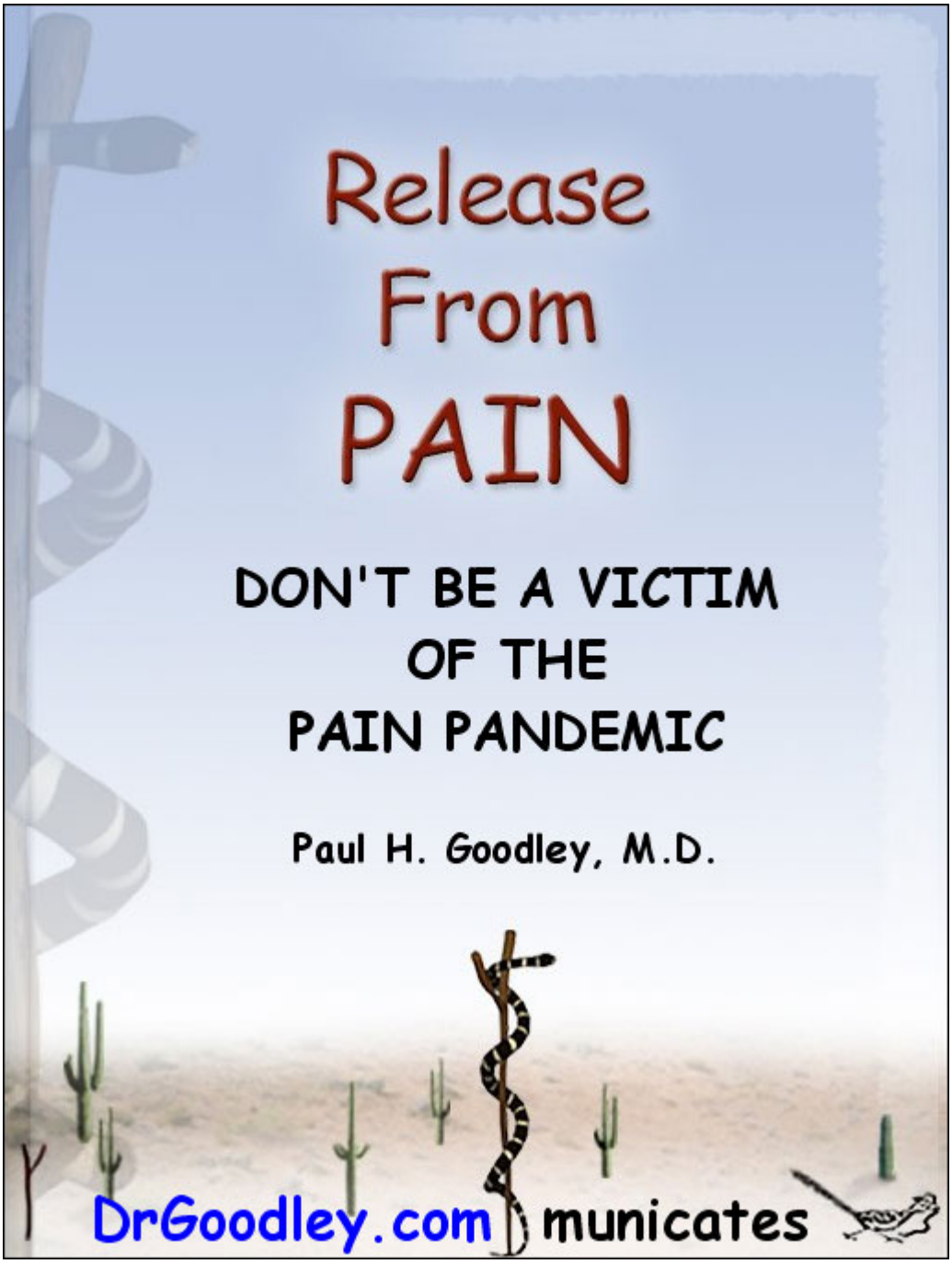
Release
From
PAIN
DON'T BE A VICTIM
OF THE
PAIN PANDEMIC
Paul H. Goodley, M.D.
DrGoodley.com
municates

Pre-Publication comment

Much has recently changed since I began writing this book in 1992. Among the more notable: Leaders in chiropractic have remarkably advanced the merits of its professionalism, in some states, in extraordinary ways.

In traditional medicine, some, at long last, are beginning to, at least, listen. At the same time, unhappily, "pain management," a new discipline, is increasingly equated with specialized injection techniques absent understanding (yet) that biomechanical fundamentals related to the beginnings of many pain syndromes must be appreciated by any professional who professes to treat pain. Regardless, the beginnings of the shift in restoring balance are now noticeable.

With history as witness, general change might evolve into ordinary thinking in a few decades, certainly not a few years. Today, the quality of so many lives remains needlessly at risk that the need for this book is as urgent as ever. But, since movement is now, finally, in fact, visible, my arguments countering medical intransigence no longer need to be in the front of the book and have been significantly revised and moved to Appendix B – where I believe they remain vitally important and entertaining nonetheless.

PHG

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 impetus to concentrate my medical writing into this book. You will meet him in the first chapter.

Drs. Loseff and Yamamoto honored 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 Pain Pandemic and the Fundamental Flaw. They personify what I hope will come from others, especially in their specialty in response to the intent of this book.

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

Goethe

…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 permits 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 find it 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 - are the irrefutable criteria of medical determinism!

TABLE OF CONTENTS

LESSONS FROM PEOPLE'S STORIES

ISSUES CONCERNING MANIPULATION'S ACCEPTANCE

RATIONAL TECHNOLOGY, AND OTHERWISE – FLAWED LAW

THE PROFESSIONS & SPECIALTIES INVOLVED

INVENTIONS FROM THE PRINCIPLES

AN ANCILLARY THERAPY

FINAL CONSIDERATIONS

APPENDIX A

APPENDIX B

The problems of "scientific analysis" with references to the investigation

The Forewords are from notable members of each of the major healing professions. (Some of their comments may be more directed to professionals):

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, FAAPM&R, ACRM, ABPM&R,ABEM, Hon Prof in Med Scs, Universidad Catolica Madre y Maestra
Professor in PM&R, 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, PM&R Service, San Juan VAMC. Staff Physiatrist, Veterans Affairs Medical Center, Washington, D.C.
September 30, 1993

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 1977was 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.

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, 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[1,2] Dr. Goodley's

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[1] Butler, D., The Sensitive Nervous System. 2000: Unley. Noigroup Publications.

TABLE OF CONTENTS

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 has caused a *Pain Pandemic* wherever Westernized medicine is practiced. It is medicine's unspoken blunder. Its occurrence during the time of its most remarkable technological advances in history only tends to make the Pandemic worse because technology cannot be a substitute for what it is not designed to do. Despite its marvels, attempting to insinuate instrumentation inappropriately has often only fed a profound and pervasive charade in pain treatment.[3]

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[3] From the *Los Angeles Times* Editorial Page July 26, 1993 written by Evelyn Storr Smart:

"Commentary - Perspective on Health Care - You Bet Your Life on the Doctor Lottery - *Whether we pick our physician or are assigned by a plan, bedside manner is good. But expertise is better.*

...The following month, suffering from a severe case of bursitis, I consulted his replacement, a skinny little kid with a beard. 'I believe we'll find calcium deposits in your shoulder, which will probably require surgery.'

'No, thanks,' I said. I left and did the only thing I knew how to do - asked for recommendations from my other bridge-playing buddies.

Helen's doctor pulled what appeared to be a 2-inch needle out of a drawer. 'This is cortisone and Novocain. I'll inject it directly into the joint and inflammation will subside.' Sarah's doctor prescribed muscle relaxants and instructed me to keep the arm moving to prevent 'freezing.' Mary's doctor put my arm in a sling and told me not to use it or 'the erosion could cause deformity.'

All my friends' doctors had very nice personalities, but the divergence of their opinions was startling...."

The confusion is admitted. *The American Medical Association* (AMA) is not shy about publishing these inadequacies although it has no idea of its fundamental. The American Medical News has a "First Person" Section. This appeared in its November 23/30, 1992 issue:

"Minneapolis --- I am offering this advice as a public service to all male physicians. Do not - I repeat, do not

There is no substitute for what only focused minds, eyes and hands may be skilled to provide for the relief of pain and impairment.

This is the entire authoritative story of the Pandemic 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 its mechanics. Eventually the word manipulation was used. 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.*

- start your conversation with a woman patient with the words, 'Have you been under any stress lately?'

I believe that, just as some women have successfully used PMS as a defense for murder, any female patient who attacks her doctor after he asks this question also will be acquitted. Especially if the jury is made up of other females.

I remember the first time a doctor began his conversation with me using that phrase. I was in his office because my back hurt, and I wanted to know what I could do to relieve the pain. The day before, I had packed and moved 40 boxes of books so a painter could paint our family room.

'I see that you have back pain,' the doctor said after he glanced at my chart and shook my hand, 'Have you been under any stress lately?'

I was much younger then. I thought that moving 40 boxes of books maybe wasn't a good enough reason for a backache, so I tried hard to think of stresses in my life. There weren't any. I felt that I had failed as a patient. The doctor, after all, had studied medicine for many years, and I was a novice at having pain.

Years passed. I got out of bed one morning, and each time I put my left foot on the floor, I was in agony. I made an appointment with a doctor.

'I see that your leg hurts,' he said after he glanced at my chart and shook my hand, 'Have you been under an stress lately?'

'I don't think so,' I said politely.

'I think I might be having trouble with my leg because I slipped and fell down the stairs while carrying the laundry yesterday.'

'Maybe I should have a look at your leg,' he said sheepishly...."

Those stories hurt. It is not a matter of healthy differences of opinion. That is not the issue. The fundamental approach is. The Fundamental Flaw is. What is up front in the doctor's mind in the initial encounter is.

Despite that hands-on care of the body's biomechanics had been in medicine's tradition for millennia, medicine irrationally repudiated them 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 reacted with disdain.

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 self-perpetuated, and evidence was always available to justify this attitude. There have always been charlatans. So, instead of the manipulative fundamental dynamically developing as a cohesive, trustworthy guide within traditional medicine, it was discredited as the synonymous derelict symbol of its most despised competitor - *chiropractic.* And future generations born into a hardening tradition of pervasive belligerence against anything manipulative unquestioningly accepted this verdict.

In recent years, while there have been isolated beginnings of change, nothing has improved institutional understanding. And now we are confounded, as well, with managed care, which so often divorces itself from medical wisdom that it has no resource to comprehend the long-range savings from sound, comprehensive early-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 has religiously insisted on its doctrinal correctness. Most of you who required, and require, these methods for your relief became 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. "Alternative Medicine" has within it a vital seed. On November 11, 1999, sixty-one international medical organizations announced the ***"The Bone and Joint Decade, 2000 – 2010, for Prevention and Treatment of Musculoskeletal Disorders"*** in the journal *SPINE.* Initially, the membership was dominantly surgical. In its admirable evolution, medical specialties and both osteopathic and chiropractic organizations are now represented.

There have been many reactions to this book. 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 new revelation. The literature is sprinkled, even from the White House, with commentaries concerning the

failure of American medicine to teach fundamental biomechanics.[4] 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.[5] 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

[4] Wilbur, Ray Lyman: Body Mechanics: Education and Practice, White House Conference on Child Health and Protection, 1932.

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

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 setting, mechanical back pain must be a *diagnosis of exclusion* because of the potential of underlying causes that may be life-threatening."** The first paragraphs of the first chapter of this book disprove this statement as well. 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 so self-evident, 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 basics 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.**

For five decades, the stories my patients and their tissues have told me 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 only deferentially discussed so they obscurely gather dust while the casualty list continued to increase while 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 only begins from the first honest look. *Release From Pain* fulfills that need.

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 treatment of 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,** w**ho 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 aware about these issues, you are doomed in 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 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 has to be told so the Pain Pandemic will end!

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: machines work better when their 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 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 seeking 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 observing a biomechanical pathologic process and then applying skillful force to restore normal relationships, appropriate motion - and *release from pain*. 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.

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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 its attended (biomechanical) *reasoning* is virtually universally applicable, and when it is 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 manipulative procedures in detail so there will be no misunderstanding about them or for their efficacy to be questioned again.

Manipulation is not merely the "cracking of joints." Thinking in those terms is crude and inadequate. I will show you how it is much more. I will discuss other fundamental issues as well: the appropriate role of science, the inappropriate 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.

Release From Pain **is for your understanding and application to your individual needs. It will empower you to make better decisions.**

Acknowledgments

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

Thomas Gray[6]

The first people responsible for this story antedate recorded history. Time passed and in different places manipulative treatments took forms and survived because often enough they worked and were literally handed down in families through generations and millennia.

The spirits of all of them are in this book. I can only write this to you by 'standing on the shoulders of giants'[7] only some of whom are now 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 contested in an age of assumed conquest through science; 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 good care; 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

[6] Elegy Written in a Country Churchyard

[7] 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 Reagen made similar reference in his First Inaugural Address in 1989. In truth,

this century, personified: A life of quiet, dedicated, productive and caring service to humankind. That a man of Herman's stature believes in my efforts and would write a Foreword compliments me beyond measure. In his Foreword, Dr. Flax listed his voluminous credentials very reluctantly and only at my insistence. When I was later further honored by 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. She is now engaged in developing *The Osteopathic Center for Children,* in La Jolla, California, a labor that deserves massive support. 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 is.

Dr. Frank Schoenholtz and I met in a very special way. I was teaching for the first time at 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 about manipulation. More than any others, I owe any skills I have with 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

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virtually every contribution to society is from the shoulders of the past.

and only through their forbearance could I finally come to answers that helped them and educated me. When there were no answers some persisted with me and together we made new discoveries from which to relieve them.

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: T*he 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 I might have discovered. 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 in 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., who has witnessed much of this story as my friend. 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 Bryant and Diane Gates 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 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 is still was not its time.

John and Wendy Williams have been my friends for well over ten 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 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 coming into 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.

And finally 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 this year before she could see it published.

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

- **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 frail, elderly, bent in severe pain. Her near-frantic children towered closely protective, gaunt ebony saplings anxiously arched high over her like an awkward cathedral. Reverently reaching down, they struggled to support her as they shuffled slowly into the emergency room of *The University of Southern California/Los Angeles County Medical Center* where I was standing the late night watch as Chief Admitting Physician.

She could only take a few short wracked steps before she froze with a tremor as their

frustrated hands trembled to relieve her while realizing that their grasping also aggravated their mama's grimaced spasms.

I was standing close by the entrance as they entered. The stark poignancy 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 her jolts were synchronized to her breathing and the touching I had observed 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 manipulative maneuver. Not a single laboratory test had been done – not an x-ray or electrocardiogram or blood panel. All astronomic 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 lock in the "jam," and trying to breathe becomes self torture.

Lifting her had eased the tension. The pressure asserted from 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 and major spasm. *Furthermore, if it*

hadn't worked, 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?

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 in virtually all its aspects, allopathic doctors (M.D.s) have been denied virtually all education about them for more than a century despite that they are at least as essential as a stethoscope.

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 while full consciousness of thought, sensibility, imagining, desire remain intact in unimaginable frustration and helplessness for the remainder a normal life expectancy.

It is called *The Locked -In Syndrome* (LIS) and occurs because there is one minuscule site high in the spinal cord where virtually all the nerve tracts that transmit the commands for voluntary motion exit from the two sides of the brain and merge as they cross to innervate the opposite side of the body. A blood clot that precisely obstructs the circulation of that remarkably tiny territory of only a few millimeters can inflict such total and irrevocable havoc.

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 predominantly 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, and 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, but I then asked him to subtract one seven-digit number from another. As I called them off, 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 for a Jacuzzi. As I lay there relaxing in the wonder of what hot water does, however such things happen, in my imaginings I was there 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 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 and that its characteristics can, at least, be easily suspected.

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 <u>rotating the torso left or right</u> usually instantly increases dysfunctional vertebral pain, from which the pain may radiate along the course of a nerve to the anterior chest. <u>Deep breathing</u> can do the same as the ribs are increasingly engaged. Cardiac symptoms are not influenced by such challenges. <u>Localized vertebral tenderness</u> 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.* Performed skillfully, this 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 facility, at that time in Los Angeles, 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 going on for weeks.

As he visited, without really a conscious intent, my fingers moved along his mid back 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. x

Whatever else is the marvel of the living body, it is also machinery. 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, predominantly mediated through nerves. There is hardly a discipline in medicine that may not, in some way, be more effective with manipulation's knowledgeable application.

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 carpenter, machinist, 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 essential questions and decide what might be done next. The principles of 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 reasoned 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 it is applicable and that a real examination has, after all, been done. While it is true of halitosis that bad breath is better than none at all, 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. And here is where technology is too readily thrown into the gap as a – consciously realized, or not - desperate attempt to compensate for The Fundamental Flaw. X-rays will almost certainly be taken, *often initially.*

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 is 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 you have to be given something. A pill and/or some therapy may be prescribed. (And it is so expedient to write a prescription. And it is so expected.) 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). In this battle to protect one's sense of professionalism, as you will eventually see, a doctor's defensive mental gymnastics can became 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.*

But there are no absolutions for the unfortunate patient. 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 slipping 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, those who feel the pain of the *Fundamental Flaw* tragedy are 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 mostly so busy emulating allopathy, they disproportionately detract attention from 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.

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 what we were entrusted with, and we are no longer trusted and admired 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 Medicine* in 1980. On October 17, 1982, a small group convened to formalize it. *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.

“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. Often I 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 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 a 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 sound so casual that I had taken a leisurely stroll from my hotel and arrived what I thought was only a few minutes late. To my consternation, the ballroom was packed with hundreds of people 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 I had already met. We greeted each other, and they said that no one in their party was occupying the empty seat. The distinguished Japanese gentleman on the other side said the same so I took it. His name is Dr. Tomio Yamamoto, Chief of Orthopedic Surgery at Osaka Koseinenkin Hospital in Japan.

We talked. 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 orthopaedic[8] medical perspective they are common impairments. And most of orthopedics is, in fact, medical. Till then, 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 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 of ignorance about the manipulative arts is general, and

[8]Throughout 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.

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 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**

It happened because of a splinter that Ozzie Hansen got under his thumb fingernail. It was from dunnage, contaminated lumber that lies around wharves to support loads from ships from wherever. Ozzie's was big and had penetrated deep down to the bone. I trimmed back the nail, cleansed the wound 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 violently rear-ended by an Army officer rushing back to his base weaving through traffic at seventy miles an hour. The crash broke Ozzie's seat and hurled him into the rear of his vehicle. He arrived at my office by ambulance, and I followed him to the hospital.

There was no gross neurological deficit, fracture or head injury, but Ozzie's neck was virtually locked with his head thrust forward. The pain was intense and became excruciating with any attempt to move it. As the spasm receded, I palpated an obvious and remarkably tender walnut size mass high on the left side of the back of his neck just under the skin.

After nine days, Ozzie insisted on being discharged although his pain hadn't diminished.

I pleaded with him not to, but he was a respected longshoreman supervisor, and he insisted on returning to work. He returned in only a few hours on the edge of shock, and two more weeks barely provided further relief.

The orthopedic surgeon I consulted claimed, "Since all soft tissue heals within two weeks, any complaint thereafter must be imaginary or faking." He 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. The orthopedic surgeon compounded Ozzie's injuries another way, as well. Because of his report, Ozzie's very legitimate lawsuit was dismissed. Later, he told Ozzie that if he still "thought he felt pain," he could hang his head in traditional "over-the-door" cervical traction, and so trusting Ozzie had sat up shivering and suffering through many a sleepless night 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. Manipulation was ridiculed in medical school, but my former brother-in-law had attended osteopathic school because he had repeatedly been rejected for admittance to medical school, so I'd heard the word often. In fact, I had heard the word ad nauseum but had never been shown anything. Later, some of my patients had told me they'd been helped by it, and by then I knew something basic was missing from what I – a traditionally trained M.D. - had to offer.

I tried the basic manipulation I'd learned on Ozzie, but he couldn't tolerate any motion at all. I attempted everything I could think of. It was 1962, and a drug called Tubadil® was available. It contained curare, found by witch doctors and used by native African hunters. It was the most powerful muscle relaxant ever known and could produce total muscle paralysis. It was

mixed with peanut oil for intra-muscular injection, and each dose had to be meticulously measured and subsequently increased by only 0.1 cc., about 2 drops, while the critical response was watched for: In the sequence of effect, about 0.4 cc. paralyzes the eye muscles, and any increase after that blocks the diaphragm and terminates breathing. I took Ozzie right to the edge and supplemented it with morphine, but even then any attempt to mobilize his neck was instantly agonizing. Nothing helped until I purchased a “Neuro-Orthion” traction table for him that immobilizes the entire body by clamping both the head and feet. With it, Ozzie was able to to get a few hours 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. As he began to look up to direct the hook through a hatch, he blacked out and started to fall into the hold towards the steel deck thirty feet below. Another longshoreman barely caught him by his sheepskin coat and saved his life. After that he didn’t return to work.

His case was reviewed by Neuro-Radiology at UCLA because it was suggested he might have sustained a small fracture and that a bone callous had compressed his vertebral artery, which ascends to back of the brain, but no fracture 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 Loretta, his wife. Always respectful and quiet despite his pain, he looked at me from across my desk with an additional sadness in his now gaunt and haggard face. He was near exhaustion, and this gentle man 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 as I sank back aching into my chair I knew that I had no choice.

"Ozzie", I said finally, "there is only one thing I can think of that I haven't tried." It was something I had learned from the doctor who had taught my first course in manipulation. He 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 joint 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 she had accepted and, for reasons unknown, she had been relieved. It had happened in England.

There was no similarity between Ozzie and the English woman. Ozzie's neck was virtually stuck. Manipulating a neck when general anesthesia is depressing the protective reflexes is one level of jeopardy, but the exact nature of Ozzie's pathology was a mystery. Any movement beyond an unknown boundary could totally paralyze or kill him. But his desperation was frightening, and I recalled the story despite the danger.

At that time, I had been manipulating for about a year and had experienced some dramatic successes even from the rudimentary procedures that I had learned, but I had never done anything remotely like what I now contemplated. There wasn't a hospital in the United States that would allow me to do such a procedure, and I had never administered a general anesthetic. Nonetheless, I offered the procedure, explaining the fullness of the risks. I would

have to do it in my office. 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… Ozzie nodded.

For three days I studied, prepared, and prayed. The morning of the procedure, everything was surreal. I couldn't speak knowing I was about to jeopardize Ozzie's life, my license, my family's livelihood and my freedom, but I couldn't allow myself to linger on 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. Without a word, we entered the small room where I'd prayed and carefully 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 now limp neck. For the first time since the injury, the "walnut" (of segmental spasm) was gone. 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 the time that had elapsed since the injury, there was almost no resistance from scarring as the room filled with the most alarming, loudest 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 looked helplessly at her unable to offer any adequate answer.

"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." Each question was a dry mouthed, apprehensive plea: "Ozzie. Can you move your toes?…Ozzie, can you move your fingers?… Ozzie, can you open your eyes?" Ozzie, can you sit up?…Ozzie, can you move your neck?"

Sitting and facing Loretta, Ozzie turned his neck painlessly through a full range of motion. Loretta slumped for a moment. Then she came to us where I was already holding Ozzie. We stood there for a long time, our faces together and arms around each other, our body's wracked, tears flowing freely as we praised and thanked God. I looked up and raised my arms thanking Him again. I knew He had put my feet on a path that I swore I would never abandon.

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 him 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.[9]

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[9] 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

In the following few years, I repeated the procedure over a dozen times. Half the patients were markedly improved, and there were no complications.

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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 Hansen"

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

CHAPTER THREE

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 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 about 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. Many other factors are involved as a complex of neurological/muscular responses are invoked.

At one time, the definition of manipulation was limited to the delivery of a sudden and precise force that is faster than the patient's ability to react. In contrast, mobilization was considered the slow, sometimes rhythmic delivery of force that always remains under the patient's final control.

HIGH-VELOCITY LOW-AMPLITUDE THRUST (HVLA)

High-**V**elocity **L**ow-**A**mplitude thrust is the grand daddy 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, and most joints can be manipulated with it.

The patient remains passive as the clinician dominates. For spinal manipulation, the body is positioned to develop a tension on each side of the joint to be manipulated. It takes a fairly well developed palpatory sense to carefully "take up the slack." In essence, two "levers" are created by relatively "locking" the joints 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 up as the force is exerted. The effect can 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 joint's normal range of movement so that soft tissues are not injured.

The spinal joints, and many others, 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, at The 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 USC.)

