” When he was living in Blue Jay, in the San Bernardino mountains, he worked in Long Beach on the coast, a two to three hour drive away. He’d injured his back again. Driving the curves down the mountain was a special torment, and after each trip, Alan would have to crawl a while before he could walk. Wearing the Lift, he was amazed how painlessly his body accommodated to the mountain curves. When he arrived, he was comfortable and immediately went about his business. Alan told me that whenever he was at a truck stop, the Lift was an immediate focus of attention, especially when he told them his experience.

CHAPTER THIRTY-THREE

ACUPUNCTURE - GET THE POINT

*There are more things in heaven and earth,
Than are dreamt of in your philosophy,
Shakespeare (Hamlet)*

- **Warning**
- **Dramatic cases**
- **Dr. Voll**

Acupuncture is almost synonymous with alternative medicine and is often attempted when “nothing else works.” I offer you a few insights.

If a dysfunction persists, acupuncture will not effectively relieve the pain of it. If someone is standing on your foot, get him off. Don’t try acupuncture. The inciting cause must be relieved rather than reaching for some needles. However, acupuncture may be an excellent option under other circumstances, and I have witnessed remarkable achievements with it.

First a warning: *Never accept acupuncture as therapy before you are properly examined!* The rules about pain and its purposes are immutable. Turning off the fire alarm never stops the fire. It is surprisingly distressing how otherwise competent professionals have used this one particular technique as if it were outside the guardianship of those rules.

Just because acupuncture involves “only needles in the skin” doesn't mean it is risk free. It is injurious to think so, and is especially hazardous if vital time is lost while it is being tried. As a tragic example, a man was referred to me on whom acupuncture alone had been attempted for too long. It was even done "as a favor" by a medical school professor after some other therapies hadn’t relieved his pain. Months passed in deceiving silence. By the time I saw him, his findings were obvious and grim: The man had spinal cord cancer.

I was co-chairman of acupuncture research at USC in 1972. I studied the patients with musculoskeletal conditions for whom acupuncture was requested. There was great excitement

during the early experience. For a while, it was a craze. I preferred that we select a few cases and study them well, but it didn't happen. Visitors, including the famous, came from all over, and the notoriety of it overwhelmed the committee. At the end of the year, we ended up with nothing but enormous exposure. The records were worthless. On the other hand, I had an extraordinary experience. I developed a sense for when acupuncture might help and when it probably would not, but my conclusions were never tested with a controlled study, and that would certainly be appropriate.

Dr. Yu Wing Choi, a young physician who had escaped from Red China, was our instructor. Some who studied with him became quite adept. After awhile, I realized I couldn't heavily invest myself without diminishing my study of the hands-on therapies because acupuncture requires a different mindset. Doing both evoked mental combat in me, like trying to simultaneously take movies and still photos. I wouldn't be able to achieve competence without sacrificing more than I was willing to relinquish, about which Dr. Joe Keating, the historian of chiropractic, my new-found-friend, commented that I am “a mechanist rather than a vitalist.”

The most dramatic success with acupuncture that I have ever witnessed began with what appeared to be an almost lifeless being. When he was rolled into the clinic, he looked like he could have arrived from some ancient burial ground dug up by the National Geographic Society. He was emaciated, shriveled and barely breathing. He was virtually a skeleton with sallow sagging, wrinkled skin. I couldn't understand why he was in our acupuncture clinic instead of the Intensive Care Unit.

He had been suffering almost continuously with migraine headaches for over twenty years! He had been unsuccessfully treated at medical centers throughout the world and had just arrived from Mayo Clinic. I'd seen him briefly, saw Yu Wing insert the first needle, and with sympathy for him and returned to my patients.

Six weeks later, I was walking into the university video studio and was approached a

tanned, distinguished and energetic man walking briskly towards me, smiling broadly as if he knew me. He reached out his hand and enthusiastically greeted me. I'd never seen him before in my life. He asked me if I'd remembered the tragedy I witnessed a month and a half before. Of course I had. I couldn't forget it. He told me he was that person. I was more than stunned. His pain had begun to diminish from that first acupuncture treatment. As long as he had three treatments a week, he remained pain free. Again, a case of a controlled series on one patient.

A young man, an orderly on the ward, had hypertension in the high numbers. He was normalized with only a few acupuncture treatments. We followed him for months. As an important note, hypertension is serious disease and can never be taken lightly. I have no idea of the likelihood of others responding to needles, and the implications of withholding medication should be taken very seriously in each case.

During that time, I met a most incredible physician. His name was Voll (pronounced “fall”). He was visiting from Germany, and subsequently returned periodically. He had developed his own system of diagnostics and the instrumentation for it,¹⁴⁸ an electronic device from which he would place a probe on acupuncture points and interpret the scale that had readings from one to one hundred.

He could then treat through the probe to increase or decrease the reading. The instrumentation had a receptacle in the circuitry where medications could be placed, not only to test for efficacy but proper dosage, as well. For us, it was a time of culture shock.

He came with relatively few test ampoules, but the photos in his superb textbook atlases showed him in his console-like workstation in his office, in which he sat facing his patient with hundreds of them available to his reach. By testing several sites in rapid succession and sometimes inserting his ampoules, he would decide a course of therapy.

The instrument was calibrated so that “50” was perfect, the range of abnormality progressing from both sides. Each of the acupuncture points, including some he discovered,

¹⁴⁸ ElectroAcupuncture According to Voll (EAV)

represented a different organ.

That first time he came, approximately twenty-five doctors were invited to meet him at a private office in Sun Valley, California. He had a large remote scale attached to his portable instrument so that we could observe the readings. Fate dealt me into the picture early in the afternoon session.

In respect to his host, Dr. Voll inquired through Dr. Schulte, his interpreter, if he could do anything to help him. The doctor said his wife was having neck pain. Dr. Voll checked her. The specific point, as I recall is “Heart 7,” on the inside of the forearm at the wrist. The reading was about “67,” which Dr. Voll interpreted as moderately severe inflammation. He said that were her neck “manipulated perfectly,” the reading would immediately become “50.”

I was the only one in the group who manipulated, and a few heads turned. I deferred that I wouldn’t attempt anything without examining her first. I did, and I manipulated her. There was a loud release, and she returned to Dr. Voll. As the instrument read “50,” he whirled his head at me, his eyes wide, and a bond was created. It was obviously impressive to all of us. What the reading would have been under any different circumstances I don’t know, but unquestionably this was an honest and brilliant man. Something was happening.

Dr. Voll checked me on two occasions. The first was part of a demonstration. I was feeling fine. Dr. Voll was convinced that I had epididymitis, an inflammation of the vessel that conducts sperm from the testicle. I told Schulte I was completely asymptomatic, and the two of them went back and forth. Dr. Voll checked me again and was adamant. To my knowledge, I never had a symptom.

I visited with Dr. Voll each time he returned to the United States. A story came back from Germany that one of the doctors who had been in our group was treated by him in his office. He had developed a troublesome ‘floater’ in one of his eyes and hadn’t been helped by his U.S. ophthalmologist. Dr. Voll tested him with his ampoules, gave him an injection with one of them, and the problem promptly resolved.

A few years later when he visited in San Francisco, he was, by that time, well known in the States. The large room was packed with several hundred observers. He was demonstrating therapy for various conditions and inquired if anyone in the room had a “heel spur.” San Francisco is one of my favorite cities, and I had been doing some extensive walking. For the first time in my life, my heel was hurting.

I promptly mounted the stage, and as Dr. Voll forcefully applied the probe, I almost passed out from the pain. He was so anxious to help me, he persisted, and Schulte virtually had to pull him off. Anything and everything in medicine can cut both ways, and anytime the physician, however great, loses perspective that Mother Nature is always in charge, he will eventually run into problems. *Whatever therapy is potent enough to relieve, is potent enough to afflict.*

While I was at UC Davis, I was teaching manipulation and acupuncture to some interested neurosurgery residents.

A mountain man, a below-knee amputee, came in for a new prosthesis. He was tough. He didn't return to what we call civilization often, and he'd held his artificial leg together with "spit and bailing wire" for only he knew how long before he'd condescended to get another one. I asked him if there was anything else we might do to try to help him. Matter of factly, he said that since he'd lost his leg twenty-odd-years before, he'd continued to feel a *burning* pain where his leg had been. Phantom pain is not rare. When a limb is lost in an adult, the pattern for its sensation is already established in the brain.

As with much else, including Captain Cook's log, much sound medicine is in non-medical classics: Captain Ahab speaking in Chapter 108 of *Moby Dick*.
“Look, put thy live leg here in the place where mine once was; so, now, here is only one distinct leg to the eye yet two to the soul. Where thou feelest tingling life; there, exactly there, there to a hair, do I... I still feel the smart of my crushed

leg, though it be now so long dissolved.”

I matter-of-factly responded to the mountain man that we could try acupuncture. I told the residents that the meridian down the front of the leg is considered "earth" by the Chinese and that earth is supposed to cover "fire" (his burning pain). If they wanted a little experience, I'd show them the appropriate acupuncture points.

As I had done during my first experience at USC, they self-consciously inserted the hypodermic needles, because we didn't have the traditional acupuncture ones. My first USC patient had been a woman with a painful dental abscess, who had been sent by the dental school. One of the Chinese doctors on the staff showed me the famous *Ho Ku* point where the thumb and index finger bones meet close by the wrist. The same as the neurosurgery residents, I had asked "What next?" and been told to just wait and see what might happen.

No experienced clinician stays and stares. I left, and returned about fifteen minutes later without preconception. She looked at me quizzically and told me that maybe I would think she was crazy, but, a few minutes before, she'd felt something go up and down her arm. Ten minutes later, she was happily smiling and pain free.

During that same time, I saw a really tough Hell's Angels-type, who had accepted electro-acupuncture anesthesia for a dental extraction with the agreement that no charge would be made. His incredulous expression as he was being hooked up couldn't be bought. The entire procedure painlessly followed.

The mountain man sat quietly as the neurosurgery residents removed the needles. I didn't see him for a few months until he returned for his new leg. I'd forgotten about the acupuncture and asked him how he was. He looked at me strangely. "Funny thing. Remember those needles? Haven't had any burning since."

I had another incredible experience with acupuncture after I moved to Israel. A young man I was successfully treating with cranio-sacral therapy would frequently travel up north to receive acupuncture from a rabbi who used only cranial points. Each time he returned, his

cranial rhythm was stopped. It both dismayed me and got my attention. I went with him for his next treatment and continually monitored his rhythm as the few needles were inserted. Almost immediately, the rhythm began to fade. I promptly restored it while intensely impressed by the acupuncture's power that my hand's had witnessed.

My experiences leave me with the overall impression that acupuncture may be a long-term solution when a cybernetic (a control mechanism) "switch" has been left on in the nervous system after the inciting cause is no longer active. Its effect is only temporary if a "rock is still in the shoe." That is one of the reasons why, in "Back School" or overly psychologically oriented pain programs, an ongoing "sifting of the sands" is so necessary.

Failure of flexibility to individual circumstance - demand for compliance to a rigid protocol - is one of the prime reasons for therapeutic failure. A dysfunction is a dysfunction until it is relieved by whatever will relieve it.

CHAPTER THIRTY-FOUR

RUMINATIONS

To sin by silence, when we should protest, makes cowards of men.

Ella Steeler Wilcox

Consensus means that lots of people say collectively what nobody believes individually.

Abba Eban

"If there is anything that links the human to the divine, it is the courage to stand by a principle when everybody else rejects it." --

Abraham Lincoln

I eventually concluded that I was born to write this book. The awed comments I sometimes hear that so many powerfully illustrative cases could happen in just one the professional life supports that.

Concerning to whom I directed this book, despite many warnings not to, I was compelled to straddle and direct this to both you, the one in need and likely frustrated by what the current standard reality is - *and* to my colleagues. It is the only way to do this right.

My decision unleashed anger, occasionally vociferous, for my impudence. Didn't I realize that books go on *bookshelves*? Where in a bookstore did *Release From Pain* belong? Didn't I understand that "Self-Help" is one section and "Medical" is another? Incredibly, those were serious questions - and my violation unredeemable.

I did try to accommodate once, but as soon as I saw the book was neutered, I reverted without regret. My only answer to the mind-constricted criticism was, "Why not on both shelves?"

The response was dumbfound.

But - if I did have to choose, I would still have chosen *you*, the patient, because you most need to know – because the pressures for resolution do not yet exist within the medical establishment. In fact, at this time in 2013, they are diminishing from so many upheavals against the medicine I cherished when I entered it over fifty years ago. A rigid realist might even regard this effort a requiem,¹⁴⁹ and well it might be.

If I had a copy of the cartoon of the mouse standing and looking up fearlessly while

¹⁴⁹ **By Cal Thomas in the March 29, 2013 issue of *Jewish World Review*:**

Last week, politicians who helped craft the Affordable Care Act (ACA) celebrated in self-congratulatory style the third anniversary of that monstrosity which will soon extinguish health care as we've known it. The president's promises about the ACA saving money and allowing you to keep your existing health plan are proving false, as many predicted.

The Department of Health and Human Services maintains the law will make health care more affordable and accessible. The Wall Street Journal, reminding readers of that claim, reported last week that health insurers are privately warning brokers: "Premiums for many individuals and small businesses could increase sharply next year." The 2013 Deloitte Survey of U.S. Physicians, a survey of more than 600 physicians from the Deloitte Center for Health Solutions, found that "Six in 10 physicians (62 percent) said it is likely many of their colleagues will retire earlier than planned in the next one to three years."

Based on the survey results, Deloitte found that most U.S. physicians believe that, among other worries, under Obamacare, "The future of the medical profession may be in jeopardy as it loses clinical autonomy and compensation" and "Medicaid and Medicare reimbursements may be problematic, prompting many physicians to limit or close their practices to these enrollees." Instead of the established doctor-patient relationship of old, "eight in 10 physicians agree "that the wave of the future in medicine ... involves interdisciplinary teams and care coordinators."

One who thinks he's seen the future and doesn't like it, is my physician, Dr. John Curry of Fairfax, Va. At my request, he sent me the following email:

"Forty years ago, when I began practicing primary care medicine, medical decision-making and its funding were in the hands of patients and their physicians. The only protection patients had lay in the professional ethics of their doctors. In modern terms that sounds pretty skimpy, but think about it for a minute. The first precept was 'Do no harm'. Ask yourself: can you hold your government to that standard?

"The underlying principle was that the physician had to put his patients' interests ahead of his own. This was, of course, the Golden Rule, formalized into standards for professional care. It was also the reason I, and many in my class, applied to medical school. It was the reason my wife's older brother, who practiced medicine in a small town in West Texas, prided himself on the fact that much of the time he 'was paid in peas and pies'. Again, ask yourself, is there any health insurance company or government agency that you can count upon to put your health above their interests?

"The decades have rolled by, and the sea-changes have come. Costs have risen, and personalized care has faded. The monstrosity has been birthed, and soon you will look in vain if you are seeking a personal physician who knows you, cares about you, and to whom you have ready access. You will find only systems, ready to suck you up, give you a number, and provide you with federally approved accountable care in a sterile environment populated by highly regulated strangers. And it will cost you a lot! (Whatever anyone says, prepare for a future where your health costs will be higher and your choices fewer!)