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-lie 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 flexing 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 the 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 PM&R. His expression was an interesting combination 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 such therapy I know that offers the opportunity for instant cure.*

FUNCTIONAL TECHNIQUES

The distinction between manipulation and mobilization blurred with the osteopathic advent of what they call *Functional Techniques.* Instead of thrusting at the passive tissues, they are performed through dynamic realignment by the application of gentle leverage.

MUSCLE ENERGY

Muscle Energy, a powerful technique, was developed by Doctor Fred Mitchell, Sr., an osteopath. It conceptualizes that dysfunction is caused by muscle tone imbalance and is corrected through exploiting the muscle physiology. The patient is precisely positioned. The involved muscles are contracted isometrically: the parts are prevented from moving. Then, the muscles are relaxed and a brief “refractory” phase ensues during which the joint is gently levered towards normalcy.

The manipulation is precise, gentle and slow. It has a number of advantages. When it works well, as it often does, it may provide segmental "training" so the involved muscles has 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 the origins of spasm: special fibers interspersed in muscle tissues sense and set the tone for a particular planned task, whether it brushing one’s teeth, scratching one’s nose in the dark or tensing for a precise leap (as is so beautifully seen in cats) - or lifting a heavy object. So, the physiology is consciously directed yet still acts as a protective reflex which fires whether a threat is real or only perceived to be. Once the alarm goes

off, it may persist indefinitely. After a time, the spasm may not be gross, but sufficient muscle fibers 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 his back muscles to thrust his body back. The sudden overload against the tensile strength of the biceps tendon could easily snap it. Tricking someone by inducing them to be convinced an object is very light or very heavy (when the opposite is true) can cause severe harm.

More specifically, for a Muscle Energy manipulation, the patient is carefully placed 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 assists the patient to perform an *isometric* contraction (contracting certain muscles while preventing any motion of the involved joints). The effort is held for at least six seconds, during which all the elements of the muscle tend to come into balanced tone.

The final phase of the manipulation occurs when the patient then *fully* relaxes, and during the anticipated “refractory period” of local quietness, which lasts about four seconds, the muscles that had just been in spasm are stretched back to their normal resting length as the dysfunctional joint is hopefully released to its normal relationship. 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.

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Vendyl Jones is an archaeologist who is reputedly the namesake for Indiana Jones. He is an extraordinary individual who has devoted his life to the "big dig" for the Temple treasures in Israel. Anthony Carton, a friend of mine, told me that Vendyl would be in Southern California in February 1995 to raise funds for his next excavation later that year, near Qumran, the site where the Dead Sea Scrolls were discovered. I wanted to meet him, but I kept missing him until the day he would leave after lecturing at a small church in Orange County close to Anthony's home. I picked Anthony 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?"

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 gone away, and sometimes it would suddenly increase. I had no preconceptions about my being able to help him, 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 a perfect workbench.

There were dysfunctions and accommodations all up and down Vendyl's spine with the primary problem about his sacro-iliac joints. I just kept working, almost entirely with Muscle Energy techniques until everything was "back in place" and moving properly. It took about an hour. Vendyl got off the bed and began to move about the room stretching and lifting his legs in all sorts of directions. He wouldn't answer me about his pain. He just smiled and kept doing all

sorts of things he hadn't been able to do for years. In fact, for the first time since the accident, his pain was gone. I told him his ligaments were damaged and that the pain would recur. He would need a series of prolotherapy injections (which I will discuss in detail). I showed his secretary, Anita, now his wife, a few maneuvers to use when the pain tended to recur, and that is how I became the physician for the dig November 1995 to February 1996. It was one of the great experiences of my life.

COUNTER STRAIN

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.

Almost four decades ago, he 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 told the story, he had worked assiduously but without success, as well. 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 related that he had spent about twenty-five minutes continuing to readjust pillows about the young man's leg until by trial and error he eventually found a pain free position that had 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 on his feet 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 application to 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,* the one that sets muscle fiber tone and protects joints (which I briefly discussed above), can fire emergently even if a muscle or a joint has not been overstretched, *if its acceleration is unexpected.* Then, once the muscle reflexly contracts to attempt to prevent a perceived injury, the "alarm" can persist indefinitely because the muscle fibers persistently remain relatively too short and "overstretched." Obviously their points of origin and insertion remained the same, so there was no place in their normal functional range for them to find a position of untensed rest. 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 for the involved muscle fibers to relax so the alarm can stop.*

A muscle in spasm has a discrete tender and tense spot in it. The patient must remain completely relaxed 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.

While there are guidelines that work most of the time, the principle is the ultimate authority. The technique requires precision, 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 is infinity for that reflex. 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.

When I first learned CounterStrain, for more than a year I repeatedly asked one of my instructors if it really worked. Each time, he had 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, 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. Then I remembered I hadn't attempted CounterStrain, asked her to turn over, performed it, whereupon she arose on her elbow and asked me what she was doing in the hospital.

While ice-skating with her children, Melody Shepherd[10] fell back violently onto the ice with her arms fully extended straight out behind her. She took the full force onto her hands as both elbows violently hyperextended. She came to my office with her arms hanging flail, totally unable to flex her elbows. Every attempt she made was prohibitively painful although I could fully flex them for her painlessly. 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. It continued for almost two weeks. Finally, I thought of CounterStrain. Only one treatment to each

[10] Melody lives in Sugarloaf, Big Bear Lake, California.

elbow broke the reflex and almost immediately Melody 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 Barbara Cunningham[11], 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 and 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 Barbara's hand was fully functional. Her expression was priceless, and the lunch was free. Bad business. Great fun.

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

MYOFASCIAL RELEASE TECHNIQUE (MFR)

Myofascial Release Techniques treat the muscles and the fascia - the connective tissue -

[11] Barbara now owns The Barnstorm Café at the airport in Big Bear City, CA.

that, like a near infinite spider web, covers, invests and supports all the structures of the body. Most often, 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. MFR is also a type of massage. The techniques are applicable in virtually every condition because almost always there is soft-tissue irritability within the pathologic process.

The procedures may be necessary when tissue tenderness, bodily asymmetry from fascial pull and spasm are observed. Not treating them tends to leave a residual whose irritable focus can fire "retrograde" - back down the nerve – and sustain an underlying dysfunction. Untreated, the pain that results from such conditions can persist for life.

MFRs have special value in the treatment of pain from internal scars whether they are realized, or not. The treatment is not benign. It can be as painful as pain can be, but for only a few minutes. As the saying goes, "I hurt so bad I thought I *wasn't* going to die." At the same time, the result can be magnificently rewarding.

When I was in Israel, Vendyl Jones asked me if I might be able to help Sarah, his forty-five years old daughter who lives there. He was aware only of the problem that involved her left arm, which I will discuss it in Chapter Seven. Sarah's other problem was as painful and far more pervasive.

There are times that an in-depth history is not all that important. Chronic scars into the interior are paths of pain along the entire extent of their adhesions that may be relieved only by palpating into them 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 happens, and it happened that night.

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 was gutsy. 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. I related what I was about to do. I explained that when tissues tighten and scar, the resultant distortion usually impairs function. I told her how painful MFR can be and that the path of her pain would be my 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 the there is no more of "it."

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

When Sarah again relaxed, I treated the full course of the attachments of her 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. The technique commences in the 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. As soon as I encountered spasm and tenderness, my fingers stopped - and held - and waited - relinquishing nothing. In its own 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 Sarah’s abdomen was soft, and all the tenderness was gone.

Then I examined the movement of her *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. Especially in the pelvis, 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” and then flows through tributaries back to the main vascular stream, which it reenters in the *subclavian vein* high in the chest. In Sarah, both sides of the diaphragm weren’t moving at all, and the resultant stasis was a major cause of the chronic edema and irritability of her pelvic organs.. Her legs would swell. Her abdomen bloated. Her digestion and her elimination were grossly impaired.

The pelvic diaphragm is palpated with the patient supine and relaxed. To facilitate the placement of the examiner’s hand, the hips can initially be flexed to a modified exposed posture. 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 diaphragm moving down), symmetric with the other side that, of course, is examined separately. But if several cycles pass and no pressure is sensed, it is likely that the diaphragm's movement is impaired.

The therapy is simple and usually works, as it did for Sarah. With the hand in place as before, the patient takes a few deep breaths, lets all of it out and then stops breathing for as long as possible. "Respiratory assistance" is sometimes irreplaceable. I ask my patients to visualize that they are deep underwater and fighting to reach the surface for a life saving breath. I want that first inspiration to "explode" into the lungs. The longer the breath is held the better. At the instant it begins, the examiner rapidly 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 that an organic condition exists.

It was 9:00 p.m. As Sarah got off the 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 and Sarah's pain was gone.[12]

The term "myofascial" inseparably binds the relationship of muscle and fascia, yet sometimes it is the muscle alone that 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 that he worked at a wrecking yard picking up engine blocks and throwing them onto a truck - one-handed, that is - either hand.

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 horizontal. There was absolutely no other impairment other than the 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. I was able to passively completely elevate his arm 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. In its basic, 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. Anatomically, while the arm's initial approximately 90° upward movement results from its swinging on the scapula[13], 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, the prominence of the top of the shoulder, the primary rotator that swings the scapula to the top of its arc.

[12] Sarah lives at Yishuv: Ma'aleh Levona, D.N. Ephraim 44825, Israel

I stood behind him and palpated deep into its immense mass and eventually palpated the sense of 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 the myelin sheaths had blocked. His muscle had been trapped shortened so there was insufficient contractility to complete scapular rotation.

It was a time when I was constantly encountering skeptical orthopedic surgical residents. 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 "timeless" time! Whatever it takes!* 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. I'd never seen it done that way, but it was logical, and that was all that was necessary. The block was over. His happily elevated his "tree trunk" straight up and went back to his engine blocks laughing. That was the night they named me The Musculoskeletal Wizard. Cute.

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

Someone offered Wayne a "tame" horse to ride. It was their practical joke. As he hit the

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[13] shoulder blade

saddle, the bronco hit back and kept right on pounding him until he departed in a pained trajectory. Not very funny, and for weeks Wayne would awaken walking like a ruptured duck. It would take hours for him to finally be able to walk around with 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 Wayne 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 these techniques approach the shortened muscle fiber problem exactly the opposite from CounterStrain, which I didn't learn until years after some of these experiences happened. CS might have worked for some of them. I don't know. Both have their place. Whatever works.

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 the thumbs. It is another approach that is often successful. While I obtained basic training in his technique and have used it occasionally, I found that my familiarity with others was sufficient for my purposes. Others skilled in his technique do well with it.

Osteopathy in the Cranial Field is in a class by itself and will be described separately.

There are many other types of manipulation with various names associated. I have

discussed some that I am comfortable discussing now. 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 can be a distinct disadvantage.

HOW OFTEN? CAUSE AND EFFECT?

One of the major criticisms of chiropractors has been their too frequent tendency to be highly repetitive with manipulation and even build entire practices on "regular maintenance." I have discussed the 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. Unfortunately, I found little correlation of what they said they do to what they do. Criticism of such tendencies is necessary, but I can't leave this paragraph without balancing the scale with the proverbial story of Ear, Nose & Throat specialist(s), as only an example, who would categorically lecture medical students on the limited indications for tonsillectomy only to then enter the operating room and yank out a dozen or so in a morning. Every profession and specialty, as members of an all-too-human society, has its exploiters. The economic issues heavily influence our times.

A long time ago, insurance companies began paying more for instrumented procedures than for hands-on care, such as manipulation. The discrepancy became and remains a prime attitudinal motivator. Chiropractors cannot perform instrumented procedures, so many of them

try to compensate by doing 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 sometimes 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 did improve but only after a long time, did manipulation have anything to do with it?

My general practice is to limit the number manipulations I will perform without observable results. Every time I treat a patient, I want to promptly find some objective evidence of response. I have only rarely extended the treatments to ten during, perhaps, three or four weeks before discontinuing and in those cases only for special reasons. 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. Banging away daily is far more a risky manipulating of the cash register than the provision of professional care. Bad stories of patients who have been victimized by years of relentlessly unsuccessful manipulation unfortunately are true. I occasionally see them.

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

protocol is unwise.

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 that common conditions are, in fact, common, and rare conditions are, in fact, rare. While it sounds obvious, it is valuable because it asserts an easily forgettable basic truth. But rarities still happen!

Each potential case for manipulation needs to be individually considered. There is always the exceptional patient who requires more than average, just as there are 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 contraindication, but it is also a question of technique. What specific joint(s) may benefit, and what is (are)its (their) relationship(s) to where there is jeopardy? I have sometimes manipulated, sometimes with dramatic success, when such "contraindications" 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 similar to my first 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. If a joint can be *hypo*mobile, it can also be too loose. Continuing to "slap" it back in place may be useless or harmful, like trying to balance ice cubes or continually closing a drawer that insists on reopening. *Manipulation that predictably provides only a few minutes, or hours, of relief is not only not warranted, it is*

exploitation. 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… That is why I told Vendyl he would need prolotherapy.

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 - that 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 regardless of its 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. It is the otherwise normal *but overworked* joint that often becomes painful, so the uninitiated give it all their attention, and the problem perpetuates, as time passes and becomes an implacable enemy. *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…

The manipulative arena is infused with other terms and procedures that require comment because they may injudiciously be considered alternative therapies. So-called *trigger- points* became fashionable some years ago. The term is now even in the official codebook for reimbursed treatment by injection, which, of course, "justifies" their use to too many as it became a death sentence to rationality. The term became so popular it is now a buzzword lacking definition. Anything tender is likely to be called a trigger-point in spite of the fact that the

definition applies to a site that causes pain *elsewhere* when it is pressed, hence the *trigger*. The distinction is critical.

Entire practices have been built on "having to" inject again and again because, after all, if the "trigger point" recurs, isn't it chronic? So doesn't it need ongoing treatment? Such practices give new meaning to whether it is more blessed to give than receive. However, while there are genuine trigger points that sometimes do respond completely to injection, in my experience, many of the so-called trigger points are often associated with dysfunction about the spine or are soft-tissue conditions that respond well to the techniques I have discussed and which have the considerable advantage that they treat the incitement.

As an incidental of value, being able to monitor how tenderness responds to treatment is similar to the wise approach to observing the course of a patient's fever. While, in contrast to tissue tenderness, fever is a sign of the body's defense attacking an infection, they both are trustworthy guides whether a successful agent is being used in the treatment of the core problem. *Unless it gets out of hand, fever is friend, not foe.* It "burns up the bugs." It is the best single gauge to judge whether a therapy is effective. Similarly, tissue change observed hands-on during hands-on treatment is the best single guide to whether a dysfunction is resolving.

Unfortunately today, treating such conditions for 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 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 example, one study[14] 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 treatment 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 went west drawing maps that labeled an ice forsaken 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 traditional medicine does not study the machinery of the body hands-on, does not check the "hinges," does not appreciate manipulation, a "muscle relaxant," or injection, seem to be reasonable primary treatment. Thus, as some chiropractors can be accused of "cracking everything that moves," allopathy, and osteopaths who seek to emulate us, are also guilty for their own predilection to expediency.

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[14] "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.

MY BLUE BALLOON

Successful manipulation is naturally assisted by the maintenance of good posture, which I define as standing relaxed as tall as nature intends one to. A balanced structure best prevents the strains that otherwise can accumulate until they cause a 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" except for the one vital focus.

I ask my patients what their favorite color is. Then I ask them to visualize a balloon of that color that has been blown up with the most buoyant helium ever. (If they say "blue," I give them mine.) 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 sternum[15]. 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 and provides a normal 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

[15] The breast bone.

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 happens from 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 bar was usually there, and not for esthetics. It was because cowboys' backs hurt, and the longer they stood there, the more drinks they bought.

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

CHAPTER FOUR

HOW "TYPICAL" DOCTORS HAVE BEEN TAUGHT TO 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, and its essential purpose is to preserve life by warning that something is wrong because if we cannot feel pain, we perish.[16] Pain is what drives most people

[16] It is called the *Riley-Day Syndrome*.

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, but, as Moses counseled Joshua, I counsel you. *"Be strong!"* Today, the market place is in disarray, and you need to be reasonably perceptive.

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 I must make a choice: Direct this book primarily to you 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 all around, but 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.

Believing in the person you trust for your care can become a near-religiously intense decision. When you are in need, you are vulnerable and exploitable and 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 each is licensed, 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 only 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, 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 remedies as they deal with complaints according to a number of factors, 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 a 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 others, who are similarly skilled, (can, will, should) find them also.

Whichever professional you visit, you will likely relate the same initial story of your symptoms. But how skillfully your complaints are investigated by further questioning, how they are sieved and interpreted, will almost certainly be different. The precision of the inquiry is the

benchmark of the clinician's intent either to find an accurate answer or to dispose of you as expeditiously as possible and move on.

The taking of the medical history and the physical examination work in tandem. Between the two, the history is usually considered relatively more important because it suggests the direction of the investigation and evidence of 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-- the laboratory, the x-ray - when, how many, of what, in addition to, or instead of – may powerfully influence what the clinician will decide to do, for better or worse because remote tests are either thoughtful adjuncts to answer reasoned questions or just "shots in the dark prayers." From those approaches: the history, the physical examination and subsequent testing, the conflict against the causes of the patient's distress is fought.

Patients likely give the same history to whomever they consult, but the thought patterns the words would encounter could be quite different. 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.

What is the usual experience 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 without sometimes even being told as the first statement that x-rays had, or had not, been 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 Doctorkeeping 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 examination,* any resulting ambiguity has allegedly been abolished. 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 safe and 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 validation 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...."

Because all of that is true and common, there are, in fact, great problems with 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 even dispense with their need. That isn't really very "scientific." ***X-rays need to be a directed incisive 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 to 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.*

Truly 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?

Virtually 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, ten or fifteen years ago, could easily expend a few hundred dollars, today, the same minimal effort expends 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 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, however seductively its images 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.

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; that is dangerous to 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 article published about fifteen years ago.[17]

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[17] Excerpting from a JAMA article about the misuse of technology:

> "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 judgment 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 deal 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

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), likely with a question 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 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.**

Muscle power may be tested. Tendons may be tapped with a rubber 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 issues will be more fully discussed later, but these are the essentials: and - the sensory examination is totally subjective - what the patient says, *is*– so time must be expended to develop

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who value life as a quality, not blindly worship life as a quantity.... *Primum non nocere*

a language of clear communication so that it has a chance to be(come) 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 - or time passes. The injury may involve litigation. It may have occurred at work. Special meaning may be associated when pain continues to be complained of under those circumstances. Then, patients too often find themselves heavily on the defensive.

As symptoms continue and progress, other parts of the patient's world are affected as ability to perform is increasingly impaired – and the family suffers – and work deteriorates - and

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machinae (Let us do no harm with our machines)."

sleep, appetite and sex life are dragged into the impairment, and 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 my patient - one of the sweetest, most gentle women I have ever known – who late one desperate, anguish overfilled night, went miserably and in finality to the side of her swimming pool, tied a rope around her waist and to a heavy weight, and pushed it in. Her name was Robertta (two t's please) Holmsley. Her picture is on my wall now as I add this in final editing, and 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 – "validated" by a professional examination. Mental gymnastics, conscious (malingering) or unconscious (you're nuts) is implied. 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 it is 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 s/he was a mental case in the first place.

The psychologist-dominated "Pain Clinic 80s" was one of my decades of special battle. The MMPI[18] 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 learn to live with a rock in his (her) shoe if the rock could be taken out of the shoe."* I was not one of their favorite people. It's all part of another story.[19]

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

[19] *Goodley Intentions of a Medical Maverick* (hopefully available soon after *Goodley Stories of a Medical*

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 - 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 (at least not when I wrote that line).

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.

CHAPTER FIVE

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**

  While I have transferred the mass of argument about medicine's historical statistical assault against the hands-on medicine to an Appendix, Little Stanley's story especially needs to be here.

Whenever I hear the "nontraditional" indicted as if medicine were pure science, I see Little Stanley. I was in my week in medical school on Thoracic Surgery, 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. A patient's blood could be shunted through an artificial pump and oxygenated while a surgical team could very impressively demonstrate 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, and 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 work and that Little Stanley would awaken and his cyanosis (dusky blueness from lack of oxygenation) would be 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 day, and 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 laying all about his bed, inserted into his little orifices and vessels, and in near panic suddenly the professor had 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, and she had looked at me so sorrowfully and said she knew. I drove her into Los Angeles where she was staying, and 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'd 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, and 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, and 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. In a corpse it had no inherent buoyancy --- *did it? It didn't have --- It wasn't supposed to float --- It didn't have* --- ***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 wrong, so instead of allowing its diffusion physiologically, as the lungs do it, so the oxygen could be carried by the hemoglobin *inside* the red blood cells, the pumps were sending forth an invasion of barbarian bubbles that battered and shattered the blood cells' delicate membranes, releasing the fatal potassium.

[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 it is viable before it is broken down?]

Science is, indeed, neutral. The discipline of science is priceless 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*.

Little Stanley's memory never faded far from me.

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 something seemingly disconnected until slowly over the sound of the engines I realized what he was saying. He was telling me 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 had 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 a short walk from the medical center, but apparently it was still too far. A shadow of the heart pump tragedy still appeared to be operating!

T*hese represented people who wouldn't touch joint manipulative procedures because they were "unscientific."* In their quest for what the perceived as purity, traditional medicine disconnected from its elemental essence.

Science is not at fault! Science doesn't care. Science is immutable, and science is silent. Only people can care. Only 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 SIX

PALPATION: LISTENING TO 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 matter to 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 at all 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 like professionals claim they possess. And it is especially true if it is a skill that seems mundane.

Allopaths have never been taught to maximize their palpatory skills in any area that would logically lead to consider joint manipulation. It isn't emphasized in training; therefore its need is not evident, however its lack has been well published.[20]

[20] *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 Depart of Psychological Medicine, Olago Medical

Regardless, 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 the 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. At first, they must be intentionally relaxed, soft, so as not to lose the sense of the signs from too heavy pressure. 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

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School, Dunedin, New Zealand. “Synopsis: 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...”

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 enlarges in consciousness once the "engram" forms for what the hands are transmitting. Palpatory skill is wondrous and akin to 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 a musical instrument, palpation must be learned. It is not conferred with the professional diploma. It is task specific and needs time to develop. . Among those who are trained, there is a high degree of correlation.

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 SEVEN

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 cure – skin rolling**
- *** How to do it**

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 your shoulder - or by function, such as your vascular system – must only be regarded as convenient isolations to focus for some temporary purpose. The risk persisting in excessive concentration on a particular part, whether realized or not, is the loss of 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 as a pump whose movement helps to assure the vital activity of circulating nutritive fluids and removing wastes. Healthy tissues are exercised and pliant. The ligaments around a joint may be seen as straps that protectively align the joint 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 - and you will get some hint of the circulatory processes about normally functioning joints. In the spine, the joints are wondrously coordinated to either stabilize or move while protecting the spinal cord it surrounds. T*he spine is an intricate series of multi-faceted, reflexly integrated, structures each of which contributes small movements that summate into the* ***appearance*** *of a unitary motion,* ***as if a spring were bending.***

But the spine is not a spring! (That might seem too obvious a statement to have to make, but sadly it isn't - because that is exactly how, however unconsciously, allopaths see and clinically treat it – *Fundamental Flaw*.) *Even a bent series of attached blocks gives the appearance of the curvature of unitary motion, but the block declare the truth. Motion can only occur at specific locations – and they are palpable and specifically treatable.*

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 ceases, as well, and encourages 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 because they are more needful of nutrition than other tissues. Deprived, they become irritable, and their ability to accurately mediate the physiology becomes impaired. Whereas normal neural control causes muscles to function along an almost infinite and intricate gradient, hyperirritability causes dyscoordinate contraction and spasm,

which can splint a broad area and further impair function even distantly.

Sufficient irritability can cause *reflex neuritis* when a "positive feedback loop" occurs as each hyperreaction somewhere in the circuit sequentially begets more that continuously amplifies itself like the intensifying screech in a public address system. 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 an equivalent of the development of too many defective generations with diminished capacity to function 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 often the accompanying nerve irritability constricts the vessels, reinforcing the circulatory impairment.

CUTANEOUS HYPERALGESIA (CH) – Abnormally tender skin

It is easy to take skin for granted, but all that need be done is reflect on its exquisite responsiveness to a loving caress to begin to appreciate its abundance of special nerves. But what can be so heavenly can be as hellish when disordered. Many affected nerves in an injured area end in the overlying skin and often deliver their irritable messages throughout all the involved tissues.

It is far safer to consider the skin as the nervous system. It arises from the same genetic material (ectoderm). The fact that it is visible and conveniently easy to take for granted has nothing to do with the wondrous intricacy of its structure and physiology.