"I am in my mid-70s and have both the capacity and willingness to care for patients for another decade. But I am retiring. I cannot stand it anymore. More than half of my time in the office is spent filling out forms, writing letters, responding to inquiries, and attending to 'urgent' matters that did not exist 10 years ago. And every year my income is less. At this point I would rather be paid nothing and have the freedom to decide what is right for my patients. ACA is only another straw, but for this tired camel, it will break my back."

Neither I, nor the country, can afford to lose doctors like John Curry, but we are and we will. Take two aspirin, but don't call in the morning because Dr. Curry and many like him won't be there to answer the phone.

“giving the finger” to an owl almost upon it with its fierce eyes, its talons terminal, I would have used it. I wish I could allegorically claim that the mouse is medicine. Instead, it’s the reality. We “accommodated” very early on. I discussed that early on.

Change that is possible must originate from *you, and that will take courage and commitment more than you are now prepared to realize.*

I am writing now after reflecting considerably for a few days. The Cal Thomas commentary on March 29 coincided to the hour that I was “coincidentally” editing here. Truly, medicine is entering a dark time. But - God, who put my feet on this path with Ozzie Hansen is the One who is in control. He would not have led this far capriciously. It is good. You just have to have eyes to see that. Times have been darker. Medicine restored, whenever that will be, will, I am comforted to think, will emphasize our humanity. Nothing can be more demonstrative of compassion than touching.

The story is told that Helen O’Connell was once asked what it was like to be a singer during the Big Band Era¹⁵⁰. She’d replied, “*Had I known it was an era, I would have paid more attention.*” **Pay attention to what is happening now.**

Your care - your function - your pain, or freedom from it - *your life*—is a powerful force on one side of the equation. *Assert that importance.* Contribute to the “external influence” to build the momentum for medicine's rehabilitation. The Fundamental Flaw is not immutable.

A few papers published in traditional medical journals are little whiffs of smoke that something is smoldering. In October 1992, a paper on manipulation appeared for the first time in the conservative *Annals of Internal Medicine: Spinal Manipulation for Low-Back Pain*. It has five authors, two of whom are chiropractors. Sponsors included *RAND and UCLA Schools of Medicine*.

The paper cites sixty-five references! Its purpose was "to review the use, complications,

¹⁵⁰ It was a shock to me that some people don’t know that term. In the 1940’s, musicians like Duke Ellington, Tommy Dorsey, Benny Goodman and Glenn Miller assembled dance bands of around fifteen instrumentalists. *In the U.S., it was the time of the Big Band*. They sold millions of records.

and efficacy of spinal manipulation as a treatment for low back pain." Like most, it *statistically* studied cases in which complications were reported. It concluded that chiropractors manipulate for low-back pain most, and that, *statistically*, those who are manipulated are slightly better at three weeks.

From that, it stated, "Spinal manipulation is of short term benefit in some patients, particularly those with uncomplicated, acute low-back pain... Recent research favorable to chiropractic treatment of patients with low-back pain, along with the current emphasis on patient outcomes, has helped stimulate a re-appraisal of the role of spinal manipulation...."

From all that work, little was concluded. The entire subject remained sanitized in scholarliness. It didn't resolve or invite revelation; it didn't cause anyone to sweat. The fact that sixty-five references didn't solidify and focus the issues is a statement of its own.

The real life proof for hands-on therapies is in real-life case histories. It is not realistic to totally bury the substance of life under lifeless statistics. Primal response, passion in crisis, is sometimes essential. Manipulative reasoning must no longer be viewed as "chiropractic" or "osteopathic." It is all historically, generically, *medicine*.

I sympathize with my colleagues' discomfort when they realize that the Fundamental Flaw exists. I felt betrayed when it happened to me. It is reflected in my logo that has been on my stationary and business cards for almost forty years. Fast in my movements, often being told, "Slow down," enormously energetic, I was "Roadrunner." Over time, roadrunners accumulated in my office: paintings, roadrunners made of wood, leather, whatever.

The man cured of his chronic, disabling foot pain when I examined the joints of his feet individually by distracting them was a revelation. That night was the meeting of the Southwest District of the Los Angeles County Medical Association. I called the president and asked him for about fifteen minutes so I could report what had happened, that I was convinced would open minds to the manipulative process. He asked me to tell him what had happened, and when I did he replied, "*Paul, it couldn't possibly have happened! It's not in the books!*" He was serious.

As I went to the front of my office shaking my head, an artist I had just treated was at the counter. I asked him for a favor. The Staff of Aesculapius, the symbol of medicine, is a staff with a snake entwined around it. (The double snake is military.) I first asked him to draw me a roadrunner tweaking the snake's tail, but then it didn't seem enough. "Oh hell, just have him walking off with the snake." It's impudent. The Aesculapian symbol can represent all that is near ministry about medicine, or it can just be a snake on a stick.

If you could sense a strand in the resistive medical mind when the challenge of unanticipated change is stressing, this is what you might hear:

"Do not present problems to me that confront my sense of competence. Proposals that are not in my precedent make me too uncomfortable. Do not take me beyond my prescribed limits, my formative training. There are standards we established that protect us and must be complied with. You have no right to make me uncomfortable...or confused. Who do you think you are? Who do you think I am?"

One M.D. put it this way: *"Damn you, if manipulation was that important, they would have taught it to us in medical school!"*

One very upset patient put it this way on December 2, 1992: *"You found something?...He made me believe there was nothing wrong with me! He saw me walk over there and over here... and he made me bend over, and he touched me with a hammer, but he didn't tell me to lay on a table like this or touch my spine or do anything like that. What kind of a doctor are you? He didn't even examine me with my shirt off...All he did was take an x-ray and tell me..."*

From such, there have been countless who have been hurt. In this coming quagmire, resolving the Flaw will not be broadly possible. Perhaps new generations of physicians will have been cleansed of primal profit motivation, and the ideal of medicine will again emerge. That will be the time. And I must plant.

Please do not forget that allopaths who care are among the most victimized by the Fundamental Flaw because they were, and are, deprived of skills that will make them remarkably

more able.

Prince Charles read a speech to the British Medical Association on its 150th anniversary. It was published in AMA News, March 18, 1983. An excerpt:

"I often have thought that one of the less attractive traits of various professional bodies and institutions is the deeply ingrained suspicion and outright hostility that can exist toward anything unorthodox or unconventional. I suppose it is inevitable that something that is different should arouse strong feelings on the part of the majority whose conventional wisdom is being challenged, or in a more social sense, whose way of life and customs are being insulted by something rather alien.

I suppose, too, that human nature is such that we frequently are prevented from seeing that what is taken for today's unorthodoxy probably will be tomorrow's convention. Perhaps we just have to accept it is God's will that the unorthodox individual is doomed to years of frustration, ridicule, and failure in order to act out his role in the scheme of things, until his day arrives and mankind is ready to receive his message: a message that he probably finds hard to explain, but that he knows comes from a far deeper source than conscious thought...."

If you are to be an agent in this, please understand the emotional impact on professionals who realize they have based their careers on a Fundamental Flaw. It is especially difficult if the physician was successfully convinced that he is a scientist, which rarely happens. As much as some doctors may imagine being one, it cannot be because medicine, in its highest expression, is an art in which science is readily, anxiously, consulted, but practical circumstances don't permit its full expression.

Ultimately, change must occur through organizations. Only *individuals* can form organizations. From right minds, they are conceived as tools for needed purpose. When that

happens, the energy flows *out* as the tool continues to sharpen to maintain its dedicated function *and to cause change according to need.*

Organizations are always susceptible to people rapacious for “status” and “honor,” however undeserved. “*They*” are always around, and given opportunity, always move in. Then, the energy flow reverses. Instead of radiating, it sucks. The organization eventually withers as the purpose for which it was born dissipates. It’s almost a universal rule that “Time betrays all revolutions.” May the change that will hopefully come not be so afflicted.

Concerning this book, I reflected about some comments Louis Sportelli, D.C. made to me when Joe Keating sent him a copy of this manuscript. He is well known and powerfully protects his profession. He wasn’t pleased by some of my criticisms. Overall, his comment was kind: “*On balance Dr. Goodley this will be a great book for those whose minds are open and whose thirst for information overshadows their blindness.*”

At the same time, he concluded: “Again, however the disbelief in the ‘one treatment’ cure for those conditions which have manifested themselves for years... stretches the imagination for belief.” As so many other chiropractors, he has never witnessed dramatic relief as I have sometimes reported. He had never been exposed to any case like the time that the wise, deft chiropractor had instantly cured the chiropractic student’s elbow, although his symptoms had persisted only for months, not “years.”

I hope Dr. Sportelli eventually reconciled his doubt. I offer two explanations, one of which I am certain: I will state it again. This book was destined. I was the bee directed to the nectar of particular cases. The other explanation is my case selection. I don’t manipulate everyone in pain. I have to have an objective reason, and of the thousands of times that I have manipulated, some dramatic results are related herein. Countering Dr. Sportelli’s incredulity, mine is that more chiropractors do not witness what I have witnessed. Nevertheless, Dr. Sportelli and I *communicated.*

I learned a lifetime lesson early in medical school that always remains vivid and still drives me today.

We first stood and defended our thinking while studying pathology. It is the foundation for understanding disease. Once during the semester, Dr. Sidney Madden, the chairman of the department, would randomly call on a student to extemporaneously elaborate on everything he or she knew about some subject.

I was fascinated by inflammation. I couldn't study enough about it. I don't think anyone in my class was as well read. Another student, only a year ahead of me, offered me some unsolicited advice. He told me that, when I was called on, it would be a resented mistake if I immediately shot my whole load. He said to give just a few comments and wait for Dr. Madden, a kindly and well-respected man, to urge me for more. That, he said, would be my time. I'd already been in too much trouble because of my my enthusiasm, and so I noted it.

Eventually, Dr. Madden asked me to stand. "Mr. Goodley, please tell us what you know about...*inflammation*."

My mouth dropped. From the dozens of subjects he could have asked! I had him in the palm of my hand. I took the advice. I blew it. Dr. Madden's shoulders sagged a little as he looked down for a moment and reflected. Then, in an obviously disappointed tone, he asked me to sit down and used me as an example of how not to respond. He never called on me again. I never let such a blunder happen again.

When a time is given there may never be another. *Communicate! Communicate what you have learned here. What is not communicated - that which must be communicated - has been deprived of its purpose!*

I pray this has communicated hope for problems you may have, especially if you are among the multitude who have been hurt again with platitudes such as, "Learn to live with it." - or, "It's chronic. What do you expect?"

What you may have may indeed be chronic, but that only means “of long duration.” *It need not be a sentence!* The least you should expect is sensitivity. Seek someone who will rationally look further and ongoing. *You must never be deprived of hope!*

If you indeed have chronic pain from a condition that is beyond what current treatment can cure, do not let it summarily be used as an excuse for *all* your discomforts. *In such conditions, associated, treatable dysfunctions may even more easily occur; and their treatment may provide proportionate relief.*

After the Second World War, Admiral “Bull” Halsey is reputed to have said that there are no great men, only great challenges that ordinary men are called upon to meet. (Please, let no brave woman, and there are many, take offense here, or anywhere in this book.)

There is a very practical reason for ideals. They give direction if you will follow them. Medical education implies the teaching of fundamental skills for confidently discovering valuable information and transforming it to effective care, thereby furthering our art and science. If there is a fault in that foundation, if an essential ingredient is omitted, then in some degree, all that follows is impaired.

There is, of course, always the human propensity to failure factor. I am adding this very late, while I prepare *Release From Pain* for iPad. (I am now eighty-one.) I am reading a book called *Number*; a history of mathematics. Albert Einstein wrote, “This is beyond doubt the most interesting book on the evolution of mathematics which has ever fallen into my hands...”

Concerning his book, Tobias Dantzig writes, “*It is not a story of brilliant achievement, heroic deeds, or noble sacrifice. It is a story of blind stumbling and chance discovery, of groping in the dark and refusing to admit the light. It is a story replete with obscurantism and prejudice, of sound judgment often eclipsed by loyalty to tradition, and of reason long held subservient to custom. In short, it is a human story.*” (Italics mine) In comparison to medicine, that commentary is about the most precise science that exists! Go figure.

On his 90th birthday, Robert Frost, the poet, was asked what he learned about life. He

answered in three words; “*It goes on.*”

It does, so be alive with it!

Helen Keller said, “*Life is either a daring adventure or it is nothing.*”

“May the force be with you.”¹⁵¹

¹⁵¹ From the movie series *Star Wars*.

CHAPTER THIRTY-FIVE

CONCLUSIONS – WHAT MAY COME

Write the vision, and make it plain...that he may run that readeth it.

Habakkuk 2:2

"History teaches us that men and nations behave wisely once they have exhausted all other alternatives."

Abba Eban

We have walked awhile now. The task I was given was to declare the crisis. I have done that to fulfill my obligation to my patients, to you, and to my profession: The ***Fundamental Flaw*** caused a ***Pain Pandemic***, from which a ***Release From Pain*** may emerge as manipulative reasoning is restored among the fundamentals of the healing arts.

Now, will it? How might it happen? I have obviously thought about it considerably and rewritten this many times. Today is no longer November 12, 2001, when I first wrote those words, but April 1, 2013. I have implied that we live in a medical world still almost as ignorant about manipulative practice as it has been for over a century - and with an additional catastrophic burden.

The Obamination in medical care devastates initiative. A Congress in which a Pelosi can hold up the monstrously huge volume of regulations and say, "*Let's first vote on it. Then we'll see what's in it.*" ***And get away with it!*** That acquiescence abandoned any semblance of the obligations of governance and relinquished any vestige of the Republic to the jaws of its destruction. We are in the time of American governmental collapse.

Any salvation will only - and eventually will - come through individual strength of spirit. Despite all, our body's were created as they were. The body is susceptible to pain. The principles described here are eternal. In some manner, they will eventually be appreciated for their logic, their simplicity, and their relevance. For the reasons that will be evident to those

who can think without prejudice, nothing about this book is incidental in its onset. It is for purpose.

Change will come when unrelenting social acknowledgment makes its demands, and there is a reassertion of character and principled effort among the professions.

We did it wrong. We can do it right. *You* are a vital link to accomplish this. This is not someone *else's* responsibility. There are no *others* to do it. There are just *us*.

Medicine will more easily and gratifyingly move towards resolution if the American Academy of Orthopedic Surgery commits to its obligations.

Recent events within the American Academy of Physical Medicine & Rehabilitation testify to its developing maturity. At the same time, PM&R's clinical ramifications remain diffuse.

The work will coalesce with reality when hands-on methodologies are literally on the table, as hand-to-hand communication begins. Only then will the barriers begin to come down.

Students in medicine, chiropractic, and physical therapy, particularly, must read this, as must all who still consider themselves in training, however many years they have been in practice. As Jane Presta emphasized in her letter¹⁵² as a long frustrated patient, this must be brought to their attention.

Concerning your individual problem(s), you may require the services of a reputable, well-trained, hands-on osteopath. You may need to urge an alliance of a physician/chiropractor team. In other locations and circumstances, a reputable chiropractor or physical therapist may be your preferred choice. *But how do you select skilled individuals?* Know this book. Be aware. Communicate. Observe.

Memorial Hospital of Glendale admitted all my patients to Four Central, the orthopedic surgery ward. (Only much later was I told how much most of the orthopedic surgeons resented it, but two were respectful, and I valued that greatly.)

¹⁵² In the Appendix

I admitted a woman one evening. A new nurse was on the ward. She and Mimi, the head nurse, were in the room as I initially examined my patient and relieved a part of her pain with a muscle energy technique. I was leaving the room to dictate my report when the new nurse's incredulously voiced question followed me out the door. It was wrapped in all the inflection we would hear as kids each week on the radio about the Lone Ranger. "*Who is that (masked) man?*" It was funny, and I smiled.

Mimi brushed it off in a half-bored tone. "Oh, he's *Ortho-Med*." She'd said it all. She'd seen it often and gotten used to it. Mimi was right. My practice is *Orthopaedic Medicine*. I am an *Orthopaedic Physician*. There are others. May there be more. Many, many more are needed.

I think of the afflictions I have cured with these essential fundamentals - the pain and despair relieved – the quality of lives restored and, in at least one case, saved life itself.

From just one practice, disability costs were reduced by multi-millions of dollars.

I have lived an extraordinary, challenging life by adhering to principles that distinguish reasoned from impaired care. We must eradicate what allows their joint existence by resolving the Fundamental Flaw – by disseminating these essentials so that many will enjoy release from pain.

What is now, need not be.

I think of so many events from which *Release From Pain* emerged, from so many possible titles to this book till the very end, when it emerged so naturally to link the ancient with posterity.

I think of a man I met over forty years ago. He had recently sold his business for “lots of money.” Now he was in my always financially-troubled institute, smiling graciously as he told me that he was looking for something else to get into. Did I have any ideas?

I hope he reads this because I owe him an apology for my reaction. I was greatly offended. All hell was falling down around me. I was in the midst of battle I doubted I’d survive. My inventions, which I had thought would provide me some relief, were being treated shabbily -and he was asking me to help him find another business?

Right in front of me, with his oblique inquiry, was my possible financial salvation and success - and I didn’t see it, and didn’t for all these years. But if I had, and it had worked out, I would almost certainly never have met Alan Couch, Beth Nick, Alberta, Diane Gates, or become involved in so much else that is the soul of this book. There are no coincidences. I wish all that I offer will some day, in some way, be appreciated, as I have no doubt that writing this book fulfills my destiny in medicine.

Who can calculate the odds of traveling half-way around the world to meet a Japanese orthopedic surgeon who had traveled a similar distance, and who would be sitting next to the only available chair in a large, packed banquet hall? It happened. It all can.

Great change will require greatness of unselfish dedication. Otherwise, *"the mountains may labor and produce only a mouse."*¹⁵³ History’s greatest blunders happened from simple errors – confused assumptions, misunderstood messages, failures to communicate a clear statement, authority ungrounded in sufficient knowledge. No matter. The consequences were cataclysmic. The Fundamental Flaw is one of them, among medicine’s most catastrophic tragedies. If *you* have learned well from this story, if *you* accept this obligation, then resolution is possible, and an inestimably higher standard of medical care is eventually achievable.

The twenty-first century has a futuristic sound about it. All sorts of advances may be

¹⁵³ Dr. Carl Menninger, psychiatrist at the Menninger Clinic

imagined. *Principia Primum! Fundamentals First!* It would be a far more honest entry if we could be well engaged in resolving The Fundamental Flaw.

*That which we are, we are...
Made weak by time and fate,
but strong in will to strive, to seek,
to find and not to yield.*

Tennyson (Ulysses)

APPENDIX A[XX]

Communication from J.C. Keating, Ph.D. to Lou Sportelli, D.C.

Joseph C. Keating, Jr., Ph.D.

1350 West Lambert Road, Apt. 110
La Habra CA 90631 USA

Telephone: (562) 690-6499

E-mail: JCKeating@aol.com

Licensed Clinical Psychologist (PSY8245)

*Vice President,
Association for the History of Chiropractic*

*Vice President,
National Institute of Chiropractic Research*

Book review: *Release From Pain*, by Paul H. Goodley, M.D.

\$100 billion per year. That's the estimated cost to American patients and their insurers which results from medicine's "Fundamental Flaw." The toll in misery and ruined lives cannot be calculated. A century ago, when medicine rejected manual therapies and their less well educated practitioners (bonesetters, chiropractors and osteopaths), it also abandoned a wealth of skill and knowledge related to 60% of the body's mass: the musculo-skeletal system. Generations of MDs have graduated with misplaced confidence in the proliferating technology of scientific medicine, and in ignorance of the basic insights to be gleaned from palpatory skills and a biomechanical understanding of human function and illness.

In *Relief From Pain*, Paul Goodley draws upon his 40+ years of experience as a physician and physiatrist to describe the real world consequences of this studied incognizance: how neck pain patients became a "pain in the neck," how the absence of radiologically visible pathology promoted smug unconcern for patients in pain and a tendency to cast off the unresponsive to psychiatry, why the treatment of garden variety back pain ("meat and potatoes" for the chiropractor) became a source of frustration to the medical man and a financial drain on society. All for the lack of elementary skills. And now, suggests this voice from the trenches, the bean-counting mentality of managed care threatens to carve the fundamental flaw into stone by encouraging a categorical (as opposed to an analytic) mind-set in medicine.

Dr. Goodley tells this tale not with the statistics of clinical epidemiology, but from the perspective of an *orthopedic physician* called upon to care for the human debris of orthopedic surgery and its hegemony. Rich case vignettes illustrate the price patients pay for allopathy's disinterest in the life-altering (albeit not usually life-threatening) dysfunction of soft-tissues: fascia, ligaments, skin and their interactions. The remedy, he suggests, lies in a return to a patient-focus: attention to detail in history-taking, practice in detecting the subtle signs of musculoskeletal dysfunction, and greater use of basic manual interventions in general medical practice and education. The politically demarcated boundaries among those healers who

encounter musculoskeletal disorders (just about all of them, but especially medicine, chiropractic and osteopathy) must be relaxed, in the interest of patient welfare.

Goodley admits his ambivalence in selecting the audience for this book. And yet he succeeds in addressing multiple constituencies: patient and professional alike. This is a work that deserves the attention of anyone concerned with the present and future of health care in America.

Joseph C. Keating, Jr., Ph.D., *Homewood Professor*
Canadian Memorial Chiropractic College
17 August 2000

From Jane Presta (after she read the original manuscript)

From Jane Presta (after she read the original manuscript)

June 21, 1994

Dr. Goodley,

I have had the opportunity to read your book. To paraphrase the orthopedic surgeon from Oregon, "This is more than a book. It is an experience."

I was under the impression this book was in the process of being published. As I read I kept increasing the list of physicians I plan to give the book to. Then I found out it is not yet being published. Please, I strongly urge you, get this book published! Why? Well, my own selfish reasons are so that the dozens of physicians I have seen over the past three years can learn something. They need your book. Their patients need them to open their minds while reading your book. Every day people like me need your book. We need validation that we're not crazy or stressed out when, in fact, our doctors are just frustrated because they can't find the problem. Some of us know this, but, well, doctors are all knowing, so we doubt ourselves and

keep quiet. Your book will open the floodgates. Maybe the patients will force the medical profession to acknowledge, address and fix the fundamental flaw.

I could go on and on, so many of your pages hit home with me, but I will restrain myself. I have filled my journal with quotes from your book. There is just so much that hits at the heart of what needs doing.

Capital Hill needs you and your book!

I wait with great anticipation for this book to be available at my neighborhood bookstore.

Thank you,

Jane Presta From Jane Presta (after she read the original manuscript)

"I finally stopped dog-earring the pages because I was dog-earring all of them."

Release From Pain is one book that should not have had to be written. Dr. Goodley will convince you that Medicine's Fundamental Flaw is so obvious and pervasive that it is almost inconceivable that it took a century and a professional life's effort to prove it so powerfully.

Dr. Goodley's pilgrimage is captivating, sometimes infuriating and always educational. It is the story of a titanic struggle between truth and institutional power in which he always sides with patients in pain and through them validates what he contends.

Nothing about this book is remote. It is deeply personal from Dr. Goodley to his reader. It is passionate, and there is anger here that is only another expression of the love and compassion that drives this man to make things right.

Dr. Goodley's vast range of compelling stories leads one easily to the conclusion that destiny is being revealed here from whose strivings real hope to many, many can now be offered.

In a word, Release From Pain is a vitally important book. The essence of its lesson is that adherence to sound principle is a practical and rewarding option that turns conformity pale. And from that, Release From Pain may now well be destined.

Richard S. Weiner, Ph.D.
Executive Director

Perspective of a former student, John C. Porter, M.D.



Vert Mooney, M.D.,
Medical Director

Arthroscopic Spine Surgeon
Thomas W. Harris, M.D.

Pain Management
Sam Maywood, M.D.
R. Charles Brownlow, M.D.

Consultant Spine Surgeons
Carl McGuire, M.D.
Bruce van Dam, M.D.

Workers' Comp
Coordinator
Jim Malone

Clinical Director
Bryan Nadeau, B.S.

March 29, 1999

Pain Pandemic is a marvelous and powerfully challenging book by a brilliant and very caring physician. It is exciting reading and uniquely directed both to support and defend the public in pain, and for clinicians - predominantly those who care for soft tissue injuries. However, there is something in here for almost anyone who lives with pain or is involved with those who are. I certainly wish for my orthopedic surgical colleagues to read it.

Dr. Goodley is a great storyteller. With a wonderful memory for details, he writes as a novelist and well proves the case with real people. Along the way, he tosses off many asides about the inner workings of medicine that are involved with this dilemma he so well describes. Dr. Goodley writes for high purpose as he strives for the fundamental changes that will bring with them a far more realistic reason for hope.

Vert Mooney

Vert Mooney, M.D.
Medical Director, San Diego Spine Center
Emeritus Professor, UCSD Department of Orthopaedics

Joseph C. Keating, Jr., Ph.D.

1350 West Lambert Road, Apt. 110

La Habra CA 90631 USA

Telephone: (562) 690-6499

E-mail: JCKeating@aol.com

Licensed Clinical Psychologist (PSY8245)

*Vice President,
Association for the History of Chiropractic*

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Book review: *Pain Pandemic*, by Paul H. Goodley, M.D.

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Joseph C. Keating, Jr., Ph.D., *Professor*
Los Angeles College of Chiropractic
10 June 2000

Perspective of a former student, John C. Porter, M.D.

I have a special perspective on Paul Goodley. He came to Phoenix expecting a teaching appointment. It didn't happen as he'd been promised so he stayed for awhile and practiced.

I was a resident in Physical Medicine and Rehabilitation at the Hospital of the Good Samaritan. I'd done a consultation on a patient the medical community was getting tired of. He continued to still complain of severe right forearm pain more than a year after his shovel had struck rock. He'd had many specialist examinations, and a local orthopedic surgeon had opened his elbow, closed it, stated nothing was wrong and collected his fee. My examination was also negative, including an EMG in which I'd sampled the muscles about the area he continued to

complain about.

The man was sent to Paul by a resident physician in Family Practice who had heard him lecture. Paul took note that there was weakness *limited to only one of the man's fingers, the middle one.*

So he did something that shouldn't be unusual. He investigated specifically and without preconception. He designed the examination according to the complaint. When he started to examine the sensation on the top of that finger, he found he was following a narrow band of loss up the forearm that measured fractions of an inch across. It ended near the elbow where the radial nerve splits and then straddles a fibrous edge where it might be damaged when a rapidly moving arm comes to a harsh stop.

Paul then did an EMG inserting the electrode within that narrow path. And there the test was totally abnormal. He did a thermogram and again demonstrated the abnormality. Right to the middle of the man's hand.

He recommended surgical exploration at "the Canal of Frohse," the site where the nerve splits. He caught hell. Who did the newcomer upstart think he was? *What was the Canal of Frohse?* Already six respected established doctors had attested that the man was malingering.

Paul quietly persisted, and finally a neurosurgeon reluctantly operated. And the scar was there binding down the inflamed swollen nerve which, unfortunately by then was chronically injured because of the delay.

All that he had done was an honest, dedicated examination following logical observable clues. That shouldn't have been anything real special. And his reward from an influential

segment of the medical community was outrage and condemnation. For that, and other "improprieties," he was ostracized. He got the same treatment elsewhere. I was told not to go near him. I was told he was some nut doing crazy things. But I thank God I decided to invest the elective time of my residency with him.

That was ten years ago. I just happened to call Paul early on the morning of Saturday, April 30, 1994. I hadn't spoken to him in many months. I just had to let him know, then, as well as I could, how much this friend felt for his mentor and how I regarded him as close as a brother.

I had to tell him that what he had taught me has become so central and more important than anything I have ever learned --- in medical school or any advanced studies. He set me straight where I hadn't ever seen, or been allowed to see, how off the real path I was, and how ordinary.

Everything I now do as a clinician has his mark on it. Every time other doctors ask me how I could know so much, and be so clinically successful, it is because of what Paul unselfishly poured into me --- as he did for anyone who asked, (as he relates in this book as the gifted teacher he is). And that is how I respond to those questions.

Paul was at least a decade ahead of his time, in Phoenix and elsewhere. When he left, many were pleased to see him go. He'd shaken their sense of security. But I've missed him every day since, and those people are now awakening to what they missed and continue to miss.

About a year ago, he told me he was writing this book. When I called, he told me he'd just finished it. He was resting, waiting for his batteries to recharge. Finally, with this

publication, Paul's time in history has come. He has much to do.

I now head a group in Phoenix and am Medical Director for Rehabilitation at Maricopa County Hospital, where Paul had been promised the program to teach. I know he'll come every now and then because I will ask him. But I know he has a far larger appointment. What is happening in Phoenix can happen anywhere.

Paul is right. He has always been right about the medicine he proposes. And I love and honor him for his enduring because of his love for medicine, for caring and principle and integrity.

John C. Porter, M.D.
Phoenix Rehabilitation Center
Phoenix, Arizona

MEDSCAPE CONTRIBUTIONS

In 2008, I was invited to write a periodic article for MedScape Orthopaedics, and it was a pleasure for me for almost a year. Then, a concurrent CME¹⁵⁴ was offered, the content of which was antithetical to my propositions concerning effective care. I had to respond. I was as tactful as possible and didn't mention the source, just the misinformation. Still, regrettably, I was promptly discharged from submitting my writings. They can be Googled at: Dr. Goodley MedScape Orthopaedics, or some equivalent.

¹⁵⁴ Continuing Medical Education

Orthopaedic Medicine

If the substance of Orthopaedic Medicine is essential for effective care, then why is that fact not already generally known? And most importantly, integrated?

The question is reasonable, logical and asked many times, its essence confluent with my professional lifetime. From its sometimes turbulence, herein is my authoritative response best supplemented by Release From Pain. If you came here before reading at least the sampler of Release From Pain, then perhaps you should, especially Chapter Two to better understand the extent of my commitment that drives my need to express this. 'The more the white light, the heavier the darkness that seeks to extinguish it.' In this world, it seems a constant. What follows is a succinct and candid journal determined to preserve the true record. Hopefully, some will learn important lessons, and medicine will be better for it.