Normally, a myriad of delicate connective tissue filaments resiliently attaches the skin to

the underlying sheets of fascia and supports it in place while still allowing its normal softness and pliability. With reflex neuritis, however, the resultant vascular constriction slows the blood and local fluid circulation causing the malnourished filaments to become thicker and shorter. The skin can become so tethered and stuck that it further impairs the nutritive flow, which can settle so intensely into the tissues that they literally become waxy. The skin in the affected area becomes intensely tender and blushes to the slightest squeeze**.**

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

Wherever I have lectured concerning cutaneous hyperalgesia - in the United States and abroad - whether among medical, osteopathic, chiropractic or physical therapy practitioners – 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.

The solution begins by suspecting that CH is present in every case - most particularly in back injuries. The therapy is exactly the same as the diagnostic procedure - s*kin rolling.* It is performed by picking up skin between the thumb and index/middle fingers of one hand and then rolling it onto the thumb - sequentially - one hand then the other so the wave continues to move between the fingers as the hands advance along a line parallel to, but not over the spine itself. *There must be no "skip areas."* T*he skin must be lifted from the 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.

When CH is intense and established, an audible "snap" may be heard across a room as the fibers break, as if a thin piece of wood snapped in half. If the condition is so chronic that the skin simply cannot be lifted, or it is too painful, the skin still must be moved. The process can begin 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.

Skin rolling is an irreplaceable screening test for underlying dysfunction anywhere along the spine. It is important to note the *location*, *width* and qualities of any abnormal

segment– *tender, stuck, blushing, waxy* - because it declares a disturbance in the involved nerve distribution, which can lead the examiner to a (the) dysfunctional joint(s) if it (they) were not already identified. 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. And, gross obesity can cause it.

Skin Rolling is usually best performed twice daily. Less can limit its effectiveness. More can irritate. It takes about a minute. 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 by about the sixth day. 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. I try to monitor the progress. *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 unless the patient is in a hospital, 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.

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 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

- **Subtle essential signs of dysfunction**
- **Hard and soft signs**
- **The observant examination**
- **Critical questions that need to be asked about your pain**
- **The pain scale**
- **What you need to know about muscle testing and illustrative cases**
- **What you need to know tendon reflex testing**
- **What you need to know about testing for sensation**
- **Measuring – the too convenient "0" and "5"**
- **Testing your back with bending – *Gotcha!***
- **Really testing your back**
- **The "Short Leg Syndrome"**
- ***Testing your leg lengths**
- ***Soft signs you can learn to do**
- **Appreciating tests directed at how your back really works**
- ***Your sacro-iliac joints and how to self-mobilize them**
- **Totally disabling pain from skin injury**
- **Illustrative cases of persisting pain from lack of fundamentals**
- **Intradermal Vitamin B12 Injections**

In the movie *Treasure of Sierra Madre,* Humphrey Bogart, Walter Houston and two others are prospecting for gold. Walter Houston plays a grizzled old timer, the only one experienced. They're 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, and he kept his eyes open. The Fundamental Flaw is among the commonest of lost happenings in medical offices in every city, every day because doctors lack the training to track the clues.

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 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. They are the sad standards of the traditional examination.

And there are *soft* signs, the "specks of gold" whose discovery is often the difference between early success and failure – *each realistic and commensurate with the patient's complaints! While the involved structures may not be actually damaged, their dysfunctions may still be so profoundly active that they can totally disable.* In such cases, clinicians need all the help they can find - and that means knowing how to search - knowing that successful hunters and detectives observe what *is* – knowing that the body reveals so long as it is approached respectfully and on its terms. "*We command the wind by obeying her."*

There is nothing mysterious about soft signs. The beginning of wisdom is that "hard and soft" is often a relative difference. It is not a dichotomy, not an either/or, not different sides of a spectrum. Every test has its nuances and extractable subtleties. All need to be performed attentively for their maximal values beyond what is ordinarily acceptable in the traditional

divisional examination of motor, reflex and sensory testing. I will illustrate some of those issues first before elaborating about soft signs.

Each test, of course, needs to be performed with the patient's specific history in mind, so the importance of the care taken eliciting it can hardly be overstated. If I was your doctor and you have symptoms after an injury, I would persist in my questioning until I "see" it happening. I must understand the *mechanics* to visualize the *biomechanics* of what may have happened to you as a result. I would hinge many questions around any subsequent changes in your *function.* I would want to know about the specificity of the *onset* – did the change(s) occur from 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 it requires committed attention from both of us in a circumstance that must encourage clear answers.

I use a 0 – 10 scale with arbitrary agreement that "10" represents the worst pain my patient can imagine, such as crucifixion or burning alive. To me, our mutual agreement about that is critically important because we may be using it for a long time, and I must be as knowledgeable as possible about the results of any therapy I attempt. All the numbers above "0" represent pain. On my scale, a "4" is beginning to get into the deep stuff.

The way such scales are too often used seriously impairs their value. I routinely see "8's" and "9's" from people who were seen at other offices. Nobody seemed to care. They weren't questioned about it. The questionnaire had become another piece of paper. The instant that pain patients conclude that they are (just) part of a paper process the spirit of relationship – trust –

begins to unravel. An unattended questionnaire allegedly inquiring about someone's pain is deadly to the relationship. Whatever has been written, I make certain to discuss it. C*ommunicating* then becomes an implicit contract.

MUSCLE TESTING:

The prime reasons for muscle testing are to determine the strength and reliability of a specific muscle group and the movement it causes - and whether the contraction, or movement, causes the pain the patient is *complaining of*. Many more than a few examinations have gone far down a wrong road because the clinician literally followed the patient's response about a coincidental discomfort that never happened again and had nothing to do with why s/he was there. Appreciating such apparently small distinctions is essential to successful pain diagnostics! To repeat, the first important question in a physical examination is whether a particular procedure causes pain. The second is, "Is it the pain you are complaining of?"

The examination for *gross* strength would seem to be one of the *hard* signs, yet it is, and it isn't. It is because the test is traditional: strength is gradable and 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 though 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 along a range, rather than in one posture. In other words, every test must be a thoughtful procedure to amplify the patient's history about the causes of your pain and/or impairment.

At the same time, muscle testing offers the opportunity for extraordinarily more

information. It requires that the patient mentally process the request and respond without undue hesitation. So it evaluates intent, "connectiveness," energy, *volition*… All the questions revolve around *consistency:* are the responses consonant with what the complaint, and if not, then why not? While there are technicalities in the examination that patients would not ordinarily know, enough will be happening for the perceptive to sense the consistency - or inconsistency -of what is being done. It is not necessarily an intellectual decision. Infants react to what they sense.

Think about it - if you complain of low back pain, whatever else the doctor does, you want your back and its related parts to be systematically studied. You want to be considerately informed so you will be clear about what is expected of you.

An attorney once referred a woman to me because she had allegedly suffered a severe injury to her upper extremities. She had walked into my office, sat down, filled out the forms and entered my examination room as casually as if she were shopping for sandals.

In the initial aspect of her physical examination, every muscle I attempted to test "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, and she was straight about it. 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 to also be honest. However, there are areas in medicine where, unfortunately, such an expectation is not regularly satisfied, and if you are

involved in Workers' Compensation litigation, you likely know what I am referring to. It is a highly polarized, often dishonest, unscrupulous business in which many doctors make a good living prostituting themselves to those who hire them.[21]

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

Working in such a cynical system where fees are micromanaged and routinely reduced also encourages the routine rapid passage of bodies through doctor's offices with protocols primarily designed to increase the bill. What takes time and attention is downplayed, and, for that, can kill. To make my point, muscle testing can give evidence of deadly disease, and 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 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 "inconsistently consistent." I was convinced

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

he was trying, but he just couldn't bring it all together in power or coordination. I did a few more tests, sent him to the hospital for a CAT 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 and 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 is so well known, it is a figure of speech and a comedy act. Testing the tendon reflexes examines the integrity of the nerve reflex arc comprised of the tendon being tested, its muscle and the nerves to the spinal cord and back. When the tendon is properly tapped - and that is a critical fundamental - the normal response is a reliable, moderate muscle contraction that moves the joint it crosses. Any interruption along the course impairs the reflex. Impairment *above* the reflex arc, in the brain, makes the reflex hyperactive. There are many normal variations, and when they occur, they need to be evaluated because the response is a significant piece of the diagnostic process.

Tendon reflex testing tends to "separate the men from the boys." It helps to answer one of the fundamental questions: Is there substantial nerve damage or not? It is a hard sign when it answers that question. It is also a soft sign because of its valuable nuances.

However it may appear, tendon reflexes are not just the eliciting of a jerk of a knee or some other joint. The doctor needs to assure that the reflex is reliably repetitive. If it is normal, it shouldn't fatigue. It should fire every time. Does it "sputter?" Is it bilaterally equal - *on careful analysis*? Is it producible in more than one posture?

As an example, the Achilles Tendon Reflex is important because it is part of the 1st sacral nerve root arc, very often involved in lumbar herniated discs. The patellar [knee jerk] reflex is part of the 4th lumbar nerve root arc. The 5th, one of the most important, *doesn't have a reliable tendon to test*, which leaves a gap that has to be compensated for.

When there is a question about an Achilles tendon normalcy, it can be tested with the patient in different positions, for example: kneeling on a chair with the feet extended off it. It can even be played like a xylophone, all along it, and the bilateral results compared. It should equally respond to taps all along the tendon bilaterally.

Do the right muscles respond? Too often, any muscle "jerk" is accepted. It is a common an error. If injury "confuses" the reflex arc as the message enters the spinal cord, the return signal may exit along the wrong nerve and go to the wrong muscle. If you turn on the switch in the kitchen, but the lights in the bedroom go on, there is obviously a problem. Likewise, if the biceps tendon (the one that flexes the elbow) is tested, it should cause the elbow to flex, but suppose the elbow extends? Or the wrist or fingers flex instead? There are a number of such variations. Such derailments of the reflex are called "*inversions*." They are abnormal. Is the doctor noting them?

Recently I elicited a reflex I had never seen before: I tapped a woman's mid forearm along its outer edge[22] 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 the first clue.

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[22] Brachioradialis reflex.

The complete bilateral absence of tendon reflexes is not necessarily abnormal, in fact, just the opposite. It is occasionally seen in well-conditioned athletes, but it requires special attention to confirm that it is the case. If the tendon reflex isn't present, an attempt needs to be made to restore it with a "disinhibiting maneuver" because the lack of response may only be from a temporary interference "in the line," or its threshold is higher than will respond to the first tap. Clamping the jaws or flexing the fingers of both hands, interlocking them 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. That one finding must be considered part of an evolving examination! Changes, especially if they are subtle, may only be noted by comparing examinations at different times. *In fact, every test is a point in time that may be vitally important to denote an important change in status.* Every test is an opportunity to *observe* and document a record that may later have valuable implications. Nothing in a directed examination can be casual.

SENSORY TESTING:

I already briefly discussed the sensory examination. Here is where the shift to the "soft" side really begins because the entire test is subjective. What the patient says, *is*. In no way, however, does that subjectivity diminish its potential value, and, in fact, this "invisibility" has its own advantages.

There is hardly a test that stands alone. The name of the game is correlation. Sensitivity and diligence are essential. It all takes time. I've said it. I'll say it again. The conditions must be established for the patient to be able to clearly report what s/he perceives. Since s/he would not likely know much about the technicalities of what is happening, this is one of the easier tests for

a doctor to gloss through without being suspected of it (and, in complete honesty, where many doctors don't know how to conduct the examination for valuable yield).

When we lived in Palos Verdes, we had a large addition put on our home. One day, I came home early 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 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, but unless the doors had crashed to the tile floor and injured someone, they were still only a doors and not an individual needing medical care.

Since examining sensation is the completely the patient reporting, it requires maximum clarity and mutual cooperation. Testing for *superficial* pain perception (there is also deep) is more than just reporting the stick from a pin or the rolling of a "Whartenberg Wheel" (which looks like a dressmaker's wheel- with sharp points around it). If it is rolled along the skin too rapidly, and the patient is asked if it was "felt," or was it "sharp," the test's value is lost. Those questions test for "epicritic" perception – precise sensory discrimination – but this test is for the status of *superficial pain* fibers. The response that needs to be evaluated is the "*ouch"* of it. A rapid rolling wheel summates what need to be individual sensations into an intimidating, overloaded barrage of confusing stimuli.

The sensory examination is best performed with a pin. Specific areas on one side of the body are compared to the other. Here is where establishing clear and logical ground rules are critically important. I develop a "currency" with my patients - another scale. We find a site where there is agreement that the pinprick is “normal” and give it a standard value, like a $1.00. We then check pairs. I don’t want a “maybe just a little less” type of an answer. The differences must be clearly perceptible, a dime’s worth or more. If there is any question, we patiently do it again to confirm. In fact, 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.” . *Very importantly,* I am obligated to teach until I am confident that my patient is clear about the $1.00. *Hyperalgesia – abnormally sensitive skin - is more than $1.00.* If there is increased sensitivity - which is very important to note - the “normal” side may then appear “less” when it really isn’t. So the test must 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 but can never be done in a few seconds.

MEASURING*:*

Descartes could have been considering medical measurements when he said, “*The truth lies in small distinctions.”* With all the variability in the body, recording differences – particularly of comparative grip strength and limb circumference - it is incredible how they are so frequently reported as being *exactly the same - ending in “0” or “5” or crude fractions.*

Regarding grip strength, a dominant hand should always be stronger. Equal grip strength bilaterally is a sign something is likely wrong. As well, the circumference of a dominant limb should be greater, if only by a fraction. This is one place to establish an unequivocal baseline

because, if the condition is progressive, the measurements well may change. Being able to measure something is the opportunity to be totally objective in at least one part of the examination.

Because limbs have a varying cylindrical shape, circumferential measurements can't be compared *unless they are taken at identical sites*, a specific distance from a landmark, like a flexion crease. Only then are they meaningful. Yet it is rare to find such a site stated in medical reports.

So how badly have doctors generally failed their patients by giving incomplete examinations?

When the low back is being examined, the patient will almost certainly be requested to bend down and try to touch his or her toes with the knees straight. Except to demonstrate gross impairment from major injury, the bare maneuver is only a basic beginning of the test's potential. The test is not only limited, it is easily misleading, yet it is artificially 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 etc. examinations, ignores the nuances that give the test its real value. So it remains among the most widely used but misunderstood procedures in medicine. This is because most bending occurs at the hips, not in the spinal structures however it is true that the entire spine's motion can become restricted if any injury is severe enough.

Regardless, any active motion can be significantly a subjective, not an objective test. Some people bend as far as they can despite pain because they are asked to. Others, for whatever reason, decide not to. **Therefore, the test has special value, but almost always the**

traditionalist reverses its logic! Those who do their best *despite* pain, which includes most people, are demonstrating their honesty, honoring their relationship with their doctor and accepting some pain to prove it. But too often the doctor doesn't reciprocate and almost gratefully jumps to the erroneous conclusion that the patient is faking. "You told me you had pain, but you bent. ***Gotcha!"*** The 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 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 and had almost completed a beautiful curve, when she remembered. Suddenly, she stopped and stiffened while twisting her flexed torso and extending her neck so 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 whatever elicits pain. I want to know where it is - and isn't. I urge them to give me feedback to everything I am doing or asking them to. The "gotcha doctor" doesn't likely do that as the rush to judgment more than likely ends any further careful analysis as s/he too easily slips into 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 (neither of which still doesn't give any information about the tissue reaction).*

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 it 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?

Evaluating relative leg length is critical because the healthy, symmetric back arises from a level balanced foundation. 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 from the front of the hip bones down to the same site. Some also (and should) place their hands on the tops of the hipbones while the patient is standing and check if they are level. There are technicalities here, but of critical importance is that "length discrepancy" may not be real.

The legs articulate with the "hip bones[23]" in sockets[24] that are situated below the bones' axis of rotation with the sacrum. The positioning results in the sockets' motion along an arc –

[23] ilia. Singular - ilium
[24] acetabuli. Singular - acetabulum

like a cam action. So, sacro-iliac dysfunction can displace the leg with it, causing the *appearance* of shortness, which corrects when the dysfunction is corrected.

Another way to assess real or apparent leg length is with the patient supine.[25] The assessment can be done by virtually anyone who can follow simple instructions, but be aware that the test has its subtleties and is relative to other effects. The patient lies with hips and knees bent, buttocks raised off the table and then "plopped" back down. (Consciously lowering allows the body to "accommodate" around a possible dysfunction and negates the test.) The legs are then straightened out onto the table. The examiner places his or her thumbs at the same sites on the lower edge of the ankles 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). If so, how much "difference" makes a 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, part of the dogma. For example, Elgin Baylor, 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 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."

[25] Face up

UNEQUIVOCAL SOFT SIGNS:

These soft signs are like tracks to a hunter. Familiarity with many of them requires some degree of palpatory skill, and performing these tests with care 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 - "jam" - partially or completely – or become *hyper*mobile - or intermittently both. It is well worth repeating that, if untreated, dysfunction(s) associated with looseness can begin a degenerative cascade that destroys 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 discuss. 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 the core of the Fundamental Flaw. Learning to identify them is the first step towards its resolution.*

NOW LET'S EXAMINE THE BACK MORE REALISTICALLY.

You consult an eyes-on, hands-on clinician. I make no presumption of what I would consider expertise, but these are some of the tests that I might perform and which I will sometimes describe in detail.

Pelvic Rotation

With dysfunction, the pelvis frequently assumes in an abnormally rotated position. While the head, shoulders and feet are aligned in one direction, the pelvis may be relatively turned right or left, a few, or many, degrees. I sit on a stool directly behind you, and after I observe how you

preferentially place you feet, I would ask for symmetrical "squared" alignment about the width of my foot apart. I would place my foot between yours to assure it and then reach around your hips with both my hands and place my middle fingers gently on the prominence of the hipbones in front, the *anterior superior iliac spines (ASIS's)*, the "hip point" of football injuries. (As an anatomical reference, from there, the tops of the iliac bones curve in a gentle arc posteriorly where another prominence is easily palpable at about the same level - at the upper parts of the buttocks about two inches from the midline - the *posterior superior iliac spines* [PSIS's]. We will discuss them shortly.) I then observe and sense whether my hands are symmetrical, or are the fingers of one hand more anterior than the other? Is one hand more posterior around onto the buttock? If they reveal that the pelvis is rotated, one of the great advantages of these biomechanical tests, as I 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 the pain. A*s 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 to assure as much thoroughness in the search as I can.*

I can check for pelvic rotation through clothing, but it is only the first of several signs I will study, and they require that I observe your entire back - which is so fundamental it should not have to be stated - so I start with it fully exposed, something I have never seen a chiropractor do and 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 - 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 as *provocateurs* 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 right 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.” During RBLB the patient remains erect while “tick-tocking” the back like a metronome, side to side, as I remain attentive to what I have asked the patient to tell me - what they are experiencing as they move. I specifically request that the patient report like a computer – as little affect as possible – as much science as possible - as the patient continues to move 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 never varies 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 toward nerve involvement.

The Hip Drop Test

While the patient keeps both heels flat on the floor, one knee then the other is partially bent, “dropping” each hip, causing the hips 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 bend forward or even grossly rotate the pelvis in an attempt to accomplish the movement.

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 bend forward (flex).

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 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 continue down as far as is comfortable, I follow the curvature of the spine from the top observing for any interruptions in the flow, places where a whole section will move at once – the "en bloc" I previously discussed After the patient has flexed about thirty-degrees, I return my full attention to my thumbs, or as soon as I palpated the tissues tensing.

Normally, my thumbs would 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 S-I joints.

What does it mean if one of my thumbs moves goes up as the patient flexes? The innocent conclusion is that since it is "moving" it is normal and the other is therefore "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.

Palpating vertebral dysfunctional rotation

A sine qua non[26] 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 flex and extend the back.

Normally: I palpate no relative rotation. My thumbs move in and back as the normal tissue tension remains essentially unchanged.

Abnormally: a rotational component of dysfunction is confirmed as one thumb moves frontward or backwards to become symmetric to the other. Abnormal rotation denotes dysfunction in other planes, as well, because all of a joint's intrinsic motions are coupled: if it is "jammed" side-bent, or flexed, it will be abnormally rotated, as well. So, one thumb would move "in" as the active movement produced a "swinging" of the vertebra's position.

Palpating the relationships correlated with the movements also designates what restorative maneuver to apply.

Palpating intervertebral motion side-lying

A very simple "test" I learned very early became impressed into my memory because of

[26] An essential ingredient. "Without which there is none."

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, "*My God, I've operated on backs for thirty-five years, and this is the first time I've felt it move."*

The patient side lies on the examining table facing me. I fully flex the hips and knees and place the forelegs against my abdomen. Then, as I rock back and forth along the table, I cause the 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.

Gluteus Medius Spasm

The gluteus medius is the most forward bulk of the buttock muscles, roughly running down from the hipbone just posterior to where arms normally rest at the side while standing. It attaches to the knob that can be palpated just under the skin about six inches further down - the greater trochanter of the femur.

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 its 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 descending 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). 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. Soon, 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.

Two years before I treated another patient, she fell 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, smaller bands continued to be diffusely palpated during the two months of treatment. She became asymptomatic concomitant with the resolution of the last strand.

The Oscillation Response

I discovered the Oscillation Response, and while it remains a clinical impression until a controlled study is done, in my experience it is 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: as I discussed, some fibers in every skeletal muscle are dedicated to setting its resting tone and monitoring contraction for anticipated tasks.

A back injury with nerve involvement disturbs the balance of the opposing muscle tensions very early on in. Similar to slacked wires intended to support a high pole, a relative floppiness of the joint develops. The involved muscles soften, as well.

The relative atrophy and joint laxity are evaluated by comparatively, bilaterally 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, the *tibialis anterior*, runs along the side of the major foreleg 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 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 a little

using my shoulder muscles, even my hips, so my hands are left alone to palpate. Imagine holding some small weights in your hands and moving them up and down to determine their relative heaviness.

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

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

I perform the *oscillation* by firmly grasping the lower foreleg in both my hands and impart a forceful, sudden 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.

Abnormally, there is an unmistakable floppiness of the joint.

SACRO-ILIAC (SI) GLIDE

Every joint, like every hinge, must have some "play" in it. If it is "frozen" for any reason, including dysfunction, it obviously can't move. Testing the "play" of all joints related to a problem is fundamental.

I examined a retired Lt. Cmdr. in the Navy Seals. 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 somewhat formed 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 the opposite side, into the other hand. Bill's right SI joint was locked and the effort was painful.

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 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 reinjured his back, and he was told that his x-rays revealed "remarkable sacral rotation." He related that he had 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.

SACRO-ILIAC (SI) SELF-MOBILIZATION:

There is a self-care exercise that might loosen up an SI condition. 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. How often? How many times? How much force? The eternal questions.

The force question is easy. There should be little of it. Gently rock. *Don't thrust. Don't force. Be patient.* Concerning the other questions, we are so concerned with precise numbers though they often mean little. Living tissue accommodates so insistence that a specific force be applied contradicts reality. Start slowly once, or a few times, a day, and see what happens. *But the attempt will not likely replace the need for competent care.*

ANOTHER FACE OF CUTANEOUS HYPERALGESIA (CH)

Cutaneous hyperalgesia, which I previously discussed, is likely the most common and easily discernable of the soft signs. When it occurs as a reflex from dysfunction, it is silent and must be elicited, but 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. Some of the most illustrative cases I have been privileged to treat

utilized what I now describe.

I was teaching one afternoon at Nassau County Medical Center, in the New York area. A young woman was presented who 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 about it that had failed to respond to several therapies. She couldn't walk without considerable support and only for short distances because the pain remarkably flared with any weight bearing.

The specific site of injury was so exquisitely tender she couldn't tolerate even the lightest touch to it, but the young resident physician was not yet aware of that as he squeezed her leg into his large hands to attempt to mobilize the joint, as 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 about the size of a quarter. In her case, it was 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.

Direct trauma CH is not usually associated with other signs of injury such as deformity, swelling, limited joint range or atrophy. It must be suspected from its circumstance – the result of a contusion – and persisting pain and tenderness. 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 to demonstrate an exquisitely tender area with a sharply demarcated border.

The condition is a close cousin of *Reflex Sympathetic Dystrophy (RSD),* which is

among the most dreaded complications of any injury.[27]

LAWN MOWING THE FOREARMS – A FREEBIE

My initial examination may include a few neurological tests for brain injury if there is a any question regarding it from the trauma history. One of my favorites is for the patient to "lawn mover" the forearms. So long as the shoulders are fully functioning, each forearm should circumscribe the other at an equal rate both frontward and backward. However, if there is any degree of brain damage involving the motor strip, the forearm on the opposite side will fail and the normal forearm will continue to orbit it. The patient is not aware of the asymmetry.

[27] 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, that mediate automatic functions, such as blood flow and sweat. The unbearable pain of it is unending, and even a waft of air sends the sufferer 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 and degrees down its presentation on the young woman's knee. The *universally* successful treatment in my experience is an injection so simple a cynic will more easily scoff than try it. It takes only a few minutes, and its discomfort is tolerable, especially if the skin is sprayed with a coolant solution, like Ethyl Chloride. The giant bonus is the virtual absence of complications.

I was taught to use Vitamin B12 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. In response, dilute Vitamin B12 works so well that I have no interest in performing a painful series of injections just to find out. And there are good academic reasons for Vitamin B12's use here. (Someone may desire to perform a controlled study if they could find a sufficient number of cases to be statistically significant.)

The solution is injected *intra-dermally, into* the skin, not under it. A series of wheals, like skin tests, or mosquito bites, are raised. The entire involved area is covered with them close to each other. A very small-bore needle, not larger than 25gauge, is used. Almost immediately, the skin becomes temporarily numb and the pain stops. I scratch the skin with a pin again to assure that all hyperalgesia is gone. Occasionally a few more wheals are necessary. *By the time the fluid is absorbed, the condition is terminated.* Again, it is one of the very few remarkable treatments that is safe and has no contraindications. It is excellent for the treatment of tender scars, as well, 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.

Neural Therapy 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.

In the young woman's case I just discussed, I gave the syringe to the resident after I had raised a few wheals, and he injected approximately four more. 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.

Intra-dermal Vitamin B12 was also curative in another totally disabled woman for whom I consulted in the Palm Springs area. 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 struck her left posterior chest against the outcrop of a tree.

Imagine lifting something of maximum weight in 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 became so exquisitely tender, she couldn't even tolerate a bra strap. Over months, she developed dull constant headaches and "pins and needles" sensations in both her upper extremities. She had several unsuccessful consultations and was eventually finalized in the California Workers' Compensation system with a permanent restriction against working for any period with her arms elevated away from her sides.

I examined her for the first time on August 25, 1992. Her examination was remarkable because of the exquisitely painful cutaneous hyperalgesia in an unusually large 2x3 inch

elliptical area where she had struck the branch. *Otherwise, her entire examination was normal. There were no dysfunctions, no rib restrictions, scapular restrictions- spasm - nothing.* I precisely demarcated the site by gently scratching across her skin. Then I injected it with lots of wheals. In her case, she had an unusual reaction, the only such occurrence I have ever witnessed. She told me later that she had immediately been pain free for three days. Then all her pain recurred even worse than previously and then slowly diminished over 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 Richardson, Vendyl Jones' daughter, whose case I partially discussed previously. When she was two, her left arm had been crushed in a washing machine wringer up to her armpit. In a panic, her mother had 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 nothing could touch it. Her elbow became dysfunctional and didn't move normally. Her arm became weak. She developed CH involving 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. It took about eighty wheals to fill the area. Sarah lay there laughing with tears streaming, as I stopped 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 bony aspect of 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.

I opened my email on October 25, 1999 to this note from Sarah:[28]

More recently, Sarah emailed me again that she needed some more injecting. In her case, "only" three years of relief diminishes nothing. I see similar cases every few years. These are only a few stories of people from how many? Before this book is ended, you will learn about Diane Gates, and you will never forget her. Clearly, there must be many others who await this remarkable therapy for whom it is specific and essential.

My most recent case was here in Israel. The man had been involved in an auto accident, a head on in which he had been 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 when it was discovered that he had coronary vessel occlusions for which he underwent heart surgery. The pain persisted. When he was sent to me for consultation, he said something extraordinary. When it would occur, at least two times a day (and repeated cardiac testing was persistently normal), he would have

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[28] 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

the urge to smash at his chest with his fist and, sometimes he reported, the pain would be temporarily relieved.

The potential significance of his anterior chest wall being crushed and held against the steering wheel hadn't been realized. 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 about three months ago, he hasn't had another chest pain.

SKIN TEMPERATURE:

The temperature of something should not have to be considered exclusively a soft sign. What could be more an objective hard sign than taking a child's temperature? But when it comes to hands-on medicine, unfortunately it just isn't thought about often enough. The inclusion of such data in reports is hardly seen however it is essential, especially if it is aberrant and persistent, however diminutive its size? For the young woman I just described, "just a quarter" was 100% of the area of her knee contusion and the sole reason for her total disability.

In some back injuries, the heat can literally be felt from inches away, while in others, there is a clear relative coolness. Noting them is vitally important because they prove an abnormality exists that accurately reflects the intensity of the reactive process.

The observation of temperature in medicine is ancient. Hippocrates described the localization of heat as a fundamental. He would cover a painful area with slip, the liquid that pottery is made from, and localize the sick part by observing where it dried first. You will read that one of A.T. Still's (the founder of osteopathy) formative observations was observing differences in skin temperature in a child he was holding.

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

discovered. Without them, every day is a Deyo 85%, “No objective findings" day. (Please read Appendix B.)

What would happen to you if you could no longer be productive? What would happen if you have to work but can't because of injury? 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. In fact, the odds are you already have.

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, her examination the same day “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 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 was 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 examination, her abnormalities included gross 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 her 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 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 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 of such an unsettling circumstance is that she had developed so much reflexive constriction of the muscles and connective tissue from her 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 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, it *will* 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 did know, 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 important manipulation you can do correctly the first time**
- **The elbow**
- **The ankle**
- **Explanations for why manipulation works**
- **Directions of force**
- **Traction**

Most manipulation cannot be safely learned from a book, especially any 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, yet its effect is potentially profound, and the person who needs it is very grateful, indeed. I will teach it to you now.

THE WRIST:

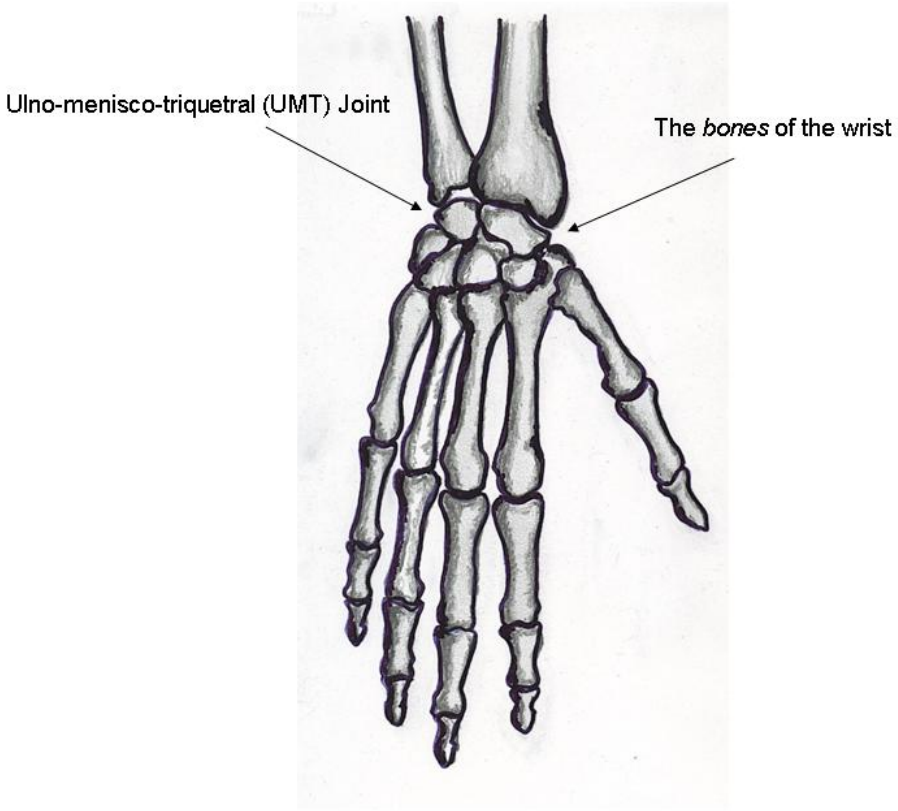
Some years ago, a Canadian physician referred a patient to me who was involved a fairly major legal case, but the reasons for his symptoms had not been diagnosed. His physician had heard me lecture, and so the man came to Los Angeles. It was a pure Fundamental Flaw situation that involved to his upper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

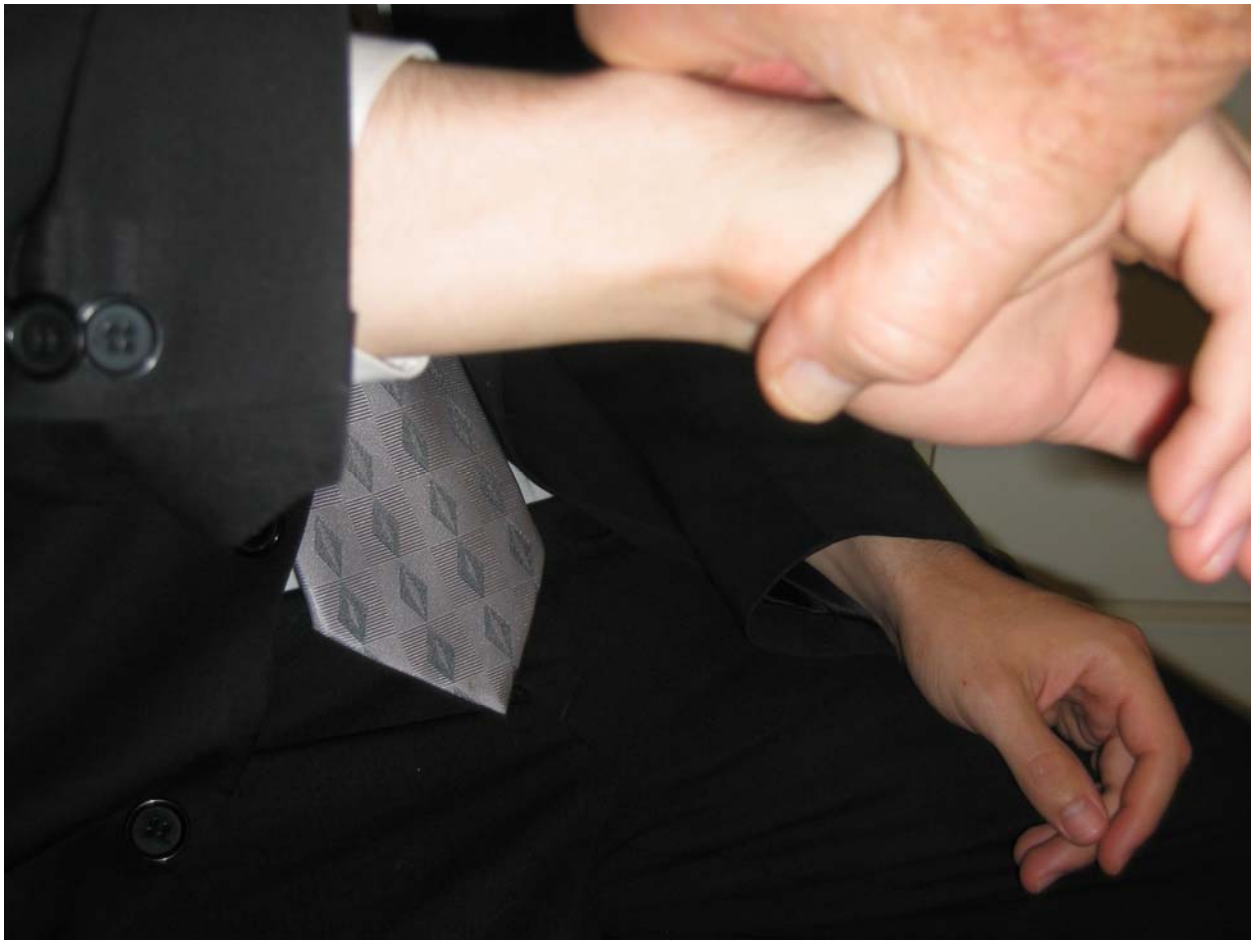
I saw Alan considerably in the ensuing years, and eventually we became close. Alan was handsome, highly athletic and could have won a Tarzan contest. Over time, he was involved in an incredible series of accidents that would likely have killed someone else, almost invariably because he was in the wrong place at the wrong 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 bad his right wrist hurt, his inflection immediately alerted me that he was in real trouble.

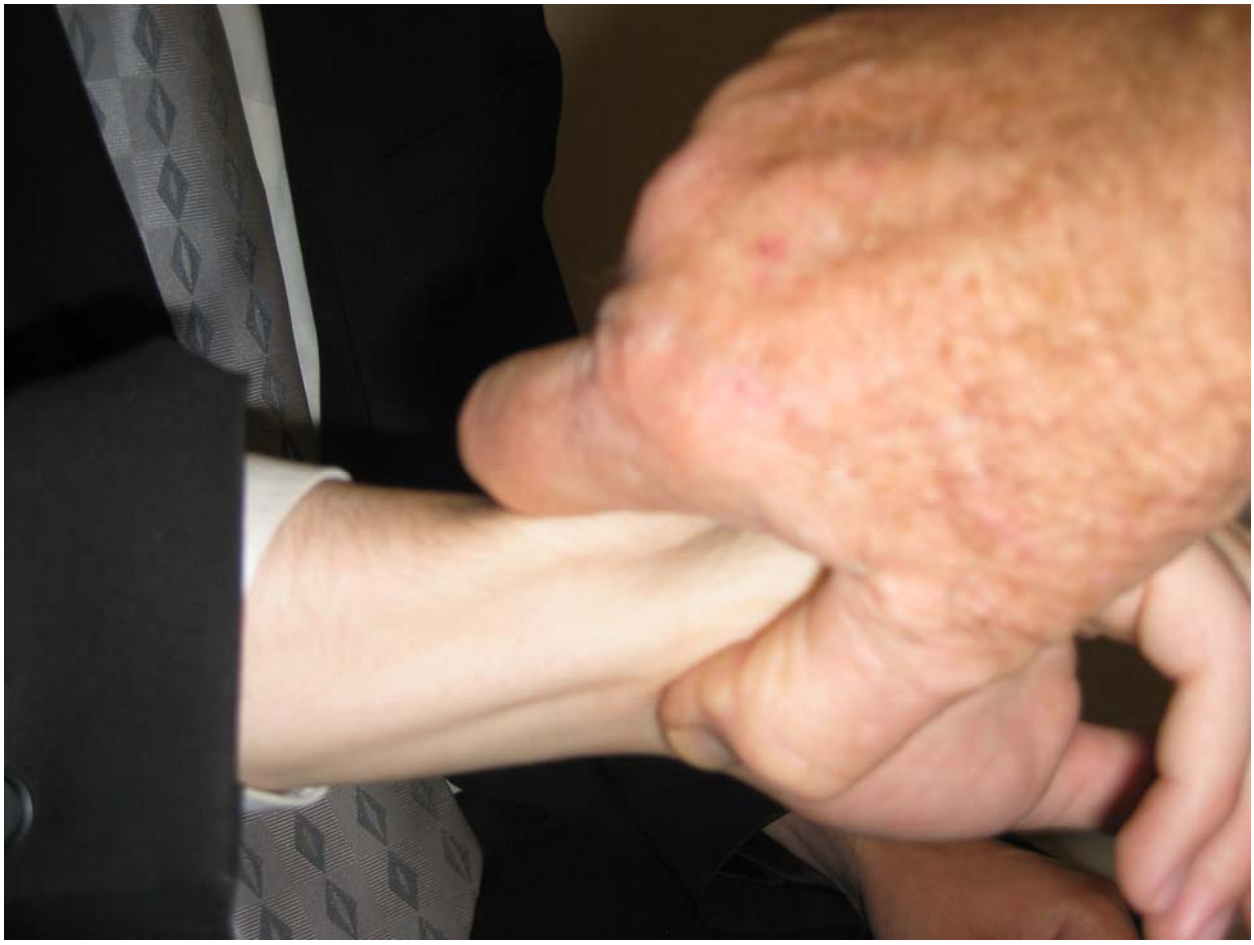
On August 5, 1990, while back in Canada, he was driving a borrowed pickup truck that had been having intermittent mechanical problems. It had stalled on several occasions because of a computer failure, and Alan's accident happened before repairs were made. As he exited the highway, the vehicle suddenly 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 it with my right hand. I placed the side of my flexed index finger on the top of 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. But 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.







There was a little resistance which I countered by persistent graded force, then a sudden audible "pop" as the entrapped cartilage suddenly released, and Alan was cured before his complaint was fully out of his mouth - within his first few minutes in my office. His jaw dropped as his eyes glazed blinking uncomprehendingly in comical incredulity at the instantaneous result after months of unremitting near-agony. It was one of those dream triumphs that seems to sometimes make magic of manipulation, a priceless, glorious instant when a perfectly designed tool perfectly fulfills its need - *after three months.* If you want to get some idea of what Alan had endured, clamp your teeth down on the inside of your cheek and don’t let go.

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. When they happen, they are magnificently gratifying.

I didn't know the condition could be a pediatric problem until August 16, 1999 when it happened to Darcee, one of my darling (then) little 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 and I took our "awenture" walks when I visited. Later, she told us 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. Her expression showed it. So, when she complained of the pain to my daughter later in the day, Diane knew something was really wrong and sent her right to "Abba."

Diane had undergone spinal surgery less than a week before, and I was visiting and writing in the next room. Darcee came to me supporting her 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, 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 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 "Abba" isn't there for such happenings. "Darcee's" arm 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. The consequences of loss of time, scarring, increased restriction, possible RSD, whatever, and when the cast came 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 especially to supinate and dorsiflex (bend upward) without causing the pain to become excruciating.* Yet, the manipulation is a new experience to virtually every osteopath and 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 became 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 personal experiences with manipulation, for the good and otherwise. This episode was by far the most rewarding. When we lived in Palos Verdes, I was carrying a ten-foot long 2x12 plank across the corral 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 pain left me in no doubt that my elbow was in serious trouble. Every time I tried, the prohibitive pain recurred 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 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. My elbow was normal within a few minutes, and I have never had another problem with it. No other treatment had provided any relief whatsoever.

In the early 70's while taking my specialty training (with a year in between) 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 arm flexed upwards on the x-ray table 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 with one hand while my other 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 why some manipulations are so efficiently effective.

I examined a senior student at Los Angeles Chiropractic College (LACC). Something had happened while he was manipulating a patient, and he had developed pain in his right wrist, which intensified when he attempted to use it. Without completing a prescribed number of manipulative procedures, he wouldn't be able to graduate, and 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 said, 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" 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.

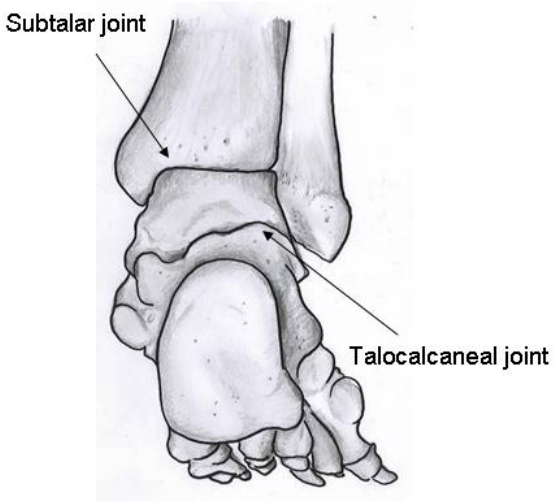
THE ANKLE:

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. One day, 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 had been 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 he began to shout, "*The pain's gone! The pain's gone!"* He returned to work the next day and never had another symptom.

A few years later, Tom Jasperson, 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.



Posterior view of foot bones

In the elbow and ankle cases what had I done? And what had been done to my elbow? I suspect

essentially the same thing. My elbow, the young girl in the emergency room with the "locked" elbow, the foot stomping patient, Tom's foot, likely 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 fringe-like tissue within joints that secretes the lubricating fluid. When they are painfully pinched and trapped, a reflex 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.)

Still, the most common cause of dysfunction reasonably happens from disadvantageous movement -"jamming" the surfaces of the joint - from which connective tissues can overstretch, distort, jam - setting off protective reflexes.

DIRECTION OF FORCE:

Therapeutic force to restore a joint's motion may move into any direction the joint allows that does not jeopardize the integrity of its supportive tissues. The common way to remove something that is caught in a tangle is to jiggle it. Whatever it takes, but there are guidelines.

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, nature must always be considered right.

However, moving a restricted joint gently against its restrictions *at a tangent* to its surfaces - or applying a traction force - can have dramatically beneficial effects. *Traction is one of the vital therapeutic forces, but that 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 need be just enough to apply mild tension onto the soft tissues!

TRACTION:

Too many professionals have been taught (or concluded) that various forms of traction are not helpful when they are, in fact, essential. They believe their decision is a rational response to experience instead of its in reality being an emotional reaction to traction's misuse from concept to practice. The fact is that, like many other treatments related to the manual therapies, traction's meritorious history emanates from the beginning for good reason.

I was introducing my cervical traction to an orthopedic surgical meeting in Palm Springs. Dr. Mason Hohl, one of my orthopedic surgical professors at UCLA, who years later served as president of the American Academy of Orthopaedic Surgery, was sitting behind me. After 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 candid honesty is unquestioned. The fact is that traction is not usually used on ankles however it is an essential to its full examination, and sometimes its therapy, as I have illustrated. His admission fully expressed The Fundamental Flaw. Traction is routinely applied to hips and to knees, so why not ankles? Certainly why not necks?

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....

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

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, m*eniscectomy* - 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 had just kept running until his problem resolved. Mine continued to lock my knee, and I would occasionally, unpredictably be disabled by it, so I eventually had a partial arthroscopic[29] 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, it was the popular solution then, regardless: 'If it's torn, take it out.

"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 likely from 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 orthopaedic physician who well deserves the distinction of being considered the first in the modern sense, described it as a ***strain of the coronary ligament.***

[29] Performed through a small incision with a scope.

The injury occurs if the knee is hit from the outside, or behind, or is twisted. It is not rare. According to Dr. Cyriax, a small hemorrhage under the meniscus scars and restricts its passive glide, so its movement is limited and causes diffuse pain and joint restriction. *Alone, it can disable the entire knee.* It *is suspected by the history and physical findings alone.* ***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 on the near-midline side (antero-*medially*), though sometimes antero-*laterally.* Specifically it is along the *tibial plateau*, the top of the large foreleg bone, the "floor" of the joint, to the side of the patellar ligament that inserts onto the midline knob just below the joint.

Transverse massage

The sole treatment 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. ***If you are gutsy, you might be able to do it to yourself if you can let your leg dangle and be willing to inflict a few painful seconds to do it effectively. You cannot damage yourself with the attempt.***

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 i*nto* 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 one afternoon that he had done a meniscectomy on a tennis player and that 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 70s. *Still, coronary ligament strain needs to be ruled out.*

THE “LOST” JOINT OF THE KNEE

The treatment of the knee *mechanism* is both the embodiment of orthopedic surgery's dedication and the full expression of its absence of manipulative perspective. Besides the major knee joint that offers so many reasons for surgery there is another. *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?

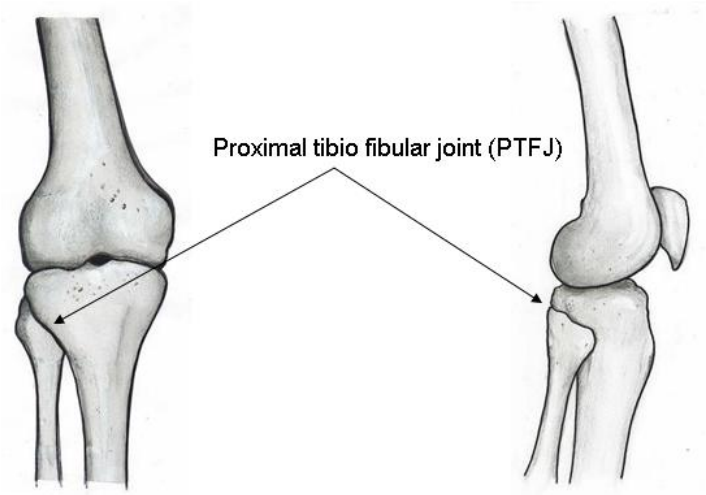
(It is not the so-called joint between the kneecap (patella) and the underlying bone - the so-called “patello-femoral "joint.”)

One certain reason for its lack of attention is that it is not considered a surgical candidate. Another other is that its motions are small. Also, the major knee joint moves so much more and has so many fascinating parts and surgical procedures that can be done to it.

There is no technicality here. It is a true joint. It has all the anatomic requirements: cartilaginous surfaces - a capsule, which seals it - synovium, which secretes lubrication - and ligaments, which 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 full 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 called the ***proximal tibio-fibular joint (PTFJ).*** It is the joint of the upper end of the two bones of the forelegs that run mostly parallel to each other and then converge just below the knee joint proper. The larger bone is called the *tibia,* and the thinner, on the outside, 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 both must move whenever the leg does for normal function..*



I have never known the pain to localize to the PTFJ when it dysfunctions. It diffuses about the knee, and the tenderness of it is never suspected unless specifically tested. 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, potentially all the way to the top.