Above all, I wish to impart this: Anyone who enlists in a great task to necessarily change an order of things assumes commensurate, special responsibility for his behavior - and must struggle, if necessary, against the base motivations that crave to extract personal gain. So long as the energy of an organization flows out, to fulfill its worthy goal, that organization remains unadulterated. When the energy is reversed, drawn in, literally to suck - so that the organization is regarded as a personal adornment, a source for sense of power, and self aggrandizement, -then that organization has lost its vitality and its purpose.

~

When the specialties began, disciplines such as Internal Medicine and General Surgery, Neurology and Neurosurgery, developed conjointly with a healthy tension providing balance between their non-surgical and surgical perspectives. That didn't happen with Orthopedic Surgery. From the first, long, long ago, no specializing group competed with the dominant natural predisposition of orthopedic surgeons. With few exceptions, from the beginning, the surgical attitude dominated them, and the penalties of the skew were severe because roughly 80% of orthopedics is non-surgical yet it found no base in traditional medicine. Instead of performing a 'systems review' to remedy the obvious flaw, medicine reacted to the schisms of osteopathy and chiropractic with reflexive antagonism and thus fed what became the Pain Pandemic. Physical Medicine & Rehabilitation, incidentally, is a very, very late comer. The issue is discussed fully in Release From Pain.

Finally, the only means to fill the vast void in traditionalism was through the forming of a new organization. The first eventually failed. Then another began. I was committed to both of them - the first as one of the founders, and as founder of the second, so I am intimately familiar with this history and its effect on the work to resolve what I have termed the Fundamental Flaw.

This history is important because it relates how personal failures of people can impair a needed movement for decades. In it is the visceral answer to the question that was initially asked. If you need the answer, it will not be found in abstract events but in the motivations and actions of people who were involved.

The first, organization, The North American Academy of Manipulative Medicine (eventually Manual Medicine) had its organizational meeting at 11:00 P.M. on a winter night at the Waldorf Astoria, in New York, in 1966. Photo Album As I relate in Release From Pain, my commitment began in 1961 and through my ongoing relationship with John Mennell, I was invited to become one of the founding members. The stimulus for that meeting had come from a few of them having met with the Europeans at another meeting some months earlier.

There were less than ten of us, Americans and Canadians, all M.D.s. One of them, not in the photo, made a remark that never left my memory. With a small smile of self satisfaction, he stated that from now on we would be the medical authorities concerning manipulation, despite that only a few in that room had more than some basic skills. I sensed a blackness enter the room. We were only in our infancy. Yet that spirit of deriving importance (power) from NAAMM was there at its inception, and it would grow and near the end stagnate everything it touched. From the beginning, there was adamancy that no osteopath, certainly no chiropractor, could join. From the perspective of 1966, the chiropractic decision was understandable, but refusal to osteopaths was another sign of the failure of perspective of some of the members, and everyone wanted to be congenial. Also, in 1966, Physical Therapy wasn't in the manipulative picture. That didn't happen till, at least, the seventies. Regardless, each year only further illuminated the original mind set. From what was eventually perpetrated, the organization could not survive. The membership voted with their feet, and NAAMM died in less than 20 years. None of us, of course, knew that in the beginning.

Good relationships developed, and Janet Travell and I were close for a time. Center in the photo. [Photo Album](#) (You may wish to peruse the Photo Album and become familiar with it.)

Ken Boake and Charles Godfrey, both Canadians, were always gentle stabilizers. [Photo Album](#)

I was the first treasurer, editor of the Newsletter from the beginning, and soon secretary for several years. I was gifted with incredible energy, something I denied for years until it became unavoidably obvious to me. For me, my work was an act of love. Mennell credited my efforts the reason for NAAMM's survival during its first critical years. The membership was growing, and, in 1969, I was elected to move through the chairs to assume the Presidency at the October 1972 meeting. One, at least, on the Board was not happy with that. They wanted me doing the work - so long as they could bask. And then I was "only" a GP.

Several in the NAAMM leadership had nurtured a close and relationship with Dr. Robert Maigne and his French colleagues. He had invited me to come to Paris and study during a 45 day period early in 1972 during the same time that I had subsequently been invited to enter the Physical Medicine & Rehabilitation (PM&R) residency at the University of Southern California under Dr. Betty Austin, who I knew from other circumstances. By then, I had been in general practice for 12 years. She resolved the time conflict by allowing me to go as part of my residency, "So you can teach us what you learned when you get back."

I had heard of Dr. James Cyriax but never met him. I stopped in London for a few days, spent time with him and learned that a few weeks hence he would be conducting his annual week-long seminar for physicians who would come from around the world, a time that would fortuitously coincide with Maigne's program recessing for a national holiday. But seminar had been filled two years in advance, and his secretary told me my attending would be impossible. I didn't have to test her adamancy. Within a day, there was a single cancellation.

Among Cyriax's attendees, presumably all physicians, a number of physical therapists who "sneaked" in. Two of them, Dick Erhard and Sandy Burkhart, told me that Freddy Kaltenborn would be conducting a course in joint mobilization in London, Ontario, Canada that would convene three days before my time with Maigne would end. [Photo Album](#)

I didn't know Freddy, but it sounded important. I told Robert. I didn't then fully understand his obvious disapproval, but, in the end, in 45 days, I was able to train with the French, the British and the Scandinavians.

When I returned to the States, my first afternoon was in Ortho Rheumatology clinic. The orthopedic surgeon wanted to do a hemiacromiotomy on a 20 year old girl. There was no precedent or research for such a procedure. A year of physical therapy hadn't relieved her pain or improved her shoulder motion after she had incurred catastrophic shoulder destruction from late juvenile rheumatoid arthritis. (Her story is in Release From Pain.) Just three days of therapy using techniques Freddy had taught relieved much of her pain and provided her with 60 degrees more functional motion.

I told the NAAMM Board that for six years I had edited the Newsletter and that this trip had been such an extraordinary experience that I desired to write a full Newsletter dedicated to it. They readily agreed with the admonition that it be clear that all opinions I expressed were mine alone. The result was Goodley's Travels – A Voyage Among the Giants. [Goodley's Travels](#) Writing it was one of those epiphany events when it seemed that it wrote itself. I did it in one sitting, changed a few lines, and there it was. What I hopefully anticipated happened. It drew congratulatory letters from all over, from as far as Finland and New Zealand, but what I obviously didn't anticipate was that for the same reasons it infuriated members of the Board, and others.

The Board met clandestinely. Though I was then the 1st Vice President, I wasn't informed. I coincidentally flew to Miami for the annual meeting in the company of the President, Carrie Chapman. [Photo Album](#) I was obviously excited, she morose, and I didn't want to take the hint.

At the hotel, Dr. John Bourdillon [Photo Album](#) shamefacedly invited me to the bar for a drink where he apologized for replacing me as incoming president. The ensuing Board meeting was vicious. Janet Travell accused me of unethical conduct for having published the list of physical therapists who had studied with Kaltenborn. Later, she was one of the speakers. Carrie quietly informed her when her time was up. Travell scornfully hovered close over her until Carrie cringed into her seat pale and shaking. Travell then continued through the next speaker's time. I left the meeting and NAAMM.

Eight years later, I received an invitation to attend its annual meeting. My hurt still within me, I construed it as an apology of sorts and responded with my dues. The meeting was at a small seaside resort, again in Florida. Maybe there were 30 attendees. NAAMM had been largely static throughout that time. Ken Boake had been president years before, and again. He asked me if I wanted to move through the chairs again, and I took it as another organizational apology. The president was a young woman, a

GP from Michigan. She announced a short time later that regrettably I couldn't be elected to any office "however much they desired" because I wasn't yet a member. I told her my membership card was in my wallet. She had been lied to. She resigned from the organization a short time later.

I returned to the next meeting, in San Antonio. The President was another Canadian, a new face to me. He invited me to his room for a drink before the business meeting and remarked that my enthusiasm was incredible. But, Paul, he said, "You have to remember the derivation of the word – enthus – the god within. "gods get crucified, Paul." And they did.

John Mennell and I had met again after the '72 meeting when I was at Stanford University participating in a regional physical therapy meeting with Freddy Kaltenborn and Geoffrey Maitland, from Australia. When I kept my distance, Mennell's eyes went wet. He told me he knew that he had betrayed me and promised he would never do it again. I believed it and gave him a hug. Now, we were in San Antonio. NAAMM had become captive to personalities who insisted it reflect any light on them and remain comfortable to their size. In the end, the results were vastly consequential. These were doctors who were self-driven to act despicably. A few of them eventually became prominent in their fields, and I hope they learned from their behavior. I know one of them did.

As an incidental, the business meeting was scheduled before I would present my paper (on thermography). As we had our drink together, the president ("enthus")arranged with me how he would give me time to discuss the issues that concerned me. But after the slate of proposed officers was announced and he called for comments, as I began to stand, a large, dead-eyed woman who never once had ever said a word to me but who, in previous instances, had looked at me from a distance with smoldering hostility, shot up from her seat directly in front of him, rapid fired a move that nominations and discussion be closed, which was instantly followed by a second to the motion, instantly followed by the president's slamming of his gavel. Then, someone else questioned if I was even a member and should be at the business meeting, at all. The President Elect was suddenly screaming hysterically, repeatedly, "He can't be a member, he can't be!" The secretary, Stephen Levin, then harshly announced that the point was moot because I hadn't paid my dues. I assured him I had. I wrote out another check and put it on his desk with the suggestion that he credit it while he reexamined his records. It wasn't there for more than a few seconds before he swiped it viciously with his hand, shouting as it floated to the floor, "I haven't got time!" I looked at him and then out to what had become a mute audience of about a hundred attendees. But they had witnessed. I paused as I passed Mennell. He wouldn't look at me.

As I walked out, I was approached by one of the members, a tall, thin individual with whom I was casually acquainted, who, once, at another meeting had looked down at me unsmiling and asked if I knew what my reputation was on "the circuit?" I had silently shrugged to which he responded almost angrily, "G-d help you if you have to follow him on the program." The twist of it was so astonishing I never forgot it. Somehow, to be regarded as such an effective speaker should be a compliment. But now, a few years later, in San Antonio, he was looking at me half embarrassed, half ashamed. "Come back the next year. Nobody will be able to stop you." Nobody wants to be seen as a coward. I had responded stiffly, "What makes you think that I would ever want to associate with people who do things like that?" He dropped his head and walked away. As the door opened to the tiny elevator, Travell was inside. She turned ashen and tried to disappear into the corner as I entered. After that, I never saw her again .

I presented my paper that afternoon. I gave a teaching they'd never forget and received a standing ovation for it. Some of the perpetrators were there, keeping on the sides of the room back against the walls, sullen, sallow, wet faced, complexions a tinge of green. As I looked at them, I thought what I've thought on a few other occasions: "Thank G-d, I'll never know what it is to feel like that."

Outside on the veranda, removing my slides from the carousel and thrusting them haphazardly into the plastic sheet holder, one of the members, who had been at the Florida meeting nine years before, came to me plaintively. I immediately remembered how he had come to my breakfast table the day after I'd been brutalized there. He had laughingly told me that I was an "SD, but then every organization needs one." I'd asked him what an SD was. He continued laughing as he replied, "shit disturber." From the expression on my face, he knew to leave. Now, he was looking at me with helpless frustration. He apologized for his remark almost a decade earlier excusing that he had just joined and didn't understand. He couldn't comprehend the absolutely random disorder with which I was reinserting the slides. All I could utter was a near furious, "I'm angry." He walked away. He resigned from NAAMM soon after - and it kept on happening. The membership that had sat numb had been disgusted with what they had had to witness. Within five years, somewhere near its 20 th , when it should have been safe and maybe influential, NAAMM was dead.

NAAMM lost its mission because of people who lusted for the appearance of power. As I left the hotel, I said quietly that it was time for a new organization

I had flown to San Antonio in my plane and landed in Phoenix to pick up Kent Pomeroy. We had met at other meetings. He was in my specialty and also involved with Prolotherapy. He seemed trustworthy.

I didn't want to return to the airport and fly out immediately. I needed to get the heat out. We walked and bought souvenir swords from an Indian shop. I told him I was starting another organization if he wanted in. In front of my plane we drew the swords and crossed them as someone took a picture. We talked as I flew, and he played with some words on his notepad. As the sun set on the vast Texas flatness, he looked up and said, The American Association of Orthopaedic Medicine. I nodded. All the AAOM Newsletters I wrote are in the Archives here, and there are many other documents available.

When I had returned from Florida to my residency after the 1972 NAAMM meeting, Betty Austin was no longer Chief. She had retired suddenly and been replaced by Rene Cailliet. I had had the chutzpa to go to Dean Franz Bauer to tell him that, of the candidates being considered for the position, the residents preferred Cailliet. I had known him, I thought, for about ten years. Highly popular, excellent speaker, seemingly always with a smile, apparently universally adored. I had been long impressed and convinced that he was one of the shining lights of PM&R. He was appointed. And what began as cognitive dissonance, belief in what is in total conflict with reality, became the pain filled experience of his real dimension.

In the clinic, I might have been working up a difficult case when Cailliet would half enter the cubicle, shoot off such a rapid series of yes/no questions to the patient who would soon shrink back confused and intimidated, to which he responded to with a declaration of diagnosis accompanied by a rapid affirmative shaking of his head as he suddenly disappeared behind the curtain. He didn't examine. He was repeatedly wrong. Always superficial. Then, with one fateful malpresentation before the most important meeting of each medical school week, Medical Grand Rounds, in which everyone important to USC attends, which, this particular week, Dr. Charles Bethune, Chief of Medicine, had given Cailliet the opportunity to gain respect for himself and our department so we might be granted some beds, which the department had never had, he outrageously destroyed everything within the first half minute. It was a stupefying, shameful blunder of sheer ignorance. The residency didn't survive. I was there. Cailliet knew me for who I am: dedicated, honest, open and enthusiastic having nothing to hide. For that, he would become my lifetime hateful, jealous, nemesis. And he had power.

I was distraught when I had returned from the NAAM meeting. I told him it hadn't been a good. He blushed and said he knew. He was seated at his desk looking up at me. He blushed more and asked, "Do you know what you are?" I shrugged. He purpled. "You're a maverick!" I'd paused and then quietly asked, "What's wrong with being a maverick?" He looked back at me in startled near panic as he wide-eyed rasped, "Nothing! Nothing!" A few months later, in collusion with NAAMM, he fired me from the residency and tried thereafter to assure that I would never enter the specialty, and after that never get onto a hospital staff. The USC Residency was closed soon after. The last resident told me years later that he was told when he entered the department, that he could do much as he liked, but he must never mention the name, "Paul Goodley." The rest is another story, but more than any other lesson I learned was the need to attempt to see beyond appearances – that it is so difficult to judge the real contents of anyone except by fire, and sometimes, by then, it's too late. But I tried.

I told Pomeroy that the secretary of an organization, particularly a new one, could, in many ways, be the most important, the most potent - and the most destructive officer. I reminded him of the mission - how important Orthopaedic Medicine is. I asked him if I could trust him. I will never forget his expression that I decided in his favor. He had looked down, not into my eyes, and slightly nodded. It wouldn't be long before I would taste the total incompatibility of our natures. He had said nothing. I realized what I had seen. I also needed dedicated people, and he had shown me that he certainly could be dedicated. And I didn't have much maneuvering room in my life. For a long time before, and thereafter, I was involved in near overwhelming challenges that, however, I never allowed to interfere with this mission. Unambiguously, I am a visionary, and, truly, I would have given my life for it to succeed, a quality that both attracts and threatens as the jealousies it can arouse when the expenditure of such immense energy succeeds. Such accomplishments can drive associates who also should have expended themselves in some degree, but didn't, to near insane actions to try to steal any or all undeserved credit.