Way back in my GP days, a woman was my patient who was likely the most unusual headache case I have ever seen. I was only able to cure her by relieving her PTFJ dysfunction. Her headaches were clearly of muscular origin. I had first treated her neck dysfunction, but it promptly recurred along with her headaches as I continued searching down the linkage and failing with each recurrence until I finally discovered the source. In principle, there was nothing strange about that. The overbearing principle cannot be stated sufficiently: the body is a *unity*.

I have consulted on 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 was completely restored when the joint's function was.

Guillermo Rosales, a Los Angeles Police Office, a sergeant when we last communicated years ago, first consulted me in the late 70s 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 and fully flexed his left hip and knee. Then, while one hand continued to hold his knee down, my other 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.

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 contractured capsule, 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 that 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, I received an unexpected letter:[30]

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[30] 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

Maybe a year before I left Big Bear Lake, we had new neighbors. Bill is a California Highway Patrolman. About two years before, Andrew, their son, ran into a fire hydrant and injured his left knee. It persistently bothered him, but he was eleven and athletic, so he kept right on going. Then, about a year before, 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. Nancy, Andrew's mother, asked me to examine him.

Andrew's knee was distinctly warm, the tissues of his medial knee swollen and boggy. He had both a coronary ligament strain *and* PTFJ dysfunction. I've never seen that before. The initial mobilization and "sanding" were both painful. I showed Bill and Nancy how to do them. The next day, the appearance of Andrew's knee was markedly improved, 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.

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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

(Sgt. Rosales later was assigned to the Van Nuys Division.)

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 – Jazzercize – 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 and fell to the floor. For the next six months, she couldn't bear any weight on her left leg, or sit, without immediately experiencing intense pain. During that time, she had been seen by many orthopedic surgeons, including at Orthopaedic Hospital, in Los Angeles, without success. Every possible diagnosis had been considered, but one.

It was 1972. I was then "Co-Chairman of Acupuncture Research"[31] at USC,[32] and it was my task to decide which pain patients would be studied. As a last resort, Lisa's mother had 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 almost immediately there 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

[31] More title than anything else but from which I received an excellent exposure to acupuncture.

was 15° more outwardly rotated than her right, and testing demonstrated that it internally rotated less than the right by the same amount, i.e. the entire range of her left hip had been precisely 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 the 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 by, in retrospect, 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.

Lisa's mother brought her back the next day and told me optimistically that, for the first time, 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 it, 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. [33]

I went to the radiology department and asked who might perform a *cinearthrogram*, an x-

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[32] The University of Southern California/Los Angeles County Medical Center

ray movie of the hip and was directed to Dr. Frank Turner[34], Professor of Radiology. Frank became one of the great compatabilities 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 is a great teacher who loves what he does. He could quote from 10,000 papers he'd read. He'd performed over 5000 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 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 *arthrograms,:* 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 bowel back out that has "swallowed itself," a condition called intussussception. When Lisa awakened, she was cured.

I have the film, probably 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

[34] Dr. Turner was last in private practice at San Gabriel Medical Center, San Gabriel, California.

"entrapped ligamentum teres." (Click here to download video.)

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, but 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 each of them? I believe I know. Clinically, the soft tissues close to an inflammation tend to become reflexly edematous (boggy). For instance, a child with tonsillitis can develop torticollis (wryneck). In both girls, it is likely that some inflammation developed proximate to the respectively involved hips, whose soft tissues then reflexly reacted, and the necessary conditions waited. As they had parted her legs while sitting, some of the loose, nerve rich, synovial tissues were drawn into the joints. Then, as they stood up, the tissues were trapped and compressed. Only manipulation – gapping the joint - could release them.

I continue to occasionally see such cases. Two were women in their early 50s injured in 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 and long ago learned to tolerate pain, including the low back pain and increased headaches she attributed to two old whiplash injuries,

but 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 driving, and her headaches 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 balanced. If I occasionally see such patients, other practitioners see them, as well.

Most recently, 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 instantly completely relieved.

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 – (previously) relatively unknown, often a cause of pain**
  - ***How to diagnose when it is inflamed**
  - **More examples:**
    - **Pat Hansen – a new diagnosis**
- **Manipulating the thoracic spine**
- **Arthrograms and abnormalities**
- **Maria's case – a shoulder destroyed by arthritis**
- **Mobilizing the shoulder**
- ***Self-help mobilization**

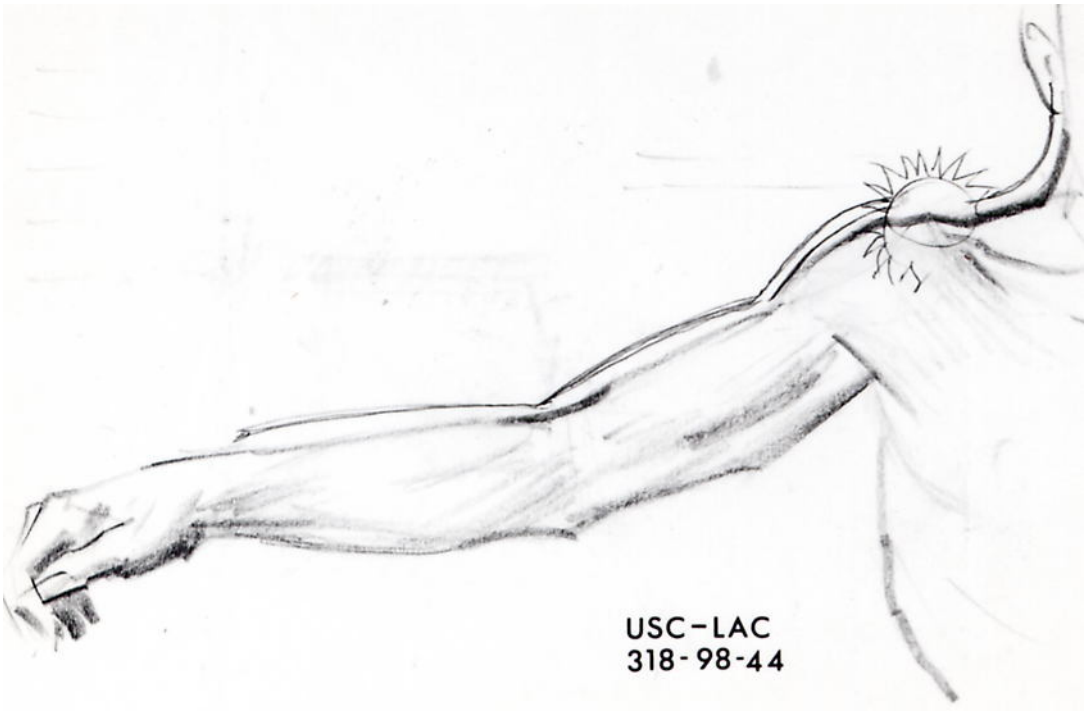
The *acromio-clavicular (AC)* joint is the highest joint on the shoulder. It is palpable directly under the skin, is fairly small and comprised of the lateral end of the clavicle where it articulates with the forward extension of the scapula.

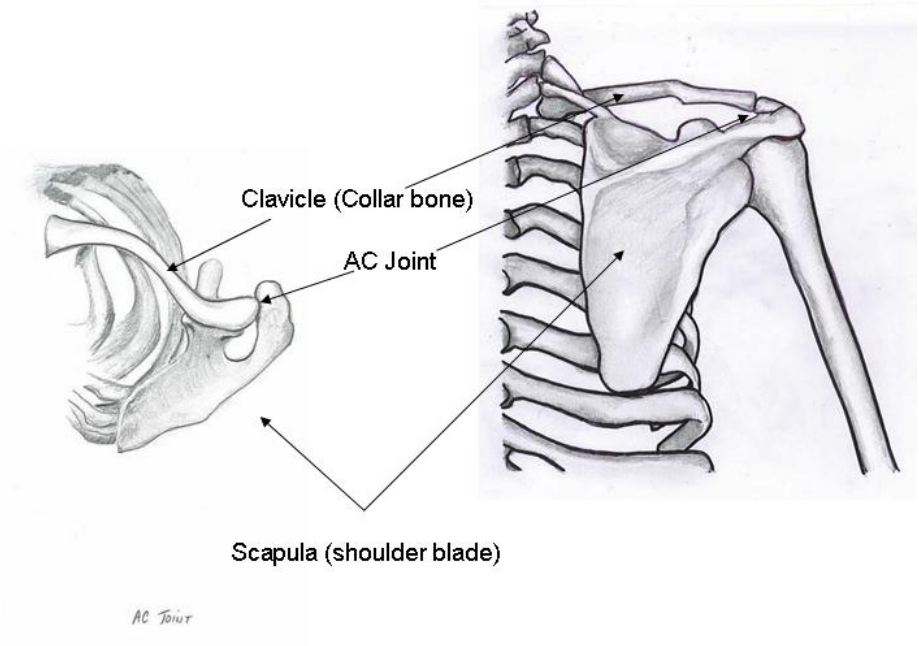
Like the knee's PTFJ, the AC is also adjacent to a large, obvious joint: *the gleno-humeral joint* - the articulation of the arm into the *glenoid fossa*, the socket at the lateral side of the scapula. Maybe, such proximity to an obvious, better known joint has a diminishing effect. Whatever, the price persists.

The AC can be easily mobilized to test for motion and tenderness, yet, the same as the PTFJ continues to be, it is often forgotten as a structure that, of itself, can cause disabling pain. In the 70s, it was still truly the lost joint of the upper extremity and is still not generally viewed in its full spectrum of potential problems. In fact, its "discovery" coincided with the

popularization of shoulder arthroscopy, a surgical procedure, which did not enhance the exploration of its full spectrum in the impairment scheme of things. *It is still not commonly examined by palpation or mobilization, or through many tests that reveal its culpability to disable because of a purely medical diagnosis.* It is easily manipulated, sometimes with dramatic results. It is another of the joints Dr. Yamamoto referred to.

Only a few weeks after leaving general practice and starting specialty training, I was entering the clinic when a man came towards 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 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 tests implicate the AC joint and predominantly distinguish its pathologies from other structures: *(1) The top of the joint is tender. (2) Mobilizing reveals that its motion is restricted and painful. (3) The pain is almost invariably markedly increased when the arm is passively elevated to horizontal and then moved across the chest*

(horizontally adducted), which compresses the joint. The entire examination takes half a minute.

I performed the tests where he stood, relieved much of his pain with a manipulation (which confirmed the diagnosis) and 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!*

Important digression: *It is a gross error to assume that pain about the shoulder is "shoulder pain!"* It is essential to accept the concept: *pain that is experienced in the shoulder area - pain within a particular nerve distribution rather than pain in a particular part, the shoulder, as example.* That way, the testing begins at the origin of potential sources - the head and the neck - even the abdomen if the history and initial examination suggests that the source of the pain is there and referring *to the shoulder* – as can happen with ruptured spleen – as can happen with heart attack. The concept of referred pain is well known.

When we lived in Palos Verdes, I came home one evening to the cries 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.

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 it all together, and discovering the cause of her injury revealed a new diagnosis. It was also another bittersweet time with my orthopedic surgical colleagues.

Pat's experience is another damning proof that the pain-clinic-mentality is (was) wrong which declares 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!

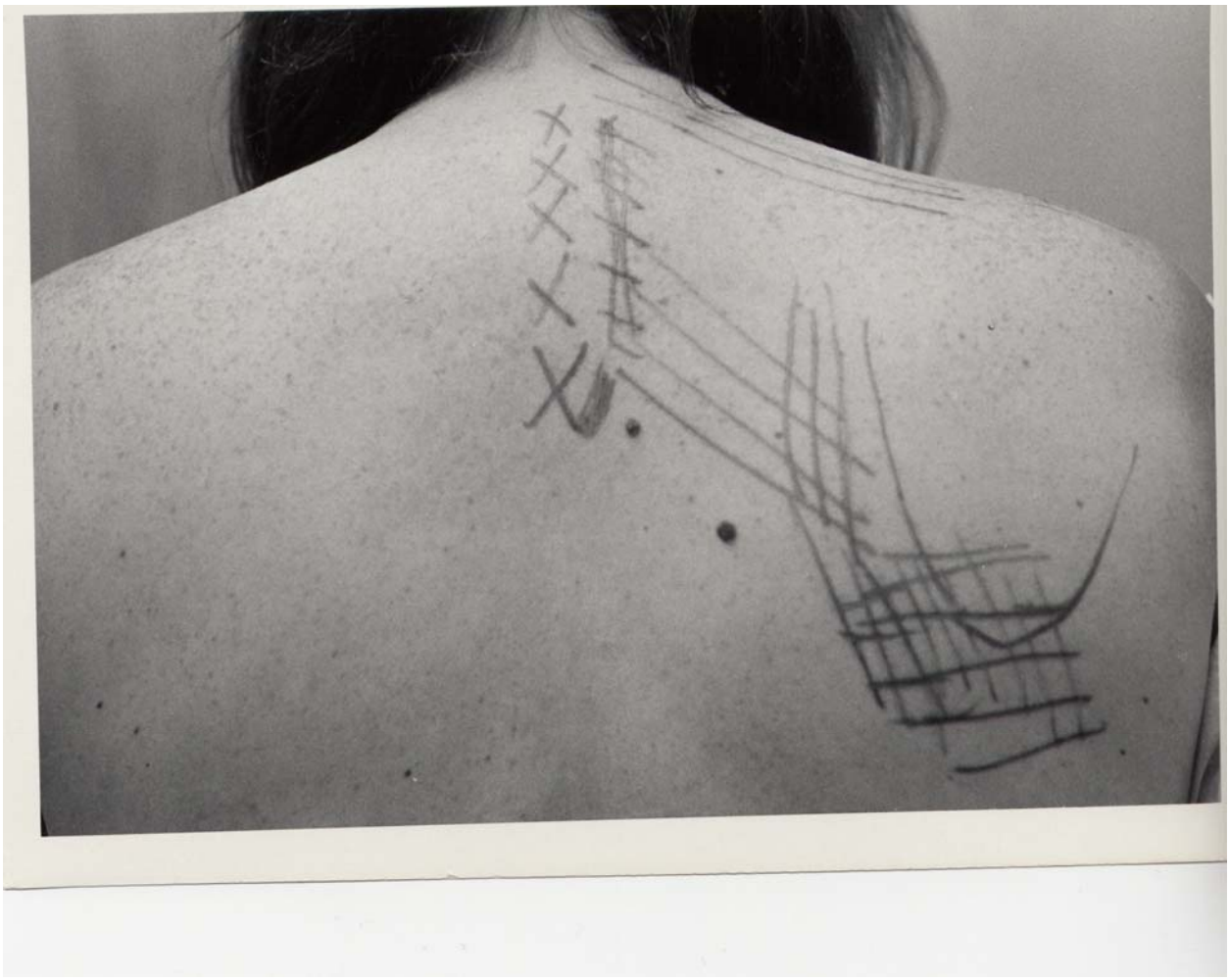
It was early 1974, during my last year of residency, at the University of California, Davis/Sacramento Medical Center. I first saw Pat from her back. She was sitting at the

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 unremittingly drove her to the ground every time she attempted to move her right shoulder at all. 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.

Her history was so unusual, it taunted diagnosis, and the totality of it was baffling until the very end. The accident had only been a mild fender bender. Pat had been seen in the emergency room for a very minor neck injury 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 through her thoracic spine and right scapula areas. In a short time, she was totally disabled by severe pain, and she could find no position of relief.



As I approached her, immediately obvious to me was a puffy edema in the skin overlying her right scapula. Just running my fingers gently over it markedly intensified her pain, and when I attempted to barely mobilize her AC joint, she turned a gray ashen, groaned and almost fainted.

I told Dr. Sterling that if I had any chance at all, Pat would have to be admitted to the hospital. He smiled and said, “Do it.” Pat and I spoke for the first time. In the order of things, as part of the so unusual in her 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 reopen the clinic several floors down, I cleared the ping-pong table in the recreation room. With her lying supine, the relieving manipulation to her neck was easy and completely ended that minor aspect of her case.

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 *arms uncrossed* and moved my chest close against her elbows. I put my left hand under her head and flexed her neck sufficiently to focus my intended force through my chest at my hand and further facilitated the maneuver by Pat's pushing her head back slightly into my hand.

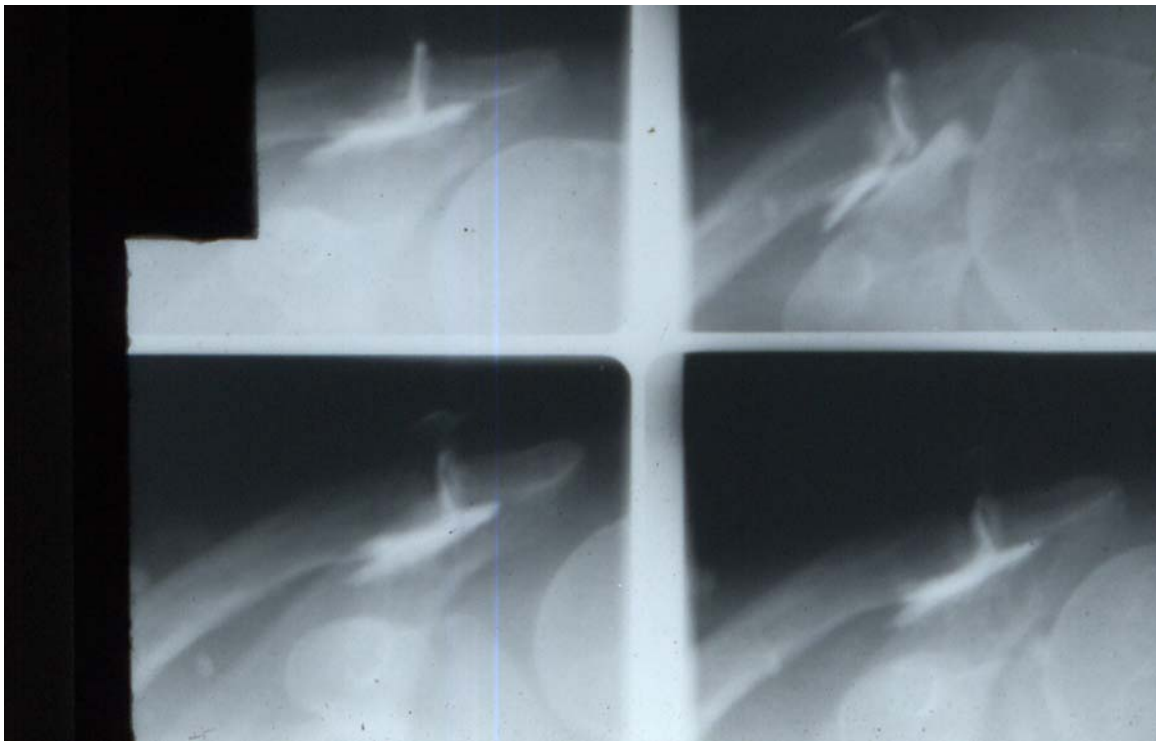
. Pat relaxed as best she could. The manipulation is performed by “taking up the slack” and then thrusting down while “moving towards the upward.”

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. The prompt change was remarkable. The body’s ability to heal when an impediment is removed can seem miraculous.

But at that same moment, 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 anesthetized the joint with an injection, 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. It was the same procedure I had performed on Lisa's hip, but of course very little dye is needed. There was nothing in the literature about doing AC arthrography, and no one I spoke to knew anything about it, so there were no standards. I studied the left side first and assumed it was normal, so it became my standard.



The dye pattern looked like an inverted T (⊥) with an abundant inferior reservoir and thick vertical column in the joint space. Pat's right, symptomatic, side also showed a similar inferior recess, but as I watched the dye enter on the intensifier screen, the verticality was a bare hairline.

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 believed 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 it 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 it 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 specialty, had a close working

relationship with the Department of Orthopedic Surgery. I have always sought to work closely with my surgical colleagues. (For very good reasons, this book is dedicated to two of them.) But I have 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. All that I have striven to do is to be helpful, but I am not one of them (and I will discuss this more). Here, I have decided in this final editing as I am entering my evening years, I will not be circumspect with the problem at the core of resolving the Fundamental Flaw.

I was told, in retrospect a little hesitantly, that it did. Unfortunately, it didn't, at least as I had hoped. The barrier was always there. The orthopedic surgeons didn’t appreciate that a non-surgeon 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 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 **C**hief’s reflex response was, they'd first do their own arthrogram. When Pat heard that she breathed fire. She let them have a piece of 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 **C**hief’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 **C**hief 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. The **C**hief 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.

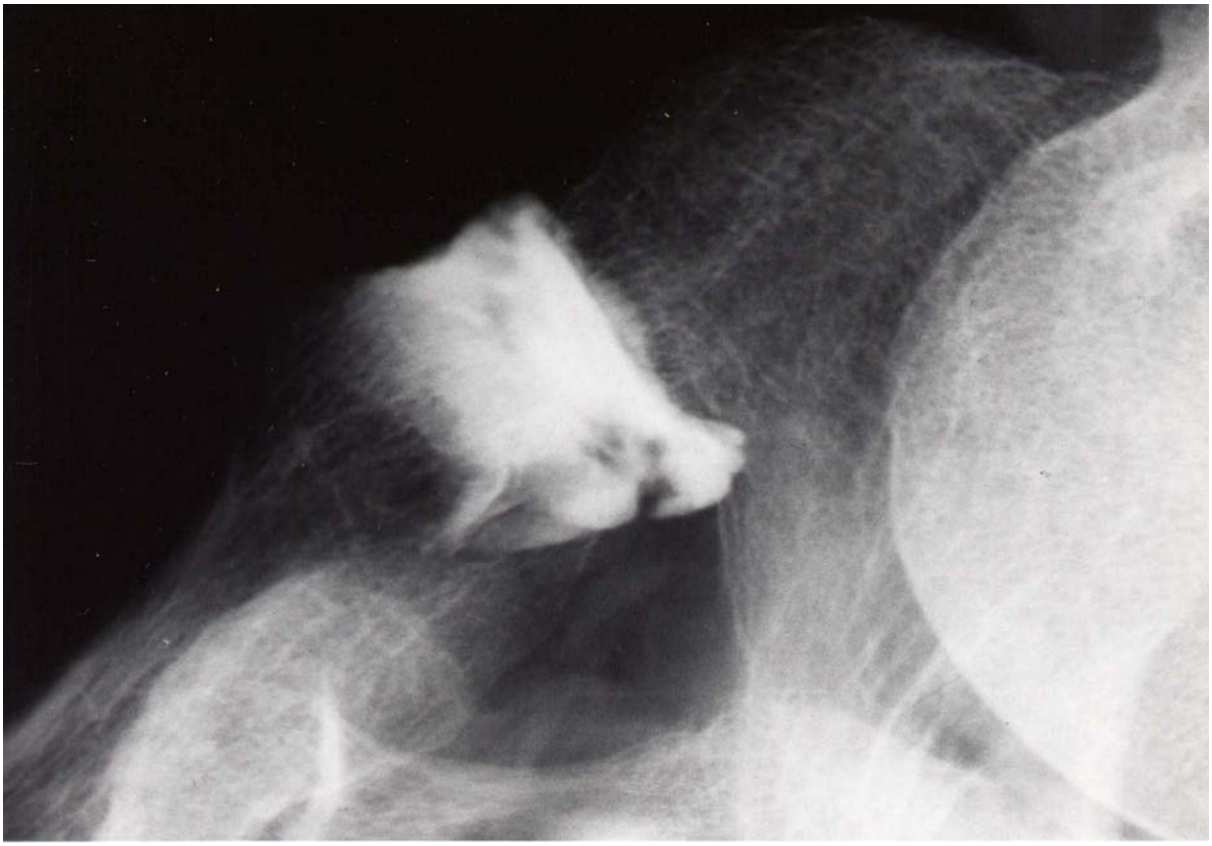
Later, I found a paper written by Dr. Marshall Urist, one of my UCLA orthopedic surgery professors, who, to me, was always a gentleman, who had demonstrated that such joint changes were common consequences by the third decade of life.

Most importantly, however, Pat had been cured (but I still didn't understand how the accident had happened).

I studied fifty fresh post-mortem AC joints, from infancy through the tenth decades by

frequenting the autopsy room at night. The pathology and radiology people liked me, and I got away with it “midnight auto supply” style. I certainly made their nights more interesting. After an autopsy was completed, I excised an AC joint with its adjacent structures, placed it on a frame that the hospital engineers had constructed for me from light plastic, 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 understand its significance.



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,"[35] 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 PSA flight back to Sacramento.

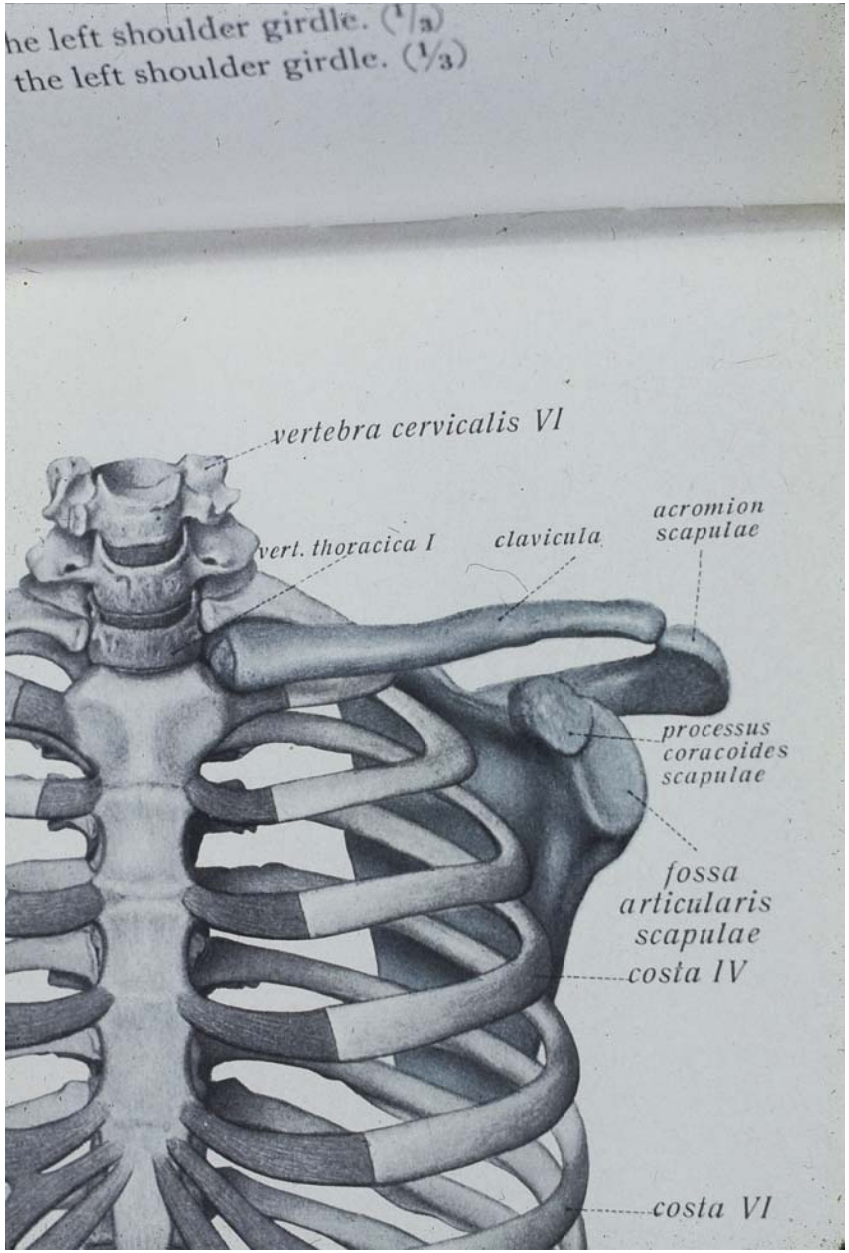
One evening, I returned home after traveling somewhere, exhausted and desperate for sleep. Doing something I'd never before done in my life, I crawled into bed and almost begged the mattress to close over me. Lying on my side, I kept pushing myself into the mattress harder

and harder trying to literally bury myself into it.

Suddenly, my mind exploded in the purest of Archimedes Eureka experiences! *It was among the rarest of human events that, if it happens once in a life, is worthy of a lifetime's celebration.* ***I knew!*** *Amazingly, I was instantly totally refreshed, 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.)

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 down slightly from its position directly under her AC. Under ordinary circumstances, it would have made no difference at all, *but Pat's underside ligaments are defective* though she'd lived her whole life till then with no problem. 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 collapsed. The clavicle dislocated downward, trapped synovium (similar to Lisa's hip) and, as suddenly, realigned itself while capturing the soft tissue and trapping it in a vicious vise.

[35] Perform medical work privately


he left shoulder girdle. (1/3)
the left shoulder girdle. (1/3)
vertebra cervicalis VI
vert. thoracica I
clavicula
acromion scapulae
processus coracoides scapulae
fossa articularis scapulae
costa IV
costa VI

Pat did suddenly sink into the bed! Lying on her side, her vertical clavicle became a major strut supporting her horizontal spine. As it unexpectedly "kicked out," in that instant, her spine reflexively buckled in a totally unnatural manner. As the mid thoracic joints suddenly “sprung” and gapped, they jammed and locked, also possibly entrapping their own synovium along the linkage. Then her tortured nerves began screaming, and the “swamp” and extreme cutaneous hyperalgesia joined in the devil’s merry-go-round that almost destroyed Pat’s life.

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 belonged to me.

I taped her note to the back: "This had to be yours. Pat Hansen."

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 an uncomplimentary self revelation. I saw him years later, when I visited UCD. It was still there when he looked at me.

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 was all right again, with the same type of relieving sensation I had experienced when “Bear” cured my elbow.

I told Audra to keep me informed how she was doing, and when I saw her occasionally all seemed right. Then I didn’t hear from her for almost a year. Audra was working for certification as a scuba diving instructor, but she was progressively experiencing shoulder pain whenever she put her tanks on or pulled herself up into a boat. It was becoming serious enough to threaten her intended career.

Acromio-claviculitis progressed as severe tenderness spread all about the joint, across the “spine” of her scapula and along its lateral edge. Audra was in real trouble.

The joint had been more than strained. It had sustained ligamentous damage, so it couldn’t hold itself in normal position. And it became clear that there had been an extensive over straining of the attachments of several muscles. None of them had healed, and together they were compromising her entire shoulder function. I told them that Audra’s only chance was a series of prolotherapy injections (which I discuss elsewhere).

I performed them twice over a two-week period, injecting all about the joint, top, bottom

and around and at all the symptomatic muscle attachments. Within a few weeks, Audra was completely relieved and back on her full athletic schedule.

Maria's story

Whereas Pat required an operation, Maria would have been destroyed by it, and her story constitutes the total confrontation of orthopaedic medicine against inappropriate surgery.

Just before my first year of residency, I was invited to study in Paris. The forty-five days played out with opportunities to study in London and with the Scandinavians all of which became foundational to virtually all my future work.[36]

Maria's case was presented to the Rheumatology/Orthopedic Surgery Conference the same day that I returned to USC. She was in her early twenties, and only a few years before had developed ravaging arthritis in her right shoulder that had become unremittingly intensely painful and completely prevented her from elevating 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 her shoulder she might be more functional if it were removed. No one had ever attempted it. He wanted to. I saw it as a mutilating procedure, and I asked for a few weeks to try the methods I had 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.

[36] The description of the trip is archived on this 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

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: An extremity is held close to its joint, and a specific force is applied that stretches the restricted soft tissues without unduly stressing the joint and causing pain. They are predominantly shearing forces *transverse* to the joint's surface. The prime purpose is to "open" the joint space and provide the "play" that allows the bones to move freely on each other.

The theory is that before an arm elevates, the humerus first has to descend a little in the shoulder 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" in its joint. Since the head of the humerus couldn't descend a little, it impacted the tender, inflamed tissues as soon as movement was attempted. As well, the bones of Maria's joint had been destroyed by the arthritis.

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 vise to insert a strap into and how to use it for gentle traction. She would assure that it 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.

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one of the pivotal and most challenging events of my professional career.

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. As you sit on a chair, you can reach under the seat and hold it as you lean away, staying relaxed. None of this is complete therapy, but it can help.

Two days later, Maria was at the sink crying when I entered her room. Immediately concerned, I asked, "Maria, por que lloras?"[37]

"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 explained when I described the man who was able to throw engine blocks onto a truck one-handed, full upper extremity range of motion is only partially the movement of the arm at the shoulder. Maria’s range remained at only ten degrees, as before, but the therapy had stretched the capsule some and desensitized the area likely by freeing away entrapped tissue. 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.

[37] Spanish: “Why are you crying?”

(Photos of Maria are among the scrolling photos on the home page.)

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 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 fundi[38] 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**

Very early on in my general practice, a woman was brought to my emergency entrance. She was in ashen agony, grotesquely contorted and struggling to breathe as each gasp racked her

[38] The fundus is the back of the eye, the retina. Examining it with an *ophthalmoscope* is an important part of any complete physical examination.

with pain, the same as had happened to the frail, elderly black lady of my opening story.

She had been shopping at the Market Basket, and as she walked out holding a large package under one arm, her small son had said something impertinent. She'd swung to slap him, screamed and dropped the package locked in the rotation.

I had only the few crude manipulative techniques I'd learned during the twenty-hour introductory course and what allopathy remains restricted to: X-rays, narcotics, oxygen, drugs and weeks of expectant "therapy." After a brief exam, with assistance we lay her face down on the exam table as I soothed her to relax as best she could, asking her to keep her mouth open and exhale.

I crossed my hands to each side of her mid thoracic spine so that my wrists on the little finger side were over the area of restriction, "took up the slack," waited until the tension was "right," then delivered a short downward thrust.[39] 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. There was no recurrence.

She was among my first cases that seemed a stream of exclamation points emphasizing 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 never repeated itself.

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

[39] The pisiform thrust.

paragraphs before she would smilingly persist until finally I 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. All the therapies available to her had been unsuccessful. She was her own controlled series. A few manipulations over less than five minutes, and she was pain free. I saw her a few years later. The pain never recurred.

Scott was one of the volunteers on the dig in Israel. He was one of those computer geniuses who, back home, sat inside a circular table and worked with about eight 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 Scott 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 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'd been thrown about violently. Ever since, he'd had a strange back pain and other problems including progressive fatigability.

My findings revealed the extraordinary "locking" of more than half his right ribs. It took a few sessions before suddenly they released.

Later, Scott 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.

CURING “HEART ATTACKS”

Auggie was another of my early on 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, that year, London playgoers were entertained with it.

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, with all tests negative, the pain mysteriously dissipated

. 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 just since it had taken over as carrier of his health plan. The total was considerably higher.

For all its focus on x-rays, allopathy doesn't look for fine 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.

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 air borne microbes is an excellent culture medium.

It is anecdotal that 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 checked for and restored rib motion. The lore is that their patients (logically) had better survival rates. Assuring that the essential anatomy is moving seems so fundamental, but never in medical school was it even suggested to me.

That is what I found when I first examined her - a 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 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.

COMPLICATIONS

My beginner's series of seemingly miraculous cures had to have a complication or it wouldn't have been complete, and, at the same time, while I wasn't getting cocky, I couldn't help becoming very nearly convinced that this was simple, reliable stuff.

One morning, I entered the hospital ward just as one of the staff nurses, a post-menopausal, osteoporotic and 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.

Overstretching is always associated with hazard. The bad leverage had locked her mid thoracic spine. The reflex literally interprets abnormal motion anywhere around the spinal cord: *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 [40]on 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 understand that, took it into account and provided the same pisiform thrust I previously described. 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,

[40] Face down

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 leaving 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. They more likely occur when the neck is extended and over-rotated. A skilled manipulator guards against that, as I have discussed. 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

I consulted 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, and almost blind. Her life had been a misery, and the expectation of her being discharged to a convalescent facility to endure her last days in intense, unremitting pain instead of returning to her family was an excessive cruelty.

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, and she was about to be transferred.

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 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.[41]

The other consultants certainly wanted to succeed. They weren't given the tools. (At the same time, obtaining a more perceptive history certainly would have helped.)

Opinions founded on prejudice are always sustained with the greatest violence.

Lord Francis Jeffrey (1773 - 1850)

[41] The story was published as part of an interview with me concerning Orthopaedic Medicine in *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!

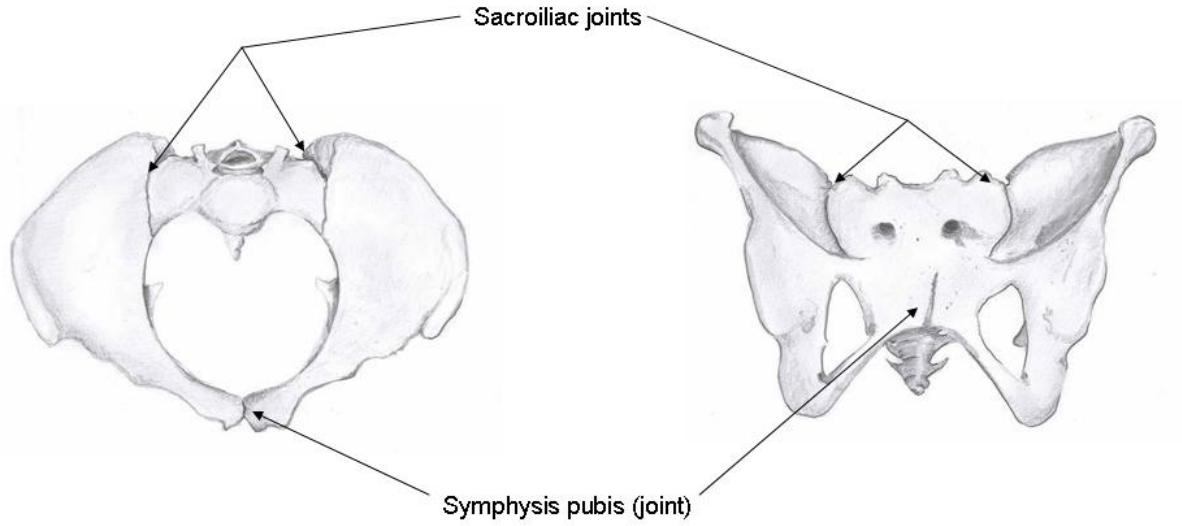
My first year in general practice, an orthopedic surgeon retorted to me, *"My God, Paul, how could they move? Have you ever tried to dissect one? Look at all those ligaments!"* to which I had stunned him when I heard myself responding that, since the purpose of ligaments is to *restrict* motion, what 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 overlie 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 subject 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.

The SI joint is complex, and its examination is complex. Each of the joints has three distinct aspects. 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 had lost his balance, fallen back and the area over his left SI joint had 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. That weekend, I was on duty, and I took him down to the deserted clinic and started again. He stood and the pain came. I lay 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.

Unfortunately, but as anticipated, the relief was only temporary, lasting no more than a few weeks, but it proved the point and was his first validating evidence against his persecutors. While I was there, I reinjected him periodically. I was only beginning to learn about such dysfunctions, and I certainly missed something.

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 attending 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, intense, unremitting, non-radiating low back pain. He'd never experienced anything like it before.

Again, one of the priceless values of a precise examination is its capability to localize sites of injury. 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!*

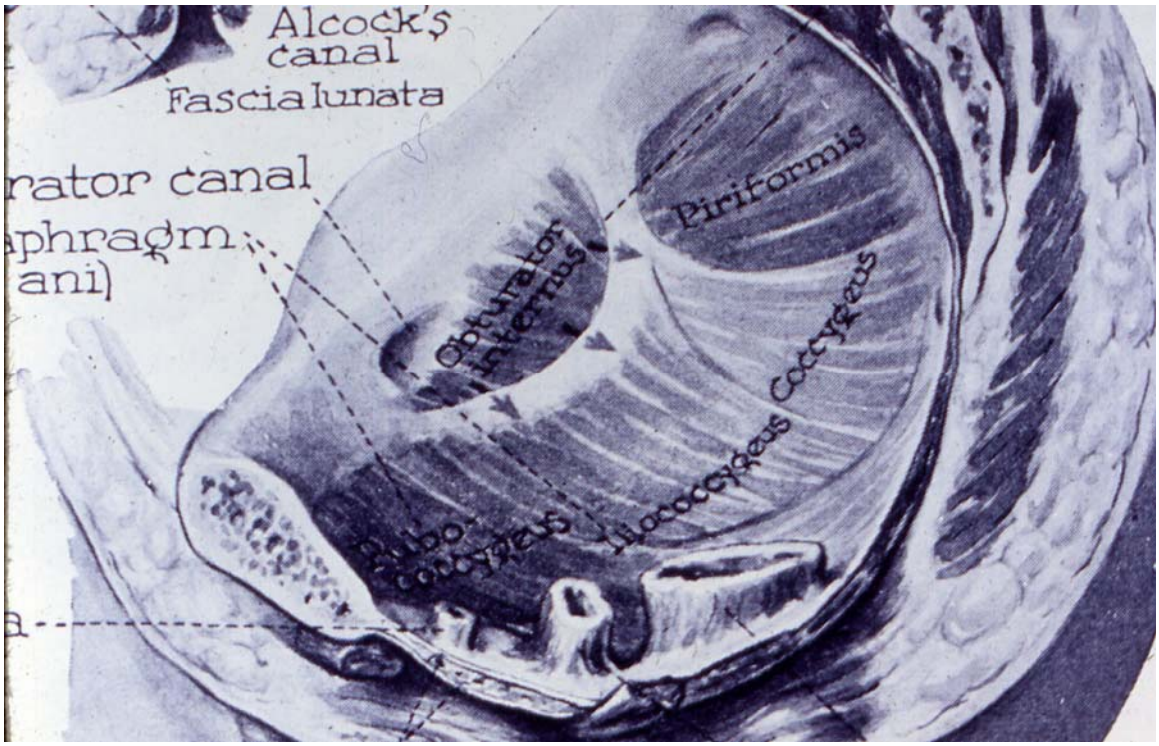
Medicine knows well that the joint moves. Towards the end of pregnancy, mother-to-be begins to waddle like a duck because the symphysis and its related joints about the ring soften so the pelvis can mold as baby comes through. Dysfunction of the symphysis pubis is relatively common, and it is often one 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 (front) 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 & gynecologists need to know it.

A BRIEF DIGRESSION TO THE TENDINOUS ARCH



There is something else obstetricians & 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.

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 (It takes 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 clinician (you) 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

The muscles of the i*nner* thighs largely originate along the edges of the bottoms 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 a simple procedure called *reciprocal inhibition.* That is the name for what happens when - as the muscles on one side of a joint contract to move it - the muscles on the other side necessarily coordinately relax. The physiology is exploited to a specific purpose. To equalize the tone of the thigh **add**uctors, first contract the thigh **abd**uctors, 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 there needs to be hands-on 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.

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 who I have performed it on. The sensation resembled the rumbling shudder of a bank vault closing, accompanied by a grinding as if concrete were 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 reexamination 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.

But sometimes the mass of interrelated tissues in a complex injury can appear as a Gordian[42] knot of futility. Parts are so twisted and locked that all ordinary therapies are fruitless in what is, for very good reason, 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 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 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 because of 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

[42] 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 his sword.

she pitched forward, landing on the concrete, face down. Her low back injury flared. Pain would unpredictably intensify and radiate down the front of her thigh. Any attempt to move would be excruciating. It was 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. Her entire body contorted against the torture for about a minute, 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 in years. 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 have an Adjunct Professorship. 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 is a clinician to be admired - who is a chiropractor.

CHAPTER FIFTEEN

LESSONS ABOUT THE CRANIUM - THE "CRYPTIC CONDITIONS"- ANOTHER NEW DIAGNOSIS - TEMPOROMANDIBULAR JOINT DYSFUNCTION

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 VA 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. Eventually they trusted me and would line up for complaint call as soon as we assembled.

Randy was from Colorado. He'd collided face to face with someone while playing volleyball and intense pain had 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 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 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 seen 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,[43] a bridge formed from two bones that meet as a joint.[44]

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 backside 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 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

[43] Zygomatic arch
[44] Zygomaticomaxillary suture

discovery wherever it leads.

We will never be pain's overbearing masters. In all things, '*We do command nature only by obeying her.*'[45] 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 almost assure failure.

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 him nine months after the accident when I was periodically flying up to Big Bear Lake and

[45] Author not known

consulting. He had been extensively examined at Loma Linda University Medical Center and finally signed off by Workers' Compensation as 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 and 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 both 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, and it is understandable because 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 trained 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 and 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, "across the hall" in the clinics there is a long medical tradition against considering the cranial joints as having 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 or 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*[46] 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 biomechanically sound and safe therapy. Sadly, it and its successor have had a troubled time in the market however valuable it is. I will discuss it in some edited manner later, but its proof 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.

[46] Chapter Thirty.

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 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 hospital stay the traction was his only treatment.

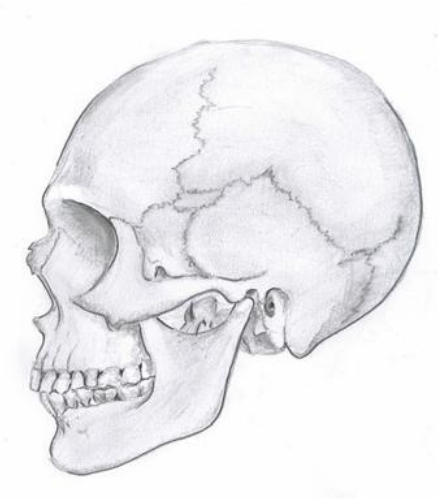
There was no time for the tests. After a day, he was demonstrably stronger. He could walk down the hall rapidly, and the painful tinnitus was half relieved. Each hour in traction brought observable results, and when I arrived on the ward on the fourth day, he was waiting in the hall for me, smiling the ecstasy of someone reprieved from hell, already explaining as I approached him.