And so I directed my energies into AAOM. Much of what transpired is in the Newsletters, especially "Our Crisis Of Rededication Shall We Begin Again?" my last, in 1986. [AAOM '86](#)

I immediately invited osteopaths to join, something NAAMM would never allow. There was a group of them involved in the Prolotherapy Association which was under the guardianship of an older doctor, Gus Hemwall, who had given unswerving loyalty to Pomeroy despite whatever he did. Jim Carlson was well known among them, friendly, an excellent clinician and a good teacher. In deference to osteopathy, I invited him to be the founding Vice President. I spoke to him in a similar manner to my discussion with Pomeroy and on many occasions thereafter that I expected work from him consistent with the commitment he had accepted. My Presidency would be for two years, and I needed him prepared.

The remainder of the Board was composed of both M.D.'s and D.O.'s. Among all of them, the one who always appeared the most steady and studious to me was Harold Walmer, an osteopath and Carlson's friend. As described in Release From Pain, my friendly association with osteopathy goes back decades.

Dr. Arielle Bar Sela was a joy but with us for only for a short, inexplicable time. Arielle, may he still be well and prospering, is a force of a man. I don't know why, but he had an aversion to osteopaths, and I told him that if he was on the Board he would have to contain himself until we could hopefully work out his problem. He had agreed.

Our organizational meeting was in Dallas, Texas on October 17, 1982. We sat down to a tentative silence around an ornate conference table, and it was Arielle who spoke. "I move that we form an organization called The American Association of Orthopaedic Medicine. All in favor say, Aye. I move that the founding President is Paul Goodley. All in favor say Aye." He then said that we had an organization and a President and let's get started. Just like that, and we did, but it immediately wasn't that easy. In short order, Arielle exploded against osteopaths. I took him aside and tried to reason with him in earshot of Carlson and Walmer. At least, I thought I had further earned their respect and trust. Perhaps I did, but as time went on it made no difference. I drove Arielle to the airport. We said an affectionate goodbye. He got into his Mooney and flew off. I never saw him again. The time was soon coming when I would sorely need a few with his fundamental strength of character.

Dr. Max Negri, an orthopedic surgeon, and I had trained together when I was an intern and he a resident. He came from my "neck of the woods" and in our casual conversations he had repeatedly expressed admiration for what I was involved in. He was a member of the American Academy of Orthopaedic Surgeons, and he knew that his Board appointment had the specific purpose of his becoming our liaison with his specialty. He accepted. Despite all my efforts, he never wrote a single letter or made a single phone call.

AAOM immediately attracted members. It was extraordinary, about 400 physicians in only two years. Everyone on the Board had, of course, immediately accepted responsibilities, but they were rarely done, and, I eventually concluded that, realized or not, they couldn't long tolerate their accumulating guilt that only compounded by my doing the work and succeeding. Something eventually had to give, and they became increasingly bonded by their failures.

Pomeroy was productive - but on his own counter productive course. He wanted to design the brochure for the first meeting. I agreed but with the condition that nothing would be finalized until the Board had reviewed it and made its recommendations - as I had submitted my design of the logo and the letterhead. Pomeroy precipitously printed them regardless. Thousands that, to me, resembled the outside of a Cracker Jack box - for the inaugural meeting of an organization that allegedly aspired to be a major medical influence - February 15-19, 1984, in Scottsdale, Arizona. AAOMBROCHURE 1st MEETING 1,2,3,4. He unilaterally appointed his office secretary as his "Executive Secretary," and, of course, she had to have her own Newsletter and total independence.

The Prolotherapy Association disbanded and became part of AAOM. The written directive was that its funds were to be melded with AAOM's. Pomeroy never revealed the directive or relinquished the funds. The discovery occurred very late in the scheme of things, but by then the Board would have covered each other for virtually anything. The eventual correspondence that ensued as I tried to communicate rationally to them would make an excellent study in psychopathology. Still, AAOM grew.

Finally, at a Board meeting in Kansas City, I related the difficulties I was having with Pomeroy. I was stunned when Negri indignantly responded that every member of the Board had the right to do whatever he wanted without reporting to anyone.

The time approaching the 1985 meeting was a special trial. Pomeroy's rebellion persisted. Once, in a moment of candor he confessed to me that whenever we were together he felt like a "little boy." Maybe that explained some things. Again he wanted to do the meeting brochure. I was worried. The Board agreed "so long as he accepted the supervision that I, this time, demanded." It made no difference. He again precipitously printed up thousands, black print on plain dark grey paper, all fonts and sizes exactly the same, the salad selections getting as much emphasis as the names of the guest speakers. Not one design or illustration. Over 10,000 had been sent out. I was in Kafka land and heartbroken.

I had been invited to teach in New Zealand and had only a week to design an entirely new brochure. Every night I arrived home late from my Institute, worked till about 0300, got a few hours sleep and finished it barely in time to leave it at the printers on the way to the airport with everything arranged for mailing. AAOM Annual Meeting 1985 The Board, by then, in full rebellion and agonizing "consultation" begrudgingly "allowed it" so long as etc., etc., etc.

A few weeks before the meeting, Negri baldly declared the issue, "What you have accomplished in the first year of your Presidency is amazing. If we allow you to finish your term, we will never be able to match you. We're taking over now." I had to

respect him for that. All the underhanded ambiguities were almost over. It was an honest statement regardless that it been made by jackals.

Approximately \$25,000 was left in the treasury after what Pomeroy had squandered. They transferred it to another account. I was without funds. They told me that if I tried to go to the membership they would prevent me. They tried. Of all of them, Walmer had led a group down to the parking garage and attempted to serve me with papers allegedly removing me from office. Then they surrounded me in the doorway to the meeting room before it began and tried to rip off my President's badge - like little kids trying to pull off someone's Levis tag - and prevent me from entering. In a meeting of physicians. The members who happened to be close by suddenly "disappeared" into fixed interest in the overhead architecture. I couldn't fault them. What was happening was impossible.

I had done everything I could to avoid the confrontation. I had met with members in California . The results were also bizarre. They had become a gang bent on revenging their egos against me. There was a stream of phone calls around the country, the writing of circumlocutory notes both threatening while disavowing. Finally, I began preparing copies of the incriminating documents to present to the membership at the meeting. Shortly before, I had consulted with the Parliamentarian of the Arizona State Senate and retained him to sit in. That is how bad it was.

At the hotel, the night before the meeting, I had accepted that they wanted to salvage things, and I ceased my document packaging. I tried to negotiate with them one more time. They sent a spy to my room. He sat there wide eyed, heard a few things and raced out the door before returning again. The second time around, I saw his passage and disinvited him.

Before I met with them, I sought some members who I thought had integrity, to let them know what was happening and to seek support. I asked Jean Pierre Oulette, from Canada , who was the member of the Canadian contingent, who had the integrity I needed. He hesitated. I should have asked him. He, in retrospect, reluctantly offered Robert Kidd. I invited him to my room. As I explained the situation, he sat back resembling a Currier and Ives caricature of a stern, cynical schoolmaster that had hung in my childhood home. His only words were an acid, "You have a knack for getting into trouble, don't you?" I asked him to leave. Essam Awad was a professor of PM&R at the University of Michigan . I explained the situation to him and asked for his help. He stood there for a moment, and then his only response was a continuous nudging of my shoulder with his elbow and a repeated silly smiled urging, "Aw, c'mon..." Years later, I saw him across a large room looking at me. He didn't look so good. It was another time I said, "Thank G-d I will never know what it is like to feel like that" (As I write this now, for the first time ever I examined the AAOM website. Kidd and Awad are listed as former presidents.)

The last private meeting with the Board took place in one of their hotel rooms. The light came from one low watt lamp in the corner. All of them but Carlson and Schacter were huddling together, sitting up squeezed tightly, leaning back against the bed board, all of them sullen and silent. Carlson sat in a chair in the far corner by the lamp. Schacter stared at me, his only inexplicable comment, "I heard the story about NAAMM...twice!" The only constant sound in the room was Carlson's repeatedly spitting tobacco juice every few seconds into a glass he held close in front of his mouth. All that came out of the meeting was an ultimatum: Stand up. Praise the Board and resign or we will.... (which they attempted).

The auditorium was packed at the business meeting. Behind me sat the Arizona Senate Parliamentarian. I had only maybe twenty of the evidence packs prepared each numbering about thirty pages. There would be no time to examine them. Months before, I had been counseled that in any dispute between a Board and President, the Board always wins. Regardless, I saw no other choice.

The Board was sitting together close to the front as I explained what had transpired. I told the membership that they had to know and had to decide. A presumed member who I did not recognize said that since I was part of the dispute, I should not conduct the meeting. Some requested members refused. Dr. Tom Dorman came to the platform, and I stepped back and soon down. He should have moderated between the Board and me. He didn't. I don't know why he did what he did. I never asked him. Whenever he saw me after, he paid me great deference, as he had when he visited me at my facility years before when he was just beginning to appreciate Orthopaedic Medicine.

As the debate began, he came back to me twice when I raised my hand to answer, and then he ignored me. He just kept pointing to Board members or the audience. There was no inquiry. No document based presentation of the issues. I walked up the aisle to leave. Negri had stood, half turned and pleaded that what the Board was doing was for the good of AAOM. How could anyone think otherwise? The others were mute.

Some time later, at another medical meeting, I was on a river tour boat and heard animated conversation and laughter below decks. It turned out to be from Negri and some others of the Board - a painful surprise, and I stayed on deck to minimize the

bleeding. The boat tied up. I was standing close by where the crew would lay out the debarking plank on the Port side. The enclosed "ladder" (the vernacular for a stairway on a vessel) from the below decks compartment emerged about twenty feet in front of me opening Starboard (the right side - I'm a Coast Guard veteran). Suddenly, Negri had burst around the covering. His sideways glance instantly identified me, and he literally froze grotesquely on the spot, his left hand holding onto the stanchion, his left foot planted, his right leg fully parallel to the deck, his right arm openhandedly stretched forward by his propulsion, all caught in space, his glazed gaze somewhere down in front of me, his expression in the first stage of startled. The crew wasn't anywhere near the plank. Negri remained that way literally for minutes. It was remarkable, the price of such deceit incalculable. (I was told that he died of a massive coronary some time later.) When the crew eventually got around to clanking the plank onto the deck and shore and clamping it, his tragicomic attempted disappearance into limbo snapped, and he ran off the boat. And I whispered again, "Thank G-d...."

Back in the auditorium at the business meeting, there was by then near pandemonium as I approached the door. One of the members, bless her, who had been in AAOM from the beginning was shouting, "Dr. Goodley is the spirit of AAOM! This is terrible! Oh, G-d, we can't let this happen...!"

I learned from others later on what had transpired. Much had been said praising me. The demand had been made that if the vote was against me that I be given given the title, "Lifetime Founding President Emeritus." It had passed unanimously. The Board won by a moderate majority. There had been no certification of membership. No elections were conducted for the new officers. The gang just stepped in. Perhaps strangely, I felt clean and at peace. I'd gone down with a sword in my hand.

That afternoon, I was walking from the reception after having made a brief appearance, as Carlson was approaching up the path to claim his reward. He was walking sort of a jig, and as he came close, crinkled his face and cooed, "I love you, Paul." For two years, he hadn't done a thing. I was incredulous.

I was told the luncheon was subdued. No one spoke much except Schacter who had bounded from table to table shouting that they had brought me down.

The over 400 members almost immediately plummeted to less than twenty. I was told that most of the Board never returned. How much their conduct in this influenced what happened to several of them, only G-d knows, but Harold Walmer died of pancreatic cancer within two years. I already wrote about Negri. For a time in the 90's I had an office in Big Bear Lake, California. One of my patients had been referred to me by him. She told me how he had said "the most marvelous things" about me. She was startled by my expression at his name. When she repeated that he had said such beautiful things, and I responded that he should have, I left her befuddled. I had no desire to explain. The wound were bleeding again. Carlson had a stroke and had to retire, and Pomeroy developed constrictive pericarditis (the covering of the heart) and had to have a cardiac "circumcision."

I attended the next meeting in 1986, in Portland, Oregon, and tried fruitlessly once more to save AAOM. I had printed my last Newsletter AAOM '86 #4 which candidly stated the case and mailed copies to the membership from my old list. Too few were there to counter the hostility from the jackals.

The Board had never acknowledged to me the demands of the membership at the '85 meeting. The only letter they ever sent me was through an attorney, Thomas Lofy. AAOM Lofy letter. Until then, my rage had been contained to my dreams but not when I read it.

I didn't receive anything further from AAOM for about 14 years when I received a notice of its annual meeting, that year in Las Vegas. I received a call from Dr. Bjorn Eek, always a gentleman, a pure pursuer of good medicine. He was the program chairman that year, and I was being invited back as an "old timer." He said that people wanted to meet me. The wound hadn't healed, and I wanted closure. I hoped (imagined) that there would be some rapprochement. All my expenses would be paid. I went. It was a large and very successful meeting. Bjorn had made it big budget, and he had done very well.

I didn't know the president, Michele Fecteau, an osteopath from Colorado who several times announced nervously that Dr. Goodley, the founder, was in the audience, but she never approached me, introduced me or invited me to the platform. The AAOM staff was very nervous any time I came near their booth. I still had a supply of my Newsletters. I had brought them and offered them. Some I put out at the entrance to the meeting room. Only a few were picked up. The staff took the others and put them under the counter.

I brought a copy of the Lofy letter. Jeff Patterson was a Family Practice Professor at the University of Wisconsin. We had met and become friendly years before when I was on a program there. Now he was AAOM secretary. I gave it to him and asked him

to present it to the Board with the request to remove the stain. Later that day, he told me the Board would let it stand. If I wanted to be part of the organization, I could ask for an application. I didn't know how to interpret his expression.

There was a small luncheon that less than 50 members attended. Tom Dorman went to the podium and asked me to come forward. He gave me a piece of generic paper of welcome to the meeting. It didn't even have my name on it. All I could do was smile. Reluctantly, he said that he supposed I would like to say something.

As I related, until today, writing this, I had never examined the AAOM website. What is on the Google is exactly how that meeting program began. (text underline mine)

AAOM Home The American Association of Orthopaedic Medicine (AAOM) is a not-for-profit organization, which provides information and educational programs on the accurate ...

Their very first statement about an organization conceived to fundamentally change the face of medicine was that it was not-for-profit! It more than perturbed me, but all I said was that it was untrue. I said emphatically that AAOM had been founded to profit the entire world. Any statement that might relate to taxation issues belonged in some obscure place, if any reference to it was made at all. Today, on its website, it's still all over the place.

Robert Kidd had not changed. I was in line for something, and he was saying something to me with his cynical expression intact, but I didn't hear him, or want to. I recognized only a few people there. Some wanted to know what had happened to me. I told them briefly and to read Newsletter #4. A few said they intended to do something. I had no expectations and drove back to California.

I performed a consultation here in Israel about six months ago. The man returned to New York and contacted me. When his doctor learned who he had seen, he had become excited and referred to my having founded the organization he was about to become the president of. He emailed me, referring casually to no one seeming to know why I was no longer in AAOM and that someone had said "because of some politics." I wrote him back with a fuller explanation. He didn't respond.

The website had some other items (copied directly from the website).

Lifetime Achievement

The AAOM Lifetime Achievement Award recognizes the lifetime of work of an AAOM Member for their contribution to the AAOM and to Orthopaedic Medicine. Winners of the AAOM Lifetime Achievement Award

- 2003 AAOM Lifetime Achievement Award Recipient - Kent Pomeroy, M.D.
- 2002 AAOM Lifetime Achievement Award Recipient - James Carlson, D.O.
-

The following is their published list of past presidents. Dr. Zeiger was listed as the immediate past president so perhaps it was a clerical error to put him on top, I don't know. (At some time the error was corrected. I am leaving the list as I originally saw it.)

AAOM Past Presidents

David Zeiger, D.O.
Paul Goodley MD
Jim Carlson DO
Essam Awad MD
Kent Pomeroy MD
Robert Kidd MD, CM
William Loomis, DO
Thomas Ravin, MD
John Finkenshtadt, MD
Michele Fecteau, DO
Ken Knott, MD
Lawrence Wang, M.D

So, why then is Orthopaedic Medicine not generally known and influential? Because of a lot of littleness? Yes, I think so. Because no reputable force entered into prolonged and honest debate with orthopedic surgery? Yes, I think so. Because of the paucity of a dedicated, reputable, consistent, persistent organizational voice? Yes, I think so.

I reflect that there is much to be said for having to sincerely study and swear allegiance to a credo as a preliminary to leadership. Such an anachronistic thought. Regardless, there is a spirit in endeavors whose highest goal must be to maintain the guiding principles that serve that endeavors' purpose. What happens to the spirit when its leadership is despoiled? What lingers? Is the fetish with "not-for-profit" unconscious and self-fulfilling? That wouldn't be too strange a story. It certainly immediately impresses the imagination. None of the administrations, some for obvious reasons, ever attempted to resolve the wrong that, in civilized terms, is monstrous.

When I first wrote this, there were some on the Board then who I have believed are honorable physicians. If I did not manifestly believe in this mission, and that there must be others who willingly will see this cause, then I would have to believe that medicine is incapable of resolving the Fundamental Flaw. I refuse to believe that.

After having painfully written this history so the truth will be in record, possibly to be pondered and absorbed - and, in the end, only then having examined the AAOM website, I came to a conclusion.

The Lofy letter notwithstanding, the Board in 1987, nor at any other time, was never empowered to annul the explicit demand of the 1985 membership and to act against me as it did. The privilege the membership unanimously granted me became immutable, especially as denoted by the "Lifetime..." status of the title. Most proximal to the events, only the membership at the 1985 meeting understood the necessity and both implicitly and explicitly affirmed its unconditional insistence. It needs to be noted that on that day, everything was precipitous presentation to the members, absent of any possibility for timely investigation by them. Technically, as there were no elections that year but only an illegal assumption of offices, there was also no certification that those who voted were actually members of AAOM in good standing.

To the point, no Board can negate the membership's unanimous demand as the condition for its accepting the permanence of what transpired because of that Board's disgraceful malfeasance.

And so I assert the title that the membership permanently granted me in the same spirit with which they originally honored me.

In the same frame, I wonder if AAOM knows what the purpose of its conception is about. Is it still a (passing) of insular administrations, each with its small time in the sun? Or, is there any maturing towards fruition of the original concept, evolving from clan to instrument? Has there been the establishment of liaison, at least, ongoing communication with AAOS? Is there communal realization that we are now well into the time of "The Bone and Joint Decade, 2000 – 2010", for Prevention and Treatment of Musculoskeletal Disorders? Has there been intercourse? Association? Contribution?

What is AAOM in the process of becoming?

Paul H. Goodley, M.D.
Lifetime Founding President Emeritus
American Association Of Orthopaedic Medicine (AAOM)

December 2005 (edited December 2006)

BEUS, GILBERT, WAKE & MORRILL

ATTORNEYS AT LAW

LEO R. BEUS
K. LAYNE MORRILL
MERWIN D. GRANT, P.C.
JOSEPH A. SCHENK
ROBERT C. VAN VOORHEES
ALFRED W. RICCIARDI
SUSAN M. SEGAL
MICHAEL R. DEVITT
CATHY M. HOLT
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VIRGINIA BARKLOW

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SHAWN R. AKEN
GLENN BAYLOR JENKS
R. KELLY WARD
REBECCA R. DRIGGS
PAULA S. RICKETT
PHILLIP D. FERRIS
VICTORIA GRUVER

SUITE 1000 UNITED BANK TOWER
3300 NORTH CENTRAL AVENUE
PHOENIX, ARIZONA 85012-2506
(602) 274-8229
FAX (602) 234-5893
TELEX 756246

WASHINGTON, D.C. OFFICE
SUITE 300 WASHINGTON SQUARE BUILDING
1080 CONNECTICUT AVENUE, N.W.
WASHINGTON, D.C. 20006-5303
(202) 429-8897

WRITER'S DIRECT LINE
234-5860

March 10, 1987

Mr. Paul H. Goodley, M.D.
1112 Canyon Road
P.O. Box 317
Fawnskin, California 92333

RE: American Association of Orthopaedic Medicine

Dear Dr. Goodley:

I represent the American Association of Orthopaedic Medicine.

On behalf of the Board of Directors of the Association, you are hereby notified of the termination of your membership in the Association. The termination results from, among other things, your failure to pay dues for the 1985-86 fiscal year.

You are further ordered to stop using the name President Emeritus, or any other title purportedly associated with the Association. The title of President Emeritus was stripped from you by vote at the June 12, 1986 annual business meeting of the Association.

In the event you fail to comply with this letter, I have been instructed on behalf of the Association to commence legal proceedings against you.

Sincerely,

BEUS, GILBERT, WAKE & MORRILL


Thomas R. Lofy

TRL:jlw

cc: Chris L. Anderson
Nicholas I. Goyak
Robert E. Brimberry, Inc.
Kent L. Pomeroy

July 21, 2013

Paul Lieber, M.D.
President, AAOM
Rehabilitation and Pain Specialists
Gamma Medical Center
107 Gamma Drive, Suite 220
Pittsburgh, PA 15238

Dear Dr. Lieber:

Perhaps you are acquainted with my name. I founded the AAOM. I just completed re-editing my book, *Release From Pain*, an ebook available on my website, preparing for iPad publication with embedded demos. AAOM is never far from my thoughts, and a flow of memories about the events that separated me from participating in my vision of what medicine must restore entered the blankness that accompanies the completion of long tasks. I read your bio and decided to write to the organization through you.

I have viewed the website on a few occasions. From its weak history of NAMM and early AAOM, and its inaccuracies, including comments concerning Dr. Jimmy Cyriax, I can't imagine that you could accurately be informed about events that are foundational to AAOM's existence, and from which it evolved to what I see that it is today.

It would well serve the purposes of this letter if you would spend some time on my website now: www.drgoodley.com. The real history is there along with the essential documents in the archives and photos. I will allude to some of that history here. My intent is not to relive that history with you, but for you to understand that some goals inherent in AAOM's formation remain unfulfilled while their importance continues to increase.

My book, incidentally, is immediately available to you in its present form for the asking. The first three chapters are on the home page along with the Reviews.

I think that your reading at least the first review by Richard S. Weiner, formerly (before his death), the Executive Director of the American Association of Pain Management, will be helpful.

Bjorn Eek is the only person on the current board with whom I am acquainted. He was not there during "the events," but he knows some of the story. He invited me to return as a guest when he was program chairman for the fourteenth annual meeting, in 1999, in Las Vegas. I drove there

imagining that decency had been restored and that I would be suitably welcomed, but that is not what happened. Even then, the stench of what had transpired persisted. The board had opposed him. The president that year was a young woman who continued to nervously announce “Dr. Goodley, the founder, is in the audience,” but not once was I even asked to stand. I will now explain my purpose in referring to that meeting.

No sign could better direct your attention to the AAOM’s loss of vision than the opening words in the mission statement, that remain on its documentation today:

*“The American Association of Orthopaedic Medicine (AAOM) is a **not-for-profit** organization.. ”*

Have you ever seen such wording in the description of any other organization? Yet, it uncritically passes the years in AAOM’s as if it is self-evidently immutable. When I saw them at the Las Vegas meeting, Bjorn had provided me the opportunity to address a small luncheon meeting that was chaired by Dr. Tom Dorman. Tom was considerably responsible for what happened at the fateful 1984 business meeting that continues its damage today. He had to realize it. Whenever he would see me, he continued to exhibit shades of shame. Some years later, he put a bullet in his brain, allegedly over some business deal.

My comments at that luncheon were focused primarily at those “not-for-profit” words. Words are powerful. They direct attitude, thinking and action. Their subliminal effectiveness is universally acknowledged. *I did not found AAOM as a not-for-profit organization! I conceived and founded it to profit the entire world!* The statement, to me, undermines, regardless that it began to bear twigs of truth. Why is an incidental IRS qualifier afforded primacy when it is rationally a small print item? Its perennial presence reinforces my reason for this labor now.

I will digress briefly to emphasize my point by applying it “Pain Management,” where it similarly afflicts with a defeatist tinge. For most doctors, it ends the sifting of the sands seeking those who, because of misdiagnosis, have been mistakenly relegated to the incurable. Managing is so much more systematized than venturing into an arduous unknown, but where the treasure might be. You will be able to read in my book about some “lost” people whom I was able to cure through the persistent application of orthopaedic medical principles, while discovering new diagnoses.

When I viewed AAOM’s website a few years ago, I saw a series of videos filled with congenial commentaries from comfortable people who related how much they enjoyed the conviviality of the meetings. The primary message was “comfortable.” AAOM had become a safe harbor. That is all to the good, but nothing vital is ever accomplished from congeniality seeking comfortable consensus.

“A ship in harbor is safe, but that’s not what ships are built for.”

I built a strong ship.

There were about four hundred physician members within two years of AAOM's founding! Its dramatic, promising prominence also brought with it a devastating harvest from bitter seeds. Throughout, I had vainly pleaded with the board members to share constructively in the work. Then, when "the loaf" was finally ready, they were overwhelmed by blood lust for recognition. They went berserk, and stole AAOM. They had even declared that each of them had the right to do whatever he wanted to. They literally physically assaulted me at the entrance to the business meeting to tear off my president's badge.

When I was forced to expose them at the business meeting, a member stated that since there was a dispute between me and the board, I should not chair the deliberation. Tom Dorman took the gavel. He soon ignored that the issue was the board's theft and rebellion against my labor and evidence. It was a trial between us that should have been conducted in the presence of the membership, the jury. Tom didn't do that. After my first response, he ignored me.

I'll state it.

*"The crows may pull down an eagle... but it is an eagle nonetheless."
Native American proverb*

The meeting deteriorated into organizational shock, fast followed by pandemonium among the membership, shouts of outrage that I was the spirit of AAOM, which I was. In the end of what was called "a black day for orthopaedic medicine," after I had quietly left the hall, the membership demanded that I irrevocably be honored as the "*Lifetime Founding President Emeritus*." It passed unanimously. In a very short time, when what the board had perpetrated sank in, the membership near dissolved. From the four hundred, less than twenty, including the jackals, the exploiters, were at the 1985 meeting. I include a copy of the letter that the board sent to me.

At the Las Vegas meeting, I gave a copy of that letter to Michael Patterson, who was secretary at that time. As had Tom Dorman, he had learned from me early on in his efforts. I asked him to present it to the board for its revocation. However illegal, its stench had to be confronted. He returned with a bland expression and said the board would let it stand. After thirteen years! I was told that if I wanted to be a member, I could "submit an application like anyone else."

You are now president. All that you can notably leave as markers of distinction will be any good work you achieve.

I have a few questions for you:

After all those years, why are there no links on the website with other pain-related organizations?

Except for my efforts through Max Negri, an orthopaedic surgeon - whom I had long known and had appointed to the board for the singular purpose of opening liaison with the AAOS - has AAOM at any time worked to develop a communication with it, even to encourage a mutual conference? Believe me, I understand orthopedic surgical prejudice far better than most. Max never even made a phone call. But with his guilty indolence, he became one of the leaders of the theft.

When the shock of the shame finally scorched them, as it had to, a number of them died or sustained serious illnesses relatively soon thereafter. Max tried to relieve his burden by publicly making wonderfully complimentary comments about me. He died of a massive MI.

You may have answers to my few questions. I would appreciate knowing them. I also suggest that you critically read your editor's almost pleading request for content by the membership. Content's enthusiastic flow is where the substance of the driving force of an organization reveals itself.

FYI, I was similarly influential and similarly treated in my efforts in the AAPM&R, which I left in 1985. The story is my book. More than a decade before he became president, Ian McLean told me that if I expected the Academy to accept my concepts concerning orthopaedic medicine, I would live a life of frustration. My efforts were the first wave against the bastions. When he became president after I was gone, his inaugural address focused on one message: The old guard was gone. The younger members of the Academy would direct its future.

My professional life has been the history of orthopaedic medicine in North America. My desire was to serve AAOM after my presidency, to counsel as a "keeper of the flame," to inspire those who came after to dedicate themselves to it. Where might AAOM be now had I been able to do that, instead of each independent administration shining only in its time?

Concerning NAMM, it never amalgamated with AAOM. It died a dishonorable death. Its board reversed the organization's initial energy, which never was pure. When energy flows out, when it radiates in service, an organization's purposes are maintained. If that flow reverses, it sucks. It drains the general energy for the rulers' self-aggrandizement, and the organization begins to die.

NAAM's leaders made the classic blunder of hubris. On that fatal day, the president invited me to his room for a drink. There, he commented that my enthusiasm was incredible. But, he said that I had to remember the derivation of the word: *enthus* - *the god within*. Then he said, "Gods get crucified, Paul." As he and his gang did to me an hour later. Their blunder was that they did it openly at the business meeting. The membership was silent but voted with its feet. That day,

I said it was time for another organization, and the AAOM was born. Within a few years, NAAMM was another *Ozymandias*.

As usual, I am going my way. I am now eighty-one. I've been a physician for fifty-four years, most of them increasingly dedicated to resolving what I call medicine's *Fundamental Flaw* that has largely contributed to the seemingly silent *Pain Pandemic* that pervades western medicine.

What is AAOM's membership now? What is its authority, its generally accepted presence within the medical community? Is there power that drives its once dedicated purpose? There is a spiritual quality that energizes great endeavors. Do you think it is still there?

I ask those questions openly and seriously during this time of massive challenge to medicine, when the essential concepts of orthopaedic medicine haven't begun to be infused into medical thought, however its need is increasingly obvious.

I do wonder what you will do with this.

Be well,

Paul H. Goodley, M.D.
Lifetime Founding President Emeritus
American Association of Orthopaedic Medicine

(A copy of the Lofy letter was enclosed.)

P.S. This email was completely unexpected. Within minutes of my editing this letter, I was closing down my computer and opened my email for a last look, just as this came in!