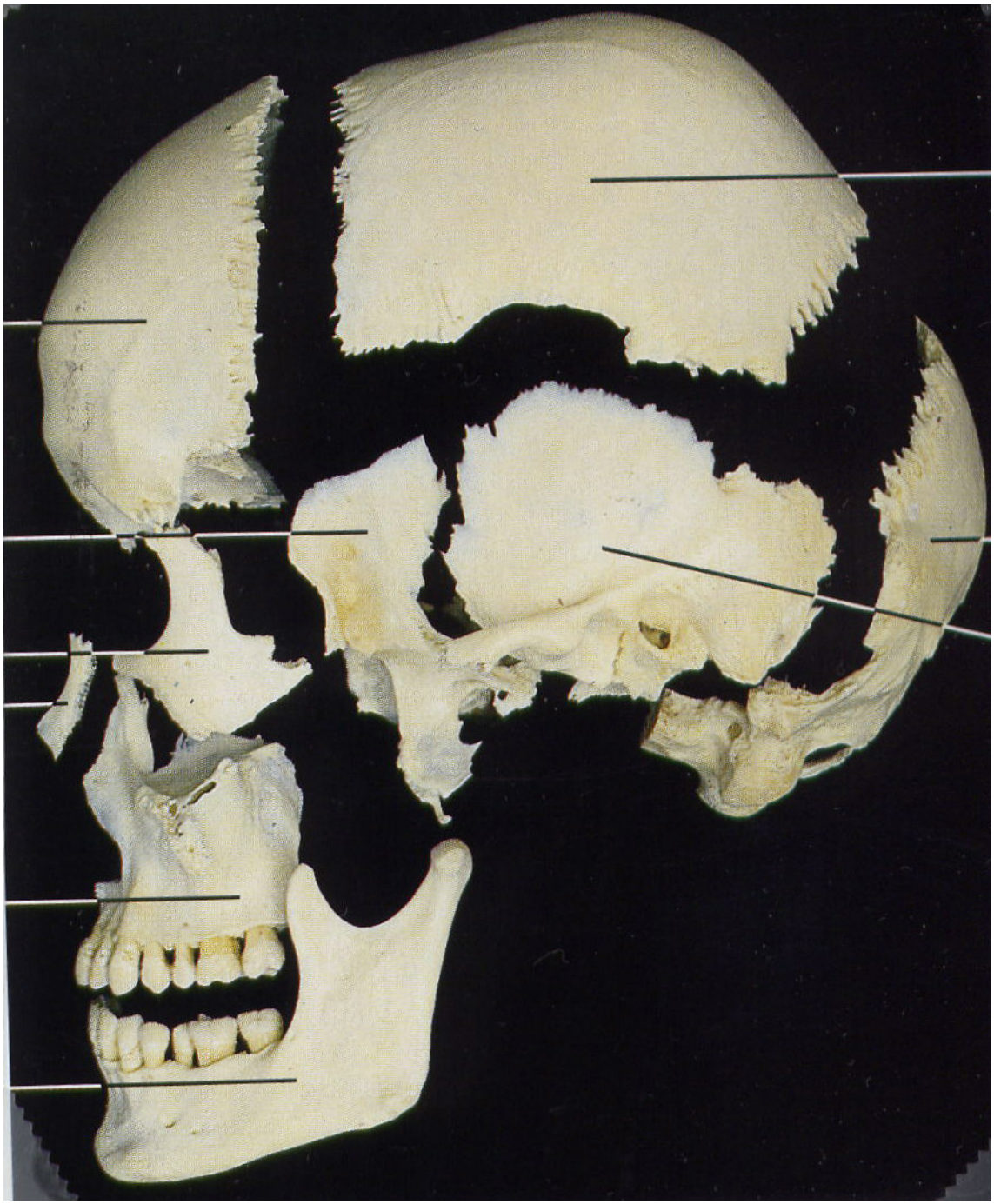
"I had my first erection in nine months last night... *And I didn't waste it either!"*

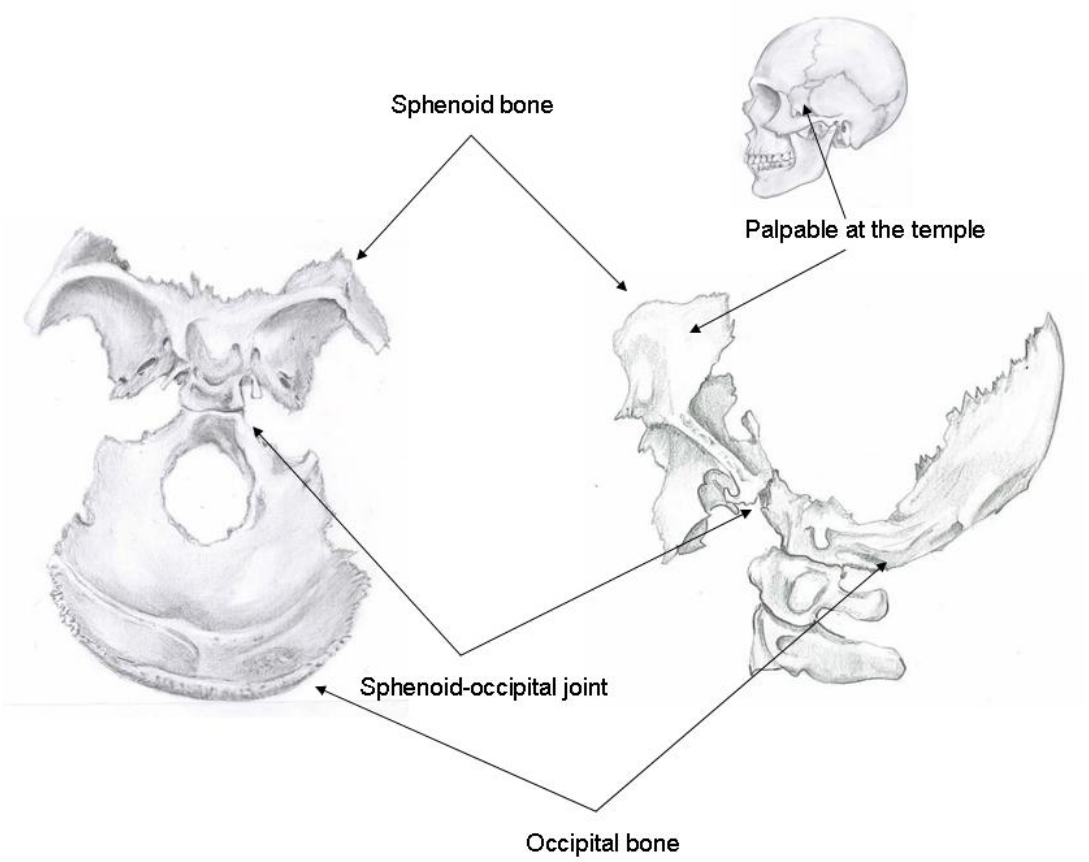
Richard's cranial rhythm was bilaterally normal and surging like a locomotive trying to make up for lost time. I discharged him, and within a week, he was fully recovered and already working full time. He never had a recurrence.

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 there, 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, is the hormone that, from the clinical evidence, Richard lacked: *Adrenal Corticotropic 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, depressing 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***

Since that time, I have successfully used "Cranial" technique hundreds of times. The exam is part of my routine examination. I had two special experiences with it in Israel when I was first there for three months in 1995-96, and, as so much else that happened there, one in particular happened in an extraordinary way.

We were at the archaeological dig site for the first time. I was getting acquainted and using my Hebrew name, "Pesach."[47] Terry Julius was a consultant to Vendyl Jones. Terry is a brilliant, highly energetic and outgoing individual. 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 from Jerusalem to lecture. We had met when, for a short time, he joined the tour we took before settling into the dig. Avraham had gone to Fairfax High School, in Los Angeles, twenty years after me. Then he moved to Israel. In time, we became like brothers, and that night we were all listening to him when the phone rang.

Kevin, one of the volunteers picked it up, looked quizzical and asked, "Who's Pesach?" At that time only Avraham and Terry knew. 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 she was very upset.

[47] It means Passover.

Their two-year old son, Nadav Gavrielle, had just had an inoculation. A short time later, his face began to frighteningly contort in what is called myoclonic contractions. All the muscles would suddenly spasm producing a frightening grimace that would slowly recede and then recur.

Heather called her mother in California. Her mother called Dr. Frymann. The calls had gone back and forth a few times, and Dr. Frymann said the child needed cranial osteopathy. She was then told 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 our camp, which was somewhat remote on the road to the Dead Sea. It was about 9:30 p.m. How could I get there? Kevin held his hand up. As soon as Avraham finished his lecture, Kevin was driving him home. Then he had to go to Terry's home to pick up a stove for the camp. There are no coincidences.

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 because the cock crowed, and elementary error in logic.) I agree. That's the way it happened.

Avraham Sutton's wife, Esther, also developed extraordinary symptoms, and in her case,

as with Richard, there is no possibility of considering the result coincidental because her relief was instantaneous. Her eyes had suddenly lost vertical convergence, and she began to see with a very unusual type of diplopia (double vision). It's a scary symptom and very serious disease has to be ruled out.

I called *Share Tzeddek Hospital* and had Esther admitted. The initial tests, particularly the brain MRI, were normal, which was very relieving because her condition could have been from a brain tumor or vascular anomaly. We considered that a viral-type infection was the most likely diagnosis, and Esther stayed in the hospital for a few days and discharged wearing an eye patch. I returned to the dig.

Esther called again a few days later. The tension in her voice was 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, for blinked her eyes one at a time. With her right eye closed, as she wrote, she told me on the phone that she was totally blind in her right eye.

I returned to Telz Stone immediately. My neurological examination was normal, but Esther's cranial rhythm was totally absent. I performed an "emergency jump start" maneuver through the temporal bones. It is a simple maneuver, and at the instant the cranial rhythm returned, Esther's vision became normal.[48] Three years later, she wrote me and related her recollection of what had happened.[49]

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[48] Rabbi Avraham Sutton, Esther, his wife, and their seven children live in Telz Stone, Jerusalem.

[49] "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.

"Only when I would open the door to the light or go into the light, my vision would come back. This lasted

I can offer no explanation her experience. However, I do repeat: there are no breaks in the body's consistent integrity, no distinctly separate parts for the traditional mind's convenience. The body is a unified whole. 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 God 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 can cause or adversely influence many common conditions.

Dr. Frymann concentrates her work on 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, fatal projectile vomiting. Dr. Frymann's lifetime commitment to Osteopathy in the Cranial Field happened when she learned, too late, that her

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at least a week, until you came. You said there were thousands of books written on the eyes alone, but you prayed, and you placed your hands at the sides of my head, and pressed your fingers on my temples. You told me you would be holding it for 90 seconds. 90 seconds was a complete cycle of time. By the time you took your hands away, the vision had returned. I walked into a dark room, and it didn't happen again that night. I think you then did it a few more times. The next day when it happened again, I put my fingers on the same spot, and it helped again. Finally, it stopped happening. I was so totally thankful for being able to see." (emailed December 31, 1998)

(Esther's recollection that it had gone on for about a week before she called me is inaccurate. She had for obvious reasons called me as soon as it had happened. Also, her reference to the "temples" isn't anatomically accurate, and my memory of what happened is different. The 90 seconds was related to a different manipulation I had performed for another reason [CounterStrain]. She obviously learned to do it by feeling what I was doing to her. I don't think she could have appreciated the subtle signs of it, but her success speaks for itself.)

own child, who had died from such a condition, would likely have been saved with its application.

Many claims are made concerning the benefits of manipulation for the young - from irritability to mucous discharges. The list of possibilities is large: The most common are headaches, sinusitis and tinnitus. As well: spasticity, other nervous disorders including facial palsies and neuralgias, visual and learning disabilities, vertigo and dizziness and temporomandibular joint dysfunction…[50]

While Richard's and Esther's cases are as rare as they are powerful examples, at least an appreciation of Cranial is important because of its potential influences on common problems.

TEMPOROMANDIBULAR JOINT DISORDERS (TMJD)

The treatment of Temporomandibular Joint Disorders (TMJD) have only begun to mature during the past fifteen years significantly because of the actualization that a medical/dental blend is often essential for success. In contrast, less than fifty years ago the "TMJs" were considered an uncomfortable "no man's land" between the fringes of both medicine and dentistry.

While medicine largely remains deferential to dentistry since the TMJs are on the face (and involved in chewing), many other structures are dynamically involved for which dentists have no training to treat and where *orthopaedic medical* knowledge is essential - but largely

[50] I must digress because of a Google search I just did on Dr. Viola Frymann to determine if she is still practicing (July 24, 2005). The first reference was extremely disturbing, accusatory of Dr. Frymann and violently condemnatory of "Cranial." Within the report is record of two cases that do officially sound as if Dr. Frymann did miss overbearing diagnoses. It is painful that, in her later years, she has documentation such as those in her illustrious career, and I am trying now to contact her. The report is from "QuackWatch," the author Dr. Steven Barrett. Within the past decade, I witnessed his appropriate discrediting for the harm that he has done. I regret that I do not have those files with me. Another search, as disturbing because of my knowledge of some of his activities, is that he continues to have an active website. A search, "Dr. Steven Barrett – lawsuits against" is revealing, particularly: http://quackpotwatch.org/opinionpieces/crackpotlawsuits.htm

unavailable because of the Fundamental Flaw. While the idea that '*the jawbone is 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 terrifies(d) them. Today, there is little medical help they can reliably call upon from the medical world. 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 overall seek surgical solutions early, another expression of the orthopaedic *medical* vs. orthopedic *surgical* tension in a special situation where medical authority is weak so there was little to inhibit the surgical inclination. (In appropriate cases, surgery could, of course, be helpful – *if* the joints were actually damaged.

That controversy continued for twenty years, from the 1970s to the mid-90s, during which a few types of TMJ prostheses were invented. Many were implanted. 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 and permanently damaged many patients. As well, when the "TMJ" was not even involved– but the symptoms only mimicked TMJ – surgery only added to the patient's woes. "TMJ" became a malpractice debacle, and all the debris discredited its care.

Today, insurance companies 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 dedicated exposure was in 1992 when 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*.

It was already well recognized that TMJD regularly involves the neck, the reason for dentists attraction. It is well known that the traditional "Sayre-type" sling fastens onto the chin and jams the TMJ, in fact, being a major cause of its injury. 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 eventual 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, and while I attended I learned considerably more than I might contribute.

My first afternoon, a woman came who had been 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. She had lost her job.

After the dentists completed their examination, they asked me to examine her. From the dental chair, she lay supine on a medical examining table. I had no preconceptions. 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, a young woman was seen 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."[51]

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, releasing 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.

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[51] "TMJ" was used carelessly. It is just an abbreviation for the joint. Everyone normally has two of them. TMJ**D**, Temporomandibular Joint Disorder, is the correct phraseology.

Another woman came also complaining of chronic facial pain. The dental examination exonerated her facial structures, 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 of which 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 treat them initially 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 neither her shoulder nor facial pain had recurred. While such a pain pattern seems to be rare, it happens.

Concerning the enthusiasm I have observed for injection techniques in TMJD therapy, as I documented this important discipline was maligned and is recovering from a bad time. It doesn't need additional that had already been maligned, as I discussed. Succinctly, I have seen too many injections habitually administered "just because they can." It is "trigger point" issue I discuss elsewhere.

Another important story comes from the achievement of Dr. Jim Boyd, one of the dentists who attends the clinic, who invented a new mouth prosthetic for TMJD, bruxism and headache.

I debated where I should enter further information

concerning TMJD issues and decided to place it in the website proper.

Because a Cranial Nerve, the Fifth, innervates both the tiny muscles about the eustachial orifice *and* the muscles of mastication, problems in one can influence the other however its

influence may hide in the relatively unrealized relationship: within that complex and intimate binding, what may go wrong in the mouth can affect the ear, and visa versa - from the purely physical, like malocclusion, to the clenching that is most likely a physical expression of the stresses of the mind.

The muscles can lock, contracture, scar and become caught in a degenerative cascade the same as the tissues about the spine, and the soundest way to approach them is through orthopaedic medical techniques.

Many alleged TMJ conditions originate from problems here. Commonly the ears “pop” or give the sense of an unpredictably bothersome fullness. It all can frequently be relieved by an easily performed “sweeping” maneuver across the eustachial orifice: a (gloved) finger is introduced far back into the mouth beyond the soft palate to the eustachial orifice where it massages and stretches the tissues, breaking down adhesions and relieving edema that may cause sufficient stasis to “close the area.” The procedure takes only a few seconds.

A highbrow name was coined (for insurance billing purposes) - Trigeminal Pharyngoplasty. I first learned the technique from an old osteopath maybe forty years ago when it was an incidental office treatment for post-pharyngeal congestion.

All those structures 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 basic defenses. We all do it. With the Fundamental Flaw, it is so powerful that it too often dangerous. Doctors whose training denies its existence can even obliviously deny 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 perspective (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 considering thought. What is too distasteful, too threatening, is rejected. Negative knowing is not a curiosity, but awesomely operative and, here, it is highly relevant.[52]

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.

[52] Goodley Stories Of A Medical Maverick begins with an example.

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.

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 6 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 eventually 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* (any italics and ( ) will be mine) to low back area." 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 said she was improving "…even though at a slow pace. *She still does not have the confidence to return to work at this time*. (Shake ‘em, bake ‘em, ultraviolate ‘em) 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...."*

It 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 true.

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 and body contours 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 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 improvement of motion. I used a few other techniques, and as she moved about she estimated that for the first time since the accident she was "80%" pain free.

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 course of therapy were clear.

Obviously, from the outset, her thoracic spine was primarily implicated. She had 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 nonspecific physical therapies were consistent with the nonspecific reports. The PT followed orders that were generic. Nothing focused on Sandra’s needs, so predictably nothing succeeded.

One of the most serious aspects of this dilemma is who could this unfortunate orthopedic

surgeon reasonably refer Sandra to 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 precedent 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.

It is a sad truth that had Sandra gone to most other allopaths, the result would likely have been much the same. She needed an orthopaedic *physician* or a chiropractor trained in soft tissue therapy, or a particular physical therapist.

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 any of them. They were ritualistic, CMA cash-register "shots in the dark."

Manipulative thinking's comfort is the confidence of it. Without clarity of principle with which to approach previously unseen presentations – or Sandra's - which was "bread and butter" – all the floundering was Fundamental Flaw.

This allopathic specialist is representative of any one might randomly see. As a 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 other person besides Diane Gates who 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, so intensely was it commingled with the therapeutic trials. Everything I could conceivably focus from orthopaedic medicine was tested. Her case is my highest proof that the *thinking* of it cannot be separated from the *hands-on* of it, and from that perhaps her story offers special hope for you.

Alberta had already been suffering terribly for five years the first time I 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.* Listening, palpation and persistence led. In the end, few joints had to be manipulated.

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, and after so long a time, her Workers' Compensation case had become another big pain.

Hers was the classical example of what happens when doctors do not carefully nurture the

need to develop a 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. Whatever their indications were at the time, they had only further complicated her problems. After the procedures were performed, 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 their *reports*.

Alberta illustrates why too often it can't work that way. Writing orders for treatment but not witnessing 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.

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. She considered for a week, and somehow, despite the five years, 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

largest aircraft manufacturers in Southern California. They both operated the same machine, called a “Hydropress Hand Form Finisher,” on different shifts that converted a rubberized material into finished products, like window panels and toilet seats. She had working with it for seven years. It was hard work, but she was good at it.

Alberta described how the extruded material she had to handle weighed well over a hundred pounds. Performing the maneuver to lift one side of it and throw it back to an area high on the machine at a precise time required the coordinated strengths of at least two people. 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 at opposite sides of the machine facing each other as a "blanket approximately six feet wide by fifty feet long and five inches thick flowed out." Each 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. In 2005, 12 years later, as I was driving to teach at Tel Hashomer, in Israel, and intending to describe this case, I had the sudden revelation that I had never realized before about what Alberta had tried to describe.)

She was taken immediately to the dispensary, then to the hospital as the pain spread about

her entire 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 is forced to hold onto and turn so the often aggravated shoulder moves up is too often, in reality, a modern medieval torture device sometimes rigidly clung to for the sake of "tradition.") All of it only compounded her pain because she was required her 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. Shortly after the surgery, she awakened to find her bandage blood soaked. She had returned to the hospital, and the treatment, she recalled, was "agonizing". The sutures were removed from which the 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 but using her right hand, all the while receiving an unchanging course of unhelpful physical therapy.

In May 1990, she attempted to lift a "rib" from an airplane that weighed about seventy pounds. The pain exploded, and her shoulder swelled "massively" as 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, again showed a tear of the rotator cuff. The surgeon who was to perform the repeat surgery died, and it was never done.

Another doctor administered a number of injections over a three-month period, but according to Alberta, they weren't coordinated with other therapies.[53] In the records I did receive, one referred to the use of "Stellate Ganglion Blocks,[54] 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 was finally realized. She was placed on total disability, and all treatment was stopped. On one occasion,

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[53] I attempted a number of times to learn what they were and where they were injected, but my inquiries were never answered.

[54]The Stellate Ganglion is a coming together 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.* While the block is working, a number of changes are obvious including warming of the affected part. Sometimes that is associated with considerable pain relief. Stellate Ganglion Block is the emergent 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 replaces its potential.

in 1991, her chest pain suddenly intensified, and she was again hospitalized and 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 minor), 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 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 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 solution[55] 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

[55] Next chapter

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 room, 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 from anterior ribs up to an anterior facing protrusion (the coracoid process) from the scapula, under the breast, 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 stretched to its normal resting length. 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 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. [56] Happily, after I performed them, and *immediately mobilized her tissues* while they were warm, for the first time Alberta enjoyed some major relief from her symptoms, and when it 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 reflexly 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 incalculable 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 those signs could I insist on persisting until I found

[56] 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. The block temporarily anesthetizes a major *autonomic* nerve junction, resulting in reflex vasodilatation so blood flow remarkably increases around the arm for a time.

some footing. 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. I 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 "foot prints" 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. I have photos, and sometimes when I need encouragement I look at them with her hands thrown over her head as all of her being is joyously laughing.

I wish Alberta's story had a Cinderella ending. [57]

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[57] 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' Comp. Fee schedule), very, very little for all that I had done, and diminutive compared to her surgeries and other former care - miniscule 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, but she did, in fact, get more than what the regulations dictated because of the Independent Medical Examiner, who 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.

CHAPTER EIGHTEEN

PROLOTHERAPY – "FOR WANT OF A NAIL…"[58]

CORTISONE INJECTIONS - EPIIDURAL 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 restore 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 indefinitely repeated when clearly it is not effective. Stories of "easy in, easy out" dysfunctions are common. When pain and impairment persistently recur, it is likely because essential issues are not being addressed.

Ligaments are the connective tissue straps that are intended to support the joints and guide them efficiently through their movements. They are a joint's primary protectors, and if

[58] "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."

their tone, length and strength are damaged, nothing compensates for the loss and the inevitable *hypermobility* that ensues. While spasm may attempt to splint the area, it has virtually no effect on protecting 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 like how a loosening bolt in an engine mount allows the increasing vibration to progressively destabilize the whole assembly.

The periosteum, the bone building tissue that surrounds the bones, can be overstressed and pulled off. The usual reaction is that new bone “grows out” in an attempt to reconnect and repair but with the inevitable result that nature’s original modeling is lost, and the resultant disfigurement further impairs movement and can obstruct the spaces that vital soft tissues, including nerves, travel through.

When degeneration spreads up and down the spine, the movements that are supposed to synchronize become increasingly impaired. What began as a single-segment dysfunction can duplicate and cause a creep of spreading pathology.

The connective tissues do more than connect bones. We generally refer to the parts that we move as the “musculo-skeletal” system, but the phrase is 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 stretch, 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.

Some now refer to this system as the *fascial-ligamentous system.* This is another aspect of the body's unity that still awaits general appreciation and for lack of which there is no estimating the unnecessary multitude of chronic pain sufferers who are assigned a diagnosis such as "D*egenerative 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. Cyriax. He was using it regularly in his office with his associate, Dr. Ronnie Barbour. Then, my skepticism hadn't been fully satisfied, and I was very slow in trying it out.

I had been treating a former cheerleader for almost a year during which her facial expression remained grim. When I had asked her how she could have been a cheerleader, she replied she hadn't been in constant pain then.

The tenderness in her back was limited to one specific superficial ligament.[59] There were no remaining residues of her injury that I could find, so I finally decided to try prolotherapy. She would be her own controlled study because several other clinicians had unsuccessfully tried numbers of other therapies. Incredibly to me, in just two days she was cheerleading again, and I was impressed. There obviously something unique here, because, as I will discuss, it takes weeks for the injections to change tissues. (The local anesthetic effect was, of course, immediate.) Regardless, it was obviously the perfect therapy for her, and she served to break through my resistance. Since then, I have administered prolotherapy thousands of times.

Prolotherapy was the other technique I treated Sgt. Guillermo Rosales with (besides treating his PTFJ[60]) that he credited me with for saving his career. He had injured his shoulder while wrestling a suspect to the ground. His ligaments were not totally torn, but there was enough laxity that when he raised his arm, his shoulder became painfully unstable, and obviously he became an ineffective peace officer. He had been treated traditionally and unsuccessfully for several months. The x-rays, arthrograms and other studies were all normal. A short prolotherapy series cured him.

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[59] A lumbar interspinous ligament.
[60] Proximal tibio-fibular joint.

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 previously. It was chronically unstable and would unpredictably twist and sprain again. I had a bottle of 50% Dextrose in my emergency kit. I mixed it with local anesthetic and injected the ligaments.

Four months later, I met her incidentally asked her how she was doing. She said that one injection had made the ankle so strong, her uninjured one felt weak in comparison. The instability was completely relieved.

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 through the injured tissues. Muscle has an abundance of blood flow 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* with relatively few cells packed among their fibers. They are 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.

The fluid flows from blood vessels, moistens, nourishes, removes products of metabolism, delivers cells of defense and then returns to the blood vessels through the l*ymphatic system*, a near invisible system of circulation in a vast continuing circuit. ***The extravascular fluid is sufficient for basic nutrition but is inadequate for major healing.*** For that, blood must

be brought in, and, for that, a vast network of capillaries is available to reflexively open virtually instantly on need.

Capillaries are the smallest of the blood vessels, the end of the blood flow *to* the body. But, ultimately, the "gatekeeper" that opens them is not dominated by need but by *time*.

When ligaments are injured, 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 Reconstructive Injections, Ligament Reparative Injections) is to open and maintain the natural repair process with the intention that the healing will be completed. The body interprets the injection solution as another injury and reflexively responds by opening the capillaries. Time still dominates so the injections are usually administered in a series over a period of weeks or a few months to keep the healing going. The process may be visualized as physiologic "spot welding -" "running a row" - and sufficiently repeating.

While the injecting obviously requires skill, in a complex structure like the vertebrae, in my opinion, it is not realistic that specific ligaments be targeted. I conceptualize prolotherapy as the laying down of a field of healing within which the body's wisdom does its work. (But in the back, I do lots of injecting. Since I usually sedate my patient and I am there, I make every effort to be thorough.)

Dose:

I "tattoo" the solution, lots of small amounts along the line(s) or in the area it is needed,

no more than about 0.5 ml. at any single site.

Today, Prolotherapy is increasingly known and a web search will likely open hundreds of references. That wasn't the case as recently as when I first wrote this paragraph. Then it was another of the relatively unknown, often mistakenly discredited and historically, intentionally unadvertised essential therapies.[61]

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.

The legion of successful cases of sacroiliac joint injury treated with prolotherapy alone proves the validity of them both.