Milne Ongley July 21, 2013 1:55 PM
To: ngerzon@comcast.net , carbonvaulter@gmail.com , Paul H. Goodley, M.D. ,
elopez@penskeautomotive.com , s09-lwgxsgrkkt@members.ebay.de and 4 more... [Hide Details](#)
Milne Ongley [Inbox - iCloud](#)
<http://dos74.com/deje/zdknlr.fumdhvzblnjrzorh>

Here, in Israel, our only explanation for such an occurrence is “hashgaha pratis” - a heavenly touching of events. I hope you know who Milne Ongley is. He was at the first two AAOM meetings. It was he who first voiced that what happened was “a black day for orthopaedic medicine.” Milne had not really written me. His computer had been hacked. to sell a weight loss product. But there on my screen was his name.

I just Googled Milne, and MedScape's interview with me concerning prolotherapy, in which he is discussed, came up. It may interest you: <http://www.medscape.com/viewarticle/707539>. I used to write a weekly for Medscape Orthopaedics.

Incidentally, the website is almost ten years old. I haven't tended it for a long while. It works well on PC's, but its functionality on Macs has been impaired by the advances, and the company that developed the software no longer exists, so I can't update it.

CURRICULUM VITAE

Paul (Pesach) H. Goodley, M.D.

Ma'alot Kedushei Telz 2/1
P.O.B. 61
Telz Stone – Kiryat Ye'arim 90840
02 533 7639
Cell 0542 460 992
paul.goodley@me.com

www.drgoodley.com

Current Practice	Orthopaedic Medicine Kiryat Yearim, Israel
	Consultant Tel Hashomer Rehabilitation Hospital, Ramat Gan, Israel

California License	A19122
Israel License	74205

Birth date	February 6, 1932
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<u>Education</u>	University of Southern California, B.A., Cum Laude, 1955
------------------	---

UCLA School of Medicine, 1959

Internship:	Harbor General Hospital Torrance, CA 1959-60 (rotating)
-------------	--

Residencies:	Physical Medicine & Rehabilitation USC/LAC Med. Ctr. Los Angeles, CA 1972 - 73
--------------	--

University of California, Davis 1974

<u>Board Certification:</u>	Charter Diplomate American Board of Family Practice, 1971
-----------------------------	--

Diplomate
American Board of Physical Medicine

and Rehabilitation, 1977 –

Academic Appointments:

Adj. Prof. of Orthopaedic Medicine, College of
Osteopathic Medicine of the Pacific, Pomona, Ca

Clinical Inst., Dept. of Emergency Medicine
USC/LAC Med. Center, Los Angeles, CA 1973
Consultant to the Veterans Administration For Orthopaedic
Medicine 1980 – 83

Director of Orthopaedic Medicine
Cranio-Facial Pain Clinic
White Memorial Hospital, Los Angeles
Affiliated with Loma Linda School of Medicine

Visiting Professorships:
(Orthopaedic Medicine)

Uppsala University, Sweden 1982
University of Auckland, New Zealand 1984

Inventions:
System

The Goodley Polyaxial Cervical Traction\Mobilizer

A Goodley Stretch
Patent 4,407,274
A Goodley Lift
Patent 4,583,533

Medical Practice:

General & Industrial Practice
Torrance & Wilmington, California
1960 - 72

Clinical Instructor, Dept. of Emergency
Medicine --- Co-Chairman, Acupuncture Research
University of Southern California/ Los Angeles
County Medical Center
1973-74

Director of Rehabilitation
The Glendale Adventist Medical
Center
Glendale, CA 1975 – 76

Private Practice
Glendale, CA 1976 - 77

Director
Pain Diagnostics & Rehabilitation Institute
2210 W. 3rd. St.
Los Angeles, CA 90057 1977 - 83

Edwards Medical Plaza
1300 N. 12th. St.
Phoenix, Arizona 85006 1984 - 85

Bear Valley Orthopaedic Medicine
41609 Big Bear Blvd.
Big Bear Lake, CA 92315 1988 - 90

First Western Medical Group - 1991 - 93
Monarch Medical 1993

Orthopaedic Medicine
1580 No. Waterman Ave.
San Bernardino, CA 92404 1/94 - 3/95

Physician - Archaeological dig near Qumran, Israel
Institute for Judeo Christian Research 11/95 -2/96

Medical Director
“Principia Medical Group”
Visalia, CA 93277 2/97 – 6/20/97

Orthopaedic Medicine/Pain Management
5901 W. Olympic Boulevard Suite 401
Los Angeles, CA 90036 5/99 – 4/00

Hospital Staff (Most recent):

Midway Hospital Medical Center
Los Angeles 1999 - 2001

Organizational
Appointments:

Chairman:
Task Force & Special Interest Group on Musculoskeletal
Medicine

American Academy of Physical
Medicine & Rehabilitation 1980-87

Chairman, Committee on Musculoskeletal

Medicine

International Rehabilitation
Medicine Association 1980-88

Member - L.A. County Med. Assn: 1960-84
Industrial Practices Committee 1981
Ethics Committee 1982

Medical Organizations:
(past and present)

American Medical Association

California Medical Association

American Academy of PM&R

American Assoc. of Electrodiagnostic Medicine

International Rehab. Med. Ass.

New Zealand Association of Musculoskeletal Medicine,
Honorary Member

American Pain Society

American Academy of Thermology

North American Academy of Manipulative Medicine

Founding member, Founding Secy.

First Vice President - 1966 – 1972

American Association of Orthopaedic Medicine (AAOM)
Founder, Elected Lifetime President Emeritus 1980 – 1984

Selected non-Medical
Activities & listings:

Los Angeles County Sheriff's Office

Reserve Deputy Sheriff 1961 – 79

Academy graduate 1965

Academy Instructor First Aid/ Emergency
Medicine 1968 - 72

Award of Valor - 1968

Founded Medical Emergency. Team - 1972

U.S. Coast Guard 1949 - 52

*Who's Who In the West 1968 -

*Who's Who in Science and Engineering 1996 -

SELECTED TEACHING

1968	"Joint Manipulation & It's Applicability to Industrial Practice" Fifth Int'l Congress of Physical Medicine Montreal, Canada
1970	"Movements Predisposing to Thoracic Joint Dysfunction and Their Treatment by Joint Manipulation" University of Alberta - Alberta, Canada
1972	"Adhesive Capsulitis - Etiology and Response to Tangential Mobilization Techniques" Annual meeting - North American Academy of Manipulative Medicine - Miami, Fla.
May 5, 1973	"Musculoskeletal Pain" Acupuncture in Perspective and Practice USC School of Medicine, Los Angeles
May 19, 1973	"Treatment of Musculoskeletal Disorders in Emergency Medicine" American Physical Therapy Association Stanford University, CA
July, 1973	"A New Diagnosis - Soft Tissue Intra-articular Entrapment in the Hip, Demonstrated on Cine-Arthrography" Int'l Seminar of Orthopaedic Medicine & Manual Therapy, Canary Islands, Spain
11/18/75	"A New Diagnosis - Soft Tissue Intra-articular Entrapment in the Acromioclavicular Joint - American Congress of Rehabilitation Medicine Atlanta, Georgia
9/14 -12/22 1976	Joint Mobilization Orthopaedic Hospital, Los Angeles
6/4/77	"Manipulation of the Cervical Spine Under General Anesthesia with a 15 Year Follow-up" Int'l Ass. For the Study of Pain, Seattle, Wash.
1977	"Manipulative Principles and Practice in Medicine" "Medical and Chiropractic Issues." Annual Teaching Seminar

Los Angeles Chiropractic College
Glendale, CA

- 8/4/78 "Invisible Lesions of the Cervical Spine"
UCLA School of Medicine, Los Angeles
- 9/9-11/79 "Musculoskeletal Pain & Thermography"
First Annual Meeting, American Pain Society
San Diego, CA
- 2/21-23/80 Symposium Director
"Musculoskeletal Diagnostics and Treatment -
Towards a More Rational Perspective"
Sponsored by Am. Acad. PM&R, the
Eisenhower Medical Center and the Pain Diagnostic
& Rehab. Foundation. Palm Springs, CA
- 3/18/80 "A Comprehensive Objective Assessment of Pain"
Chronic Pain Syndromes in Medical Practice -
Expanded Options, 1980
Eisenhower Medical Center, Rancho Mirage, CA
- 5/2-4/80 "The Cervical Spine & Physical Therapy"
UCLA School of Medicine
- 6/12-13/80 "Manual Mobilization in the Treatment of Pain"
Annual Conference., A.P.T.A.
Phoenix, AZ
- 7/16/80 "Independent Medical Diagnostics in the Industrially Injured"
Worker's Compensation Defense Ass.
Orange, CA
- 8/25-28/80 "Musculoskeletal Pain & Thermography"
Eighth Int'l Congress of PM&R
Stockholm, Sweden
- 9/5-7/80 "Musculoskeletal Pain & Thermography"
American Pain Society, New York, N.Y.
- 3/13-18/81 "Goodley Polyaxial Cervical Traction"
"Thermography & Musculoskeletal Pain"
110th Annual Meeting, California Med. Ass.

Anaheim, CA

- 6/5/81 "Manipulation of the Spine – Technical Aspects"
Sixth Annual Continuing Orthopedic Education
Program, Harbor/UCLA Orthopedic Alumni, Long Beach, CA
- 10/24/81 "A Philosophy of Musculoskeletal Diagnosis
& Treatment - First Principles"
Chronic Disease & Pain Foundation
Shreveport, Louisiana
- 11/2-5/81 Symposium Director
"Musculoskeletal Diagnostics & Treatment -
Towards a More Rational Perspective"
- 11/17-19/81 "Polyaxial Cervical Traction"
American Osteopathic Ass.
Los Angeles, CA
- 4/19-23/82 Course Director
"Musculoskeletal Diagnostics & Treatment -
Towards a More Rational Perspective II
Fourth Meeting, Int'l Rehabilitation Med. Ass.
San Juan, Puerto Rico
- 9/19-24/82 Visiting Professor, Orthopaedic Medicine
Uppsala University, Sweden
- 2/10/83 "Manipulation"
Chronic Pain: Evaluation & Management
Baylor University, Houston, Texas
- 3/12-13/83 "The Clinical Evaluation of Musculoskeletal
Pain & Thermography"
Fifth Annual Symposium on Current Concepts in
the Management of Chronic Pain Syndromes
Maricopa Medical Center, Phoenix, AZ
- 4/20/83 "Low Back, Cervical & Shoulder Pain"
17th. Comprehensive Review Course,
American Academy of PM&R
Baylor College of Medicine, Houston, Texas

5/13-14/83	"Back to First Principles of Musculoskeletal Diagnostics" University of Wisconsin School of Medicine Madison, Wisconsin
5/13-15/83	"Musculoskeletal Pain and Thermography" Perspectives on Patients with a Less-Than-Optimal Recovery UCLA School of Medicine, Los Angeles
11/12/83	Course Director "Musculoskeletal Diagnostics & Treatment - Towards A More Rational Perspective III" Annual Meeting, AAPM&R, Los Angeles, CA
2/24/84	"Manipulation" Second Annual Chronic Pain Course Baylor College of Medicine, Houston, Texas
6/27/84	"Manual Therapy & Cervical Traction" Int'l Federation of Orthopedic Manipulative Therapy (IFOMT) Vancouver, B.C.
9/15-16/84	"Soft Tissue Injury & Thermography" "Practical & Ethical Considerations for Patient Referrals" Harvest Moon Seminar, Ca Chiropractic Ass. Los Angeles, CA
11/9-11/84	"The Principles of Orthopaedic Medicine - An Overview" Principle Speaker - Annual Meeting, The New Zealand Association Of Musculoskeletal Medicine Auckland, New Zealand
11/12-14/84	Course Director "Advanced Course in Manipulative & Musculoskeletal Techniques" Auckland Medical School, Auckland, New Zealand
5/28/85	"Cervical Treatment and Polyaxial Traction" Johns Hopkins University, Baltimore, Md.
6/21/85	"Cervical Treatment and Polyaxial Traction"

Tulane University Medical Center, New Orleans, LA

- 7/2/85 "Cervical Treatment and Polyaxial Traction"
Vanderbilt University
- 7/3/85 "Cervical Treatment and Polyaxial Traction"
University of Tennessee
- 8/22/85 "Cervical Treatment and Polyaxial Traction"
University of Western Ontario, Canada
- 10/1/85 "Fundamental Concepts For Musculoskeletal
Therapeutics - A Hands On Approach"
(One hour video)
- 1985 Course Director
"Hands On Treatment For Musculoskeletal Pain Disorders"
Annual Meeting, AAPM&R, Kansas City, KS
- 12/2/85 "Cervical Treatment and Polyaxial Traction"
Rehabilitation Institute, New York University
- 12/3/85 "Cervical Treatment and Polyaxial Traction"
Einstein Medical School, Jacobi Hospital
Bronx, New York
- 12/4/85 "Cervical Treatment and Polyaxial Traction"
Lennox Hill Hospital, New York, N.Y.
- 12/5/85 "Cervical Treatment and Polyaxial Traction"
Rehabilitation Institute of Chicago
- 2/16-21/86 Course Director
"Musculoskeletal Diagnostics and Treatment:
Towards A More Rational Perspective IV"
Fifth Meeting, Int'l Rehabilitation Medicine Association
Manila, Philippines
- 2//86 "Cervical Treatment and Polyaxial Traction"
Physical Therapy Association, Hong Kong
- 5/14/86 "Cervical Treatment and Polyaxial Traction"
Cornell University Medical Center

5/15/86	"Cervical Treatment and Polyaxial Traction" "Principles of Orthopaedic Medicine" Nassau County Medical Center, New York
10/16/86	"Cervical Treatment and Polyaxial Traction" Maryvale Samaritan Hospital & St. Joseph's Hospital, Phoenix, AZ
10/20/86	Course Director "Manipulation" Annual Meeting, The American Academy of Physical Medicine & Rehabilitation Baltimore, MD.
10/24/86	"Cervical Treatment and Polyaxial Traction" U.S. Military Academy, West Point, N.Y.
10/30/86	"Cervical Treatment and Polyaxial Traction" Kaiser Hospital, San Francisco, CA Queen of the Valley Hospital, Napa, CA
10/31/86	"Cervical Treatment and Polyaxial Traction" St. Mary's Hospital, San Francisco, CA
11/29/86	"Cervical Treatment and Polyaxial Traction" Sharps Hospital, San Diego, CA
10/23/87	Rosenthal Symposium Speaker On Low Back Pain The Annual Meeting of the American Academy of Physical Medicine & Rehabilitation Orlando, Florida "Confronting The Controversy of Low Back Pain"
11/21/87	"An Integrated -Investigative Approach to Orthopaedic Medicine - A Day With Paul H. Goodley, M.D." American College of Orthopaedic Medicine Arcadia, CA
12/6/87	7th Annual Symposium U.S. Veteran's Administration Sepulveda, CA "Certain Manipulative and Injection Techniques for the Foot and Ankle."

3/16/92	<p>Manipulation in Physiatric Practice PM&R Resident Staff Loma Linda Medical Center Loma Linda, CA</p>
6/10/92	<p>Musculoskeletal Diagnostics of the Cervical Spine Temporomandibular Joint Clinic White Memorial Hospital, Los Angeles</p>
7/22/92	<p>Musculoskeletal Diagnostics of the Cervical Spine - Goodley Polyaxial Traction Temporomandibular Joint Clinic White Memorial Hospital, Los Angeles</p>
9/16-22/92	<p>PostTraumatic Cranial Vault Dysfunction with Resultant Pituitary Insufficiency - Effective Treatment with the Goodley Polyaxial Cervical Traction/Mobilizer - A New Diagnosis and Therapeutic Method. XI World Congress of the Intl. Federation of Physical Medicine and Rehabilitation Dresden, Germany</p>
1/17/96	<p>Foundations of Clinical Orthopaedic Diagnosis & Treatment Kulpat Cholim Klallit Jerusalem, Israel</p>
2/14/96	<p>Foundations of Clinical Orthopaedic Diagnosis & Treatment Meier Hospital – Department of Orthopedic Surgery Kfar Saba, Israel</p>
4/28/04	<p>Muscle Energy Technique The Israeli Society of Musculoskeletal Medicine “Myofascial Pain & Disability” Tel Aviv</p>
Scheduled 12/15-16/05	<p>Synovial Entrapment Syndromes – Concepts & Treatment The Israel Medical Association Annual Conference Physical Medicine & Rehabilitation Tel Aviv, Israel</p>

11-12/05

Muscle Energy
16 hour course for P.T.s Maccabee Health System

PAPERS ETC . PUBLISHED

Complaints"

Acta Thermographica, January 1980
"Musculoskeletal Pain and Thermography"
"Thermographic Findings in Patients With Musculoskeletal Pain

Journal of the American Medical Association
"Thermography," published in Letters, Feb. 23, 1983
"Chiropractic and Judge Getzendanner's Injunction," published in
Letters,
September 23/30, 1988

BOOK CONTRIBUTIONS

Chapter 43 "Thermography in Trauma"
INTERDISCIPLINARY REHABILITATION IN TRAUMA
Gerhardt, Reiner, Schwaiger & King
Williams & Wilkins, pub 1987

A Clinical Manual on Cervical Traction and the
Goodley Polyaxial Cervical Traction-Mobilizer System

Release From Pain –

VIDEO

Fundamental Concepts For Musculoskeletal Therapeutics - A Hands On
Approach
Produced for the 1986 Annual Meeting, American Academy of Physical
Medicine & Rehabilitation

Soft Tissue Entrapment in the Hip Joint, A New Diagnosis Demonstrated
By Cineradiography

SELECTED COURSES FROM POST GRADUATE TRAINING

1960	"Joint Manipulation" (A five day course) John Mennell, White Memorial Hospital, L.A.
4/28 -5/6 & 5/20-27/72	"Orthopaedic Medicine" James Cyriax, M.B. Saint Andrews Hospital, London, England
5/8-6/2/72	"Physical Medicine" Centre D'Etude et de Recherche en Therapetiques Manuelles Dr. Robert Maignes, Hotel Dieu, Paris, France
6/5-10/72	"Peripheral Joint Manipulations Kaltenborn University of Western Ontario, London, Canada
3/12-23/73	"Neurology" Harvard Medical School
5/19-21/73	"Joint Mobilization" Maitland Kaiser Hospital, Redwood City, CA
7/2-27/73	"International Seminar of Orthopaedic Medicine and Manual Therapy" Canary Islands, Spain
2/2-4/75	"The Research Status of Spinal Manipulation" NINDS Workshop, NIH Clinical Center Washington, D.C.
5/29 - 6/1 1979	Sixth Annual Meeting, Int'l Society for the Study of the Lumbar Spine Gothenberg, Sweden
5/14-16/82	"Muscle Energy Manipulative Techniques" URSA Foundation, Edmonds, WA

7/12-14/82	"Cranial Techniques for Stress Reduction" URSA Foundation, Edmonds, WA
2/4-6/83	"Counter Strain Manipulative Seminar" Arizona Academy of Osteopathy Phoenix General Hospital, Phoenix, AZ
3/15-16/86	"Muscle Energy & Counterstrain" College of Osteopathic Medicine of the Pacific Pomona, CA
5/17-18/86	"Fascial Release Manipulative Techniques" College of Osteopathic Medicine of the Pacific Pomona, CA
5/21-23/88	16th. Annual Seminar on Diseases of the Temporomandibular Apparatus The Temporomandibular Joint Research Foundation Coronado, CA
2/16-18/90	First International Conference, Chronic Fatigue Syndrome and Fibromyalgia Los Angeles
5/17-18/97	Treatment of Pain Jefferson Medical College Los Angeles
2/18-21/99 (AAOM)	14 th Annual Meeting American Association of Orthopaedic Medicine Las Vegas, NV
8/13-15/99	7 th Annual Meeting International Spinal Injection Society Las Vegas, NV
9/17/99	"Controversies in the Use of Opioids For the Treatment of Chronic Pain: A New Perspective?" California Society of Anesthesiologists Santa Monica, CA
9/18-19/99	Hands-On Spinal Injection Workshop Using Cadavers California Society of Anesthesiologists International Spinal Injection Society

Santa Monica, CA

6/9-10/05

Conference on the Biology of Manual Therapies
National Institutes of Health
Bethesda, MD

PROLOTHERAPY SIMPLIFIED

FOR WANT OF A NAIL...

Paul H. Goodley, M.D.¹⁵⁵

Understanding of this scientifically sound and effective therapy is long overdue.

Prolotherapy (Sclerotherapy, Proliferant Therapy, Ligament Reconstructive Injections, Ligament Reparative Injections) is a modern technique for repairing ligaments and other connective tissue injuries, the refined application of a method that is centuries old. It is historically related to such procedures as the searing of a horse's bowed tendon with a heated iron, the injection of sclerosant solutions to close varicose veins, even repair hernias.

THE PRINCIPLE OF PROLOTHERAPY:

Only blood maximally delivers what the body needs to maximally heal. Ligaments, tendons and similar connective tissues are not vascular. They are more like ropes and sheets. They are mostly made of collagen that has few cells and are normally maintained by body fluids flowing over them, which is sufficient for their basic nutrition but not for major healing.

The provision for healing is through the availability of a vast network of capillaries, the smallest blood vessels in the body that can open promptly and deliver blood when needed. But they remain open for only a relatively short time, and the signal that closes them is not governed by the healing process but by time. They close in less than two weeks. If strength, tone and tension are complete by that time, then all is well. If not, weakness and functional deficits can persist indefinitely.

Prolotherapy works by signaling the capillary beds to reopen. It does this because the reflexes are literal and interpret the presence of the injection material similarly to how it responds to injury. To keep the healing process maximized, the injections are usually administered in a series over a period of weeks or a few months.

¹⁵⁵ Dr. Goodley is in consultative practice in Telz Stone, Israel. Email: paul.goodley@me.com. Website: www.drgoodley.com. Dr. Goodley has treated patients with Prolotherapy since 1972.

A BRIEF HISTORY:

Despite the high frequency of ligament and tendon injuries, even in recent publications, little attention is directed to treating their specific needs.¹⁵⁶ Recognition of the special nature of connective tissue injury is not dominant in orthopedic surgical literature.¹⁵⁷ A major reason is that prolotherapy was introduced at the same time that vertebral disc herniation was discovered. No injection procedure could compete with the surgeon's predilection to operate.

Prolotherapy began in the United States in the 1940's. The story is it began to be refined by a veterinarian, who showed it to a dentist who used it for TMJ (temporomandibular joint) disorders and from whom Dr. George Hackett, an industrial surgeon in Canton, Ohio learned about it. He codified it but used harsh solutions. The procedure was refined primarily by Milne Ongley, a New Zealand physician who was studying in England. He popularized a gentler solution of dextrose, glycerin and a low percent of phenol that he had found as an approved substance in the New Zealand formulary.¹⁵⁸ It is popularly called "Ongley Solution." Some call it P2G. A number of other solutions are also used.

Slowly at first, the number of practitioners using prolotherapy increased until recently when substantially more have become attracted to it. From the relatively few practitioners even in the 1970's, many of whom were osteopaths (who call it Sclerotherapy), now there are recognized "main stream" physicians who advocate its use and some have reported personally benefiting from it.¹⁵⁹ ¹⁶⁰ During all this time Prolotherapy has been increasingly popular around the world.

Publications concerning Prolotherapy are appearing, including in traditional journals, and scientific proof of its efficacy is reported therein.¹⁶¹ ¹⁶² From a first tentative study performed in

¹⁵⁶ The case is elaborated, including clinical histories, in: PAIN PANDEMIC – What You Must Know About The Price You Pay for Medicine's Fundamental Flaw. Paul H. Goodley, M.D.. A copy of the manuscript chapter is available on request to: drgoodley@earthlink.net or the professional office. A copy of the pre-publication manuscript is available for purchase.

¹⁵⁷ As example, the first article in the Sports Medicine issue of The Orthopedic Clinics of North America, July 1995, is a lengthy discussion on Skeletal Muscle Injuries. The index lists two minor references to ligament injuries of the elbow and knee. While the elbow discussion specifically recommends against corticosteroid injections "because it may induce further attenuation of the ligament of tendons" there is no statement that Prolotherapy may do the opposite.

¹⁵⁸ Personal communication.

¹⁵⁹ Dr. Vert Mooney's remarks at the recent CAA meeting.

¹⁶⁰ The published statement of Dr. C. Everett Koop, former United States Surgeon General, which is printed herein.

¹⁶¹ Liu YK, Tipton CM, Mathes RD, et al: An in-situ study of the influence of a sclerosing Solution in rabbit medial collateral ligaments and its junction strength. Connect Tissue Res 1983; 11:95-102

¹⁶² Maynard JA, Pedrini VA, Pedrini-Mille A, et al: Morphological and biochemical effects of sodium morrhuate on tendons. J Orthop Res 1985;3:236-248

England by Sanford and reported in an organizational newsletter¹⁶³, an extensive literature is now in print.¹⁶⁴ ¹⁶⁵ As of the writing of this article in January 2000, the Internet offers 838 pages concerning this method. This discussion will elaborate a number of issues that revolve about this inherently valuable technique.

THERAPEUTIC CONSIDERATIONS:

Virtually all ligaments available to the needle have been injected. The literature continues to increase, and new uses will likely continue to be found.¹⁶⁶ Still, Prolotherapy is most often considered to be associated with vertebral injuries. The sacroiliac joint is particularly mentioned because when its large and complex ligaments are damaged, the condition is so difficult to treat otherwise.

The clear science merges with the art in individual circumstances. Clearly there are guidelines to the number of injection that should be used and the sites. At the same time, what the experienced clinician palpates with the needle and whether there is confidence that the structures have been sufficiently well injected to the patient's best advantage remain ongoing considerations.

I do not recommend continuing if there has been no effect by a third series. It is not unusual for a patient to experience notable improvement from the first and for it to continue with subsequent injections. The decision whether more than three should be given depends on how far the patient has come and how much pain and dysfunction may persist.

The procedure is painful, and in vertebral application most often the injections are performed with some form of analgesia. The use of intravenous narcotics and sedatives is common, which the clinician also appreciates so there is no unreasonable constraint on providing all the injecting necessary.

Concerning the procedures potential effectiveness, an accurate fast answer may be found in one of Ongley's studies.^{vii} He largely avoided individual variations, as do virtually all statistical studies: He took 81 patients with chronic low back pain with an average of 10 years duration and divided them into two random groups. The group treated with Prolotherapy had "greater

¹⁶³ Goodley's Travels – A Voyage Among the Giants, Newsletter of the North American Academy of Manipulative Medicine, 1972. Copies are available on request to: drgoodley@earthlink.net or the professional office.

¹⁶⁴ Ongley MJ, Dorman TA, Klein RG, et al: A new approach to the treatment of chronic low back pain. Lancet 1987; 2:143-146.

¹⁶⁵ Klein RG, Eeek BC, DeLong B et al: A randomized double-blind trial of dextrose-glycerine-phenol injections for chronic low back pain. J Spinal Disord 1993;6:23-33

¹⁶⁶ My chapter that is available presents a previously unreported case involving a major injury to the scapular muscles.

than 50% improvement in disability scores, compared with 16 of 41 in the control group; and the number with zero disability scores at six months were 15 and 4, respectively. ($p < 0.003$).” In other words, many in a random sample will be helped with prolotherapy.

Prolotherapy is likely the *only* reasonable therapy in conditions when a joint dysfunctions and is restored with joint manipulation but that provides only temporary relief. It regularly “goes out” again, like a loose door reopening every time it is closed. There are cases where a joint is unquestionably hypermobile.

PARTICULARLY IMPORTANT COMMENTS:

Dr. Vert Mooney wrote the initial paper for a book on prolotherapy.¹⁶⁷

“...Then a funny thing happened. Some of my patients who had failed to benefit from my traditional orthopedic surgical approach received some injections of proliferant solution. These made them better. I thought it must be a hoax or a placebo effect. Nonetheless, since I did not understand the material being injected, I had to investigate it further. To my surprise, a prospective scientific study on prolotherapy was about to be initiated in Santa Barbara, California. I was asked to monitor the study to vouch for the methods and result. I actually took on this role with a confidence that my scientific integrity would be able to squash this “hokey” concept of sclerosant injection into ligaments once and for all. I had heard of it, of course; the same concept had worked for the old-time vascular surgeons. However, none of my professors had ever talked about it, and I had never seen an exhibit at an academy meeting about it. What reason was there to believe it worked? But, I wondered, could it work? ...To rule out all placebo effect, the results of this prospective study were not evaluated until 6 months after the completion of treatment. The study was described by the editor of the journal *Spine* as an “elegant study.” It clearly documented the benefits of prolotherapy over injection of local anesthesia. The editors of *Spine*, however, said they could not publish it, because they did not like the results! Although I was one of the founding editors of *Spine*, I resigned, and the paper was published elsewhere. (reference viii)

This short story underscores the bias of the scientific community against innovative concepts that, by the nature of the tissue being evaluated in treatment, have poor capacity for objective measurement...

”

C. Everett Koop, M.D., ScD, Former United States Surgeon General, contributed this comment to a book on this subject.¹⁶⁸

¹⁶⁷ Prolotherapy in the Lumbar Spine and Pelvis. *Spine – State of the Art Reviews*, 1995. Pub Hanley and Belfus. ISBN 1-56053-187-8

¹⁶⁸ Prolo Your Pain Away by Dr. Ross Hauser

“...When I was 40 years old, I was diagnosed in two separate neurological clinics as having intractable (incurable) pain. My comment was that I was too young to have intractable pain... To make a long story short, my intractable pain was not intractable and I was remarkably improved (by Prolotherapy) to the point where my pain ceased to be a problem...

CONCLUSION:

Prolotherapy is potentially valuable in the treatment of any structure whose ligaments or capsule have been damaged. Virtually every reachable joint has been injected. The book on how to maximize the usefulness of Prolotherapy will continue to be written for a long time.

One further point: Prolotherapy can be curative in other than joint related conditions. One patient I treated (an industrial case fully reported in my book *Release From Pain*) continued to have a particular pain at the edge of her left shoulder for years after a failed surgery. She continued to be distressed by the feeling that a spicule of bone was sticking into her skin from the inside. Bone detail x-rays were normal. Nothing abnormal was palpable. A series of Prolotherapy injections along the edge of the acromion (the edge of the shoulder) completely relieved it.

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