I examined two remarkably similar young women who were small and athletically built. Both had fallen twisting, and both sustained ligamentous injuries predominantly to their left sacroiliac joints with 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 a short further course. At the conclusion of the series, neither was normal, but they remarkably improved and needed no further pain medications.

[61] After almost six decades, the situation is beginning to change. The first short course specifically on prolotherapy sponsored by a medical school was announced by the University of Wisconsin for September, 2000.

Prolotherapy is the refined application of a method that goes back centuries with its origins in a red-hot poker searing a horse's bowed tendon. Eventually various injections were (and are) used, some of which became well known in traditional medicine.

Around a hundred years ago, injections were even used in attempts to repair hernias, and they still are 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 one 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 at that, 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 sclerosant-type injections, which would not recommence until 1972.

Duration of therapy:

There are different philosophies about how many times and how often the injections should be administered. Some, myself included, prefer to inject about every ten or so 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 is because of mutual consent from observable improvement.

For necessary duration of treatment, the most remarkable prolotherapy case of my career will always be Beth Nick[62]. I injected her intermittently for about a decade. When I discussed the symphysis pubis, I described how the pelvic ring normally “softens" in pregnancy so baby can slide through after which it tightens again. Beth’s didn’t. Her two sons were born a little more than a year apart, but some hormonal eccentricity prevented the process of connective tissue normalization. Her pelvic bones and spine remained loose in the extreme, so she walked almost with the wobble of a loose toy as her hips and back continued to ”go out." For four years, 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 that had appeared on me in the Arizona Republic while I was practicing there 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 away.

I first examined Beth on September 16, 1985. Everything was so loose that whatever caused it was almost irrelevant as it was clear to me that the only help she might possibly obtain would 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. 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.

[62] Beth lives with her husband, Pete, at 6362 Glennknoll Dr., Yorba Linda, CA 92886-6417 (714) 970 8018

By now, the logical question has to be answered. If sclerosant-type 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?

My first editions of this manuscript had the essential history of the manipulative techniques up front. Perhaps it should be there now, but others wanted the "action" first. You will read it after a few more chapters, and it is important for a full understanding of this and other medical issues. Here, I will briefly discuss this issue.

First, this is more flotsam of the Fundamental Flaw. Not thinking about manipulation and its implications inhibits considering the comprehensive treatment of ligament injuries however common they are. These are the *sprains* and *strains* that many have been told will "go away with time." They don't. Still, they have been taken for granted. 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.[63] Any change in this issue, would have had to be recently, and I hope it has happened.

Prolotherapy began in the United States about sixty years ago. The story is that it was refined by a veterinarian, who 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 was willing to take the first stumbling steps that eventually others improved. The solution he used was harsh, more sclerosant, that produced more scars than proliferation. From his efforts came the admonition to do all the injecting that

[63] 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

could be done the first time because the patient would never come back.

Also, early on, a few unfortunate patients reportedly were injected into their spinal canals with the then highly caustic material.[64] The results were catastrophic, and, like manipulation, the adverse results were profusely publicized, which resulted in understandable but totally condemnatory response. Doctors who used it were considered "fringe" and 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 that more practitioners began to seek instruction.

The popular injection solution:

Eventually, Dr. Milne Ongley, a New Zealand physician, studying in England with Dr. James 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.[65] 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 allegedly 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 neither have I once I began to use his solution, but I do not fault its use by experienced clinicians. A number of other variably used solutions are also used.

Traditional medicine is only now beginning to look at prolotherapy (even later than it did for acupuncture). The proverbial barrier that had to be crossed was, *"What's to treat if the condition doesn't even exist?"* Fundamental Flaw.

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opposite.

[64] These were not Dr. Hackett's patients.

Another major reason for prolotherapy's remaining on the sidelines for decades is that its emergence coincided with the discovery of the clinical significance 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. Truth usually falls between extremes.)

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, so there is no thrust in "research" or business impetus to advertise it to public consciousness. The solution is inexpensive and readily available. All prolotherpy requires is individual 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.**

On merit, the number of practitioners in the U.S. slowly increased until recently when substantially more have become attracted to it. 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.[66]

As stated, publications concerning prolotherapy are increasingly appearing including in

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[65] Personal communication.

traditional journals, and scientific proof of its efficacy is being reported[67, 68, 69, 70, 71] from a first tentative study performed in England by Sanford, which I reported in an organizational newsletter[72].

Therapeutic indications:

The therapeutic indications include treatment of virtually all injured ligaments that are available to the needle. Prolotherapy is most often administered for back injuries. Most of the ligaments are deep, and repeated injecting is necessary to suffuse the "healing field," so it is most often performed with pain relieving medications, including intravenous narcotics and sedatives. I certainly appreciate using it because most people are not Beth Nick. We want to inject sufficiently to complete the job without having to contend with the psychological and physiological reactions of a patient being (intentionally) repeatedly hurt.

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

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[66] The published statement of Dr. C. Everett Koop, former United States Surgeon General, which is printed herein.
[67] 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
[68] 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
[69] 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.
[70] Ongley MJ, Dorman TA, Klein RG, et al: A new approach to the treatment of chronic low back pain. Lancet 1987; 2:143-146.
[71] 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
[72] 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.

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.

One statistical answer is from an Ongley’s study.[73] 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; 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. This is consistent with how common ligamentous damage is among those who do not spontaneously completely recover.

Animal studies have also been done so the injected tissues could be analyzed. The efficacy of the method was scientifically proven according to high standards by one of the most respected biomedical laboratories in the world.[74] 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 SUSMAN, UPI Science News.[75]

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[73] A New Approach To the Treatment of Chronic Low Back Pain, Ongley et. al., pub Lancet, July 18, 1987, 143-146.

[74] 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.

[75] DENVER, Sept. 10 (UPI) -- A simple injection in the back of the mouth stops problem

In his Introduction to *State of the Art Reviews – Spine* (endnote 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 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.

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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…"

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…"

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.

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 over fifty years ago, 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 naturally circulate in the body from the adrenal glands, that 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 dilution of the general circulation. While the localization is very temporary, the mass in the area can exert

overwhelming influence to accomplish what is desired, but at the same time, it asserts all of its general physiologic effects, 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. Whatever enters the body, it has to deal with it. There are always problems with absolute power. 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* about marmalade no longer being allowed in 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*." In both situations, knowing the physiology likely avoids undesirable consequences. Any therapy injudiciously applied can cause problems that only sloppy thinking attributes to its essence.

Dr. "Jimmy" Cyriax wrote a classic paper on it in the early 50s. 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 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 cannot 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, and, in fact, the tissues are temporarily materially weakened, so they must be rested and time allowed for cellular reorganization. The need wasn't realized early on, and a 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 if only because they permit injecting not only precisely within the space where the nerve roots first begin to leave the spine but on the "outside," as well where they exit the neural canal in which they can be entrapped and exposed to the pressure and chemical effects of a herniated disc, or whatever.

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 about a hundred procedures in a matter of months.

Over the years, I had performed thousands of Epidural Nerve Blocks as an essentially blind procedure, which was the standard. The needle entered the space within the spine guided entirely by palpable landmarks and the sense of release of the syringe pressure as the space was entered. It 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 at least assure that the needle had been properly placed and that the medication was flowing where it was needed.

The discipline of Pain Management has grown up largely as the domain of Anesthesiology. These are the pure physiologists of medicine who most intimately understand the advances in the cellular activity of drugs. Their knowledge is great contribution, but on the other hand anesthetists aren't competent with orthopedic diagnostics and have no notion about the existence of the Fundamental Flaw which is the bread and butter of it all.

Whether as consultants for the specific purpose of injecting - or otherwise - anesthetists of course largely approach pain problems by anesthetizing something. They use equipment they are comfortable with, which the industry is very happy about. So the Fundamental Flaw is compounded by the advent the remarkable achievement of x-ray guided needle placement that largely makes the blind technique a procedure of the past, if only for malpractice reasons. Despite his exposure for several days to what I teach, at a national meeting of his organization Nik Bogduk literally shouted to they were now, in essence, the masters of pain therapy.

B***ut the fundamentals for fixing things remain immutable; proper patient selection for all procedures is always a paramount issue.***

Realizing the existence of the Fundamental Flaw has been an unhappy shock to this new world of true believers. I must confront that now, however I am impressed with the quality of these people, because the principle must prevail.

Two of the deservedly acknowledged leaders in this field are anesthesiologists Dr. Richard Derby and Charles Aprill, both superb teachers and men of impeccable credentials (who, along with Dr. Bogduk, are today's trinity of this movement).

I met them, and we discussed these matters. Both expressed their interest in reading this manuscript, for which I was, of course, very grateful and desirous of their commentaries, which

they assured me that they would promptly provide. With sadness, I must relate that it didn't happen. Despite numerous letters and calls, neither of them communicated again with me.

A year passed. My circumstance became increasingly challenged awaiting this publication when 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. I came up in the conversation, and a telephone call became an invitation to an interview.

I was enthusiastic with nothing to hide. I was very impressed with the doctor. He was friendly, open, informal and informative from the first. It was his practice. He was beholden to no one. 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 blocks at a surgery center where he insisted on talking to his patients and examining them, which wasn't "productive time" to the owners, and it became a problem, so he saw them elsewhere and finally decided he should open his own full service facility.

He was busy, had eighteen employees and was bringing in another anesthetist in a few months. We talked about what my contribution could be. He appeared very impressed with the Reviews of this book. That loosened me up. The conversation flowed so rapidly and well that we agreed to another meeting soon. He said he would call over the weekend to schedule it. He asked me to leave him whatever I'd brought, which included my CV, the book title page (that was then Pain Pandemic…) and a recently written two-page summary that condensed the issues. It was the starkness of the title page that produced a sudden unmistakable tension and eye widening.

When I didn't hear from him, I called his office. I never heard from him again. For a day I roasted in a little crevice in hell, questioned my behavior, what I'd told him, suffered the could-a-would-a-should-a thing. I really wanted it to work out. His practice was well situated, and we could have done great things together. But a practice with three C arms and a score of employees is big bucks.

So, another clash of fundamentals versus technology, two rational concepts unnaturally forced into conflict - both essentials in their times and places - the natural first, the technological 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 that must be emphasized are aggressively supported by a burgeoning industry joining the others that already must propagate themselves if only for their own survival - however most of them are meritorious *in their places.*

So we are engaged in another clash of fundamentals versus technology, two rational concepts unnaturally forced into conflict as medicine weeps. Fundamental Flaw.

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 please remain aware of the compelling need to persistently sift those sands for the curable who are sometimes there.*

So, Pain Management and the new injection procedures are great advances in medicine that hopefully will become reliably appropriate.

Chelation Therapy

Briefly, chelation is an intravenous therapy that is non traditionally used to "open clogged arteries." Cases are reported of people who have had chelation for various reasons, and their chronic pain was incidentally relieved. I knew of it for years and had seen trustworthy patients converted from cardiac invalidism to full function. I've also seen others who did well for a time and eventually required surgery, as well.

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. Definitive information is available from *The American College For Advancement in Medicine.*[76]

Chelation therapy is authorized by the FDA[77] 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 complications, even deaths, because the physiology of essential ingredient replacement was not understood. That is ancient history. In my opinion, it is potentially valuable therapy, and if there are some people with cryptic pain who report having been relieved it requires mentioning.

Contrast Baths

Puns intended, this is a therapy that must not be washed away, and here is as good a place

[76] 23121 Verdugo Drive, Suite 204, Laguna Hills, CA 92653, Fax: (949) 455-9679 www.acam.org

as any to get immersed in it.

Evelyn's story exemplifies the basic that as long as a patient is being treated, *all that is possible needs to be periodically considered* and that seemingly the simplest adjustment in care 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 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, and she saw an attorney. She received various physical type therapies, but no progress was made as the pain spread throughout her leg.

On my examination, the ankle was tender, and stressing the ligaments caused severe pain; the foot was so tender, she couldn't even wear a sock; the 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

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[77] Federal Drug Administration

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 the findings to them 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. That is how Contrast Baths works.

In one container, have comfortably *hot* water. In another, the water needs to be *ice* cold. Immerse the part in the hot water for *three minutes*, then into the icy for *thirty seconds. C*ontinue to alternate for *about twenty minutes three or so times a day*. 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 likely 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 at USC.

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 of where the trail ended, so it took a bit of guts the first time to get across about fifteen feet of rushing frigidity 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 take a few strokes into the turbulence. Instantly, a million hot needles are massaging the skin as everything inside gets excited by the arctic rush (which 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 is elevation of another order, the startling superseded by increasing delight, ending in conviction that you can stand virtually indefinitely in wet bathing suit in the winter wind and ready to ski all night on bare feet. It's the ultimate contrast bath.

CHAPTER NINETEEN

DIANE GATES – PROFOUND PROLOTHERAPY

I learned long ago that sometimes I learn 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.

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 Texas, 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 one of the doctors was killing her. Only a few minutes before, she felt safe for very obvious reasons, especially since her father was in the room, who couldn't comprehend that the insanity that was suddenly happening was real, and so he reacted by helping to restrain his daughter on the bed even as the doctor repeatedly stabbed her in the chest with a trocar.[78] Diane found herself pinned by their cumulative weight approximating 600 pounds, which required a super human thrust of her right arm to push them off from which she sustained the same type of injury that Alberta had.

Months later, when the truth and the pain had become so unbearable, as her father sat next to her during a flight back from another somewhere she had gone to seek pain relief, the aircraft encountered turbulence, intensifying her agony. He couldn't endure living with his guilt, and, arriving home, had gone 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 in Houston, 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. It had been removed but had to be reinserted.

A strange doctor had entered her room. He wasn't accompanied by a nurse. He was a heavy man, near three hundred pounds (as was her father). She 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, had only increased his agitation. In extremis, she had finally freed her right arm, twisted and exploded in pain as her effort to shove them off exceeded the force that muscle/tendon attachments can withstand.

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[78] A hollow sharp instrument introduced into a vessel or cavity so a catheter can be inserted.

Damaged most were the medial muscles from her spine to her scapula which floats on the back of the chest like a large raft, muscles all around, over and under it, a reason the arm performs so wondrously as the scapula slides, rotates and dynamically, precisely and powerfully stabilizes.

The S*erratus Anterior* originates from the sides of the upper eight or nine ribs and travels back 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 edge. They work reciprocally: When one contracts, the other relatively relaxes.

Most of their attachment 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. At least in Diane's case, the tears didn't heal.

Diane's immediate pain was all about her shoulder, and as it rapidly increased, she, of course, complained of it and what had happened to her. 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. Every instant of those two tortured years, "high-voltage wires" had been firing jolts through her chest and arm that would frenzy with any motion. Diane, Ozzie Hansen and Pat Hansen and Alberta could have had a long conversation about who had suffered more pain. The incessant bombardment overflowed its borders, and 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 had to keep everything she could from touching her skin.

Our first meeting was one of those instances when time becomes timeless, because everything is on the line. Eventually, 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 for the extensive procedures she would need, so I opened the office the subsequent Sunday afternoons. 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 may times before, within a few minutes the exquisite skin sensitivity disappeared 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 was 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, which 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 up to fifteen injections, depending also on the number of other tender areas I elicited once I started. After a few weeks, as the pain began to decrease, other sites that had initially been “lost” in the background became obvious. The injections continued for a few months, and with each episode her pain and tissue sensitivity progressively diminished until the searches revealed fewer and fewer discrete areas, the last along the scapular spine, the long bony ridge that runs superficially, roughly horizontally along the bone.

The two or three days afterwards were always rough for Diane, and I gave her unrestricted narcotics at home. Both she and Ben, her blessed husband who was there for her all the way, readily learned how to inject them, and, I had no compunctions. Trusting Diane and Ben came easily. When you enter a jungle together, you’d better be able to trust. They are

remarkable people.[79]

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 we were winning, and eventually we did.

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, the compounded conditions would have finished her off, if she'd lasted till then. Today, she has the full use of her right arm. On last report that had moved to Portage, Michigan.

[79] 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 them 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**

Head and neck with the old battle about whether the sacroiliac joints move was (is) whether manipulation affects the nervous system. 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. "I*f tissue is compressed, twisted or traction is applied, nerve impulses are excited, and when a dysfunction is relieved, the irritability – the signals - normalize, as well. So, does manipulation – or how do it - *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*" runs along each side. The “sympathetics” are one of the two components of the *autonomic (automatic) nervous system*, and, in general, “wind things up” for action. The counterbalance is the *parasympathetic nerves* that “wind things down” for restful function. Their constant dynamism 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.”[80] 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 **H**ostile**!** She had come for ***pain medication*****!**

But the pain was gone, so why did she need a prescription? Why wasn't she **D**elighted?

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 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 which stimulates muscle – the somatic nerves – and the other is to the organs – the viscera.

The very same relationship explains the routes for "referred" pain, when an internal event can be felt in the periphery as a massive emergency message from inside arrives in a brain confused by a message on a "wire" that it has never received messages from 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 with messages from the periphery from it paired nerve. So it "interprets" the pain as coming from, for instance, 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.

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[80] Practicing medicine on the side to earn some funds.

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.[81]

More fuel for the fire is that the conflict is, in truth, not as total as some want us to believe complete. 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

[81] I wrote this when the interprofessional problems were discussed up front. Please bear with me for a time.

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 Yogis under the most stringent circumstances and recorded how they consciously stopped their heartbeats.

In varying degrees, both osteopathic and chiropractic principles consider considerably more than musculoskeletal conditions. I will relate a few of my own examples.

GOOSE BUMPS

One of my most dramatic 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, instead of first working on the soft tissues, 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. Certainly it is rare. I'd never seen it before, and 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 was with Dr. Cyriax for a week in 1972 during his annual seminar. 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 reexamine 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.

With all his accomplishments, Dr. Cyriax's manipulative techniques are legitimately criticized, which has 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 inquiry, he certainly should be able to come up with a distinct manipulative system, as well – and he certainly did. One particular lumbar maneuver even required a short hop by the therapist immediately after 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 not be a capricious act.* 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 test of conscientiousness I 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 ever 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 did, 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.

CHAPTER TWENTY ONE

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**

Reduction of a lumbar disc lesion by manipulation shown in an ancien Buddhist temple in Bangkok, Thailand, regarded as being 2000 years old *(Photograph by Dr K. L. Mah; by courtesy of Doctors Only)*

Manipulation has been within virtually all healing systems from antiquity. *Cyriax's Textbook of Orthopaedic Medicine* has a photograph of statues along the walls of a 2000-year-old Buddhist Temple in Bangkok, Thailand. One of them clearly appears

to be a manipulation being performed. Certainly the ancients were, at least, as intelligent as we. Mariners who navigated whole oceans as no one today can comprehend certainly were astute in their healing methods, as well, according to what was available to them. They certainly had similar biomechanical problems and with no technology to potentially confuse the issues.

A passage from the *National Geographic*, September 1971, *The Voyages and Hiftoric Difcoveries 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 mine) 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." In Polynesia, hands-on is called *Lomi-Lomi*, primitive, perhaps, but obviously effective. But in our recent history, till very recently (and hopefully no longer today there (were) allopaths who even incredulously screeched, ‘ how could manipulation possibly work’ when the reasonable question is *“How could it not?”* At their best, they attempted to convince themselves 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 in some form was entrenched in cultures in families of lay healers where it passed through generations long before medicine even began its struggle towards what it considered professionalism until eventually they - *doctors* - were competing against ‘the unlearned who didn’t know any medicine at all’ - as you will read, a debatable issue when much that constituted medicine was dangerous conviction, not founded knowledge.

All *they*, the bone setters, did was try to relieve pain by restoring joint motion. If the problem was only dysfunction, all could be well or, at least, no harm likely done. But if the problem was infectious arthritis, tuberculosis, tumors, and the like, and it was manipulated nonetheless, the results were likely to be catastrophic to limb and life – so there was always something supporting 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, *as from its beginnings,* something salutary had to happen often enough for people to perpetuate its use. *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." [82] 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.

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 had 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."[83]

Throughout this history, there were notable physicians who passionately urged allopathy

[82] Her story was published about her in the August 2, 1736 issue of *The London Magazine.*

[83] In *Lancet,* one of the English speaking world's great medical journals.

to review to the old tradition. I had the remarkable fortune to come across a copy of a book by Alva A. Gregory, M.D.[84], *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* --- [85]

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.

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…"

[84]Graduate 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.

[85] (Dr. Joseph Keating, a remarkable scholar of chiropractic history, informed me that Dr. Gregory was a DC as well. He describes him in his book.[85])

Prophetic. It was the time of which Oliver Wendell commented that were the pharmacopoeia (the official registry of drugs) thrown into the ocean, everyone would be better off but the fish. Medicine's methods killed more than they relieved. It 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 modified, the invasive philosophy still governs the allopathic model today that something has to be done *to* the patient. Almost by mandate, the patient leaves the allopathic office with something – an injection, 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 fundamentally contrary to it.

The *Hippocratic School* is based on holism that 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 conflict. Manipulation essentially remained within the thinking of the Hippocratic school.

When microbes were discovered – *Finally, we see the invaders!* - the Cnidean School was empowered, however that 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. Some of the great heroes of medicine were involved in that fight --- Koch, Pasteur and Semmelweis, who 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 the universities where such behavior was the norm. And they weren't considered quacks.

Dr. Semmelweis begged them just to wash their hands between attending cases, but they persistently rejected him, eventually driving him to final desperation when he cut his hand, put it into the wound of a woman who had just died and died. Only his death got their attention. He will always be one of medicine's greatest heroes.

To remove the invaders, Cnideans used purges of all sorts, like calomel (mercurous chloride), to induce "therapeutic" vomiting and diarrhea. 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. 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.

"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....

It was a medical Dark Age, and continued into the nineteenth 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.

From his "autobiography." [86]

> "Father was an M.D., also a D.D. At the age of thirty-five I began to reason how a doctor of divinity could blend his teachings with the foolish teachings of medicine. Questions arose like this: How can man harmonize the idea that God's work is perfect, and yet never in running order?…, and why did He say it was good if He knew it would not work as He thought it would when He made it, and why should a D.D., who with uplifted hands says, 'His works prove His perfection,' take a dose of quinine and whiskey to assist nature's machine to run the race and do the duties of life?"…

Referring to a seminal event in his thinking -

> "..they were poor, and the Colonel and I, feeling a wave of pity in our hearts, spoke gently to the mother, and offered our aid to get her sick children home. She accepted. I picked up the little boy, while the Colonel took one from the mother's arms that she had carried until she was near exhausted. I placed my hand on the

[86] Andrew Taylor Still, author Carol Trowbridge, pub. Thomas Jefferson University Press, N.E. Missouri State University.

back of the little fellow I carried, in the region of the lumbar, which was very warm, even hot, while the abdomen was cold.

My only thought was to help the woman and her children home, and little dreamed that I was to make a discovery that would bless future generations.

While walking along I thought it strange that the back was so hot and the belly so cold; then the neck and back of his head were very warm, and the face, nose, and forehead cold…"

Dr. Still discussed his findings with his colleagues and soon became a social reject. He persisted alone, and after years, and with considerable encouragement from those he helped, he reluctantly began to teach what he called ***osteopathy***. (Considerably more about osteopathy is in its own chapter - and the same with chiropractic.) Meanwhile, allopathic medicine stayed its course. A little known story illustrates the situation.

The Mayo brothers were GPs 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 would then apply one of the cinders, and when the patient returned 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.[87]

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 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 nonexistence 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 when sheets of photographic film are left near a cathode ray tube they would unexplainably fog. Finally, one man, Rontgen, had the insight. Technology triumphs and to be able to look at what had been unseen became the rage. And x-ray was soon exploited in the invective about manipulation. The lay practitioners' "little bones" were only imaginings, so what wasn't there disproved manipulation in the whole, accelerating the retreat from the merely mundane. Alva Gregory's plea died.

With the discovery of the microbe, medicine further concentrated its focus. Here was truly the clue to the scourges of disease and epidemics that regularly devastated disrespectful of personage or borders. The blossoming knowledge of infectious disease even further restricted the allopathic mind. Instrumentation, the x-ray and the microscope, excited and promised advance. What could capture attention about a method regularly practiced by the unlearned - at least, until osteopathy and chiropractic began to move into contention?

[87] See Dr. Keating's authoritative text.

Sociological Gestalt revealed the reality of far more complex currents. Much else was happening. Within the stresses of wars, economic depression, women's suffrage, child labor.... a number of other disciplines were developing with names like eclectic, homeopathy and Christian science. There was a time of sorting out, but eventually allopathy could not ignore the manipulators. Power prescribed and monopolistic thinking dominated. It was one thing to compete by calling bonesetters an "enemy," but osteopathy and chiropractic were cause for war. War requires patriotism and patriotism, hate.

Yet, throughout that time, allopathy was embroiled in massive troubles of its own. *The Social Transformation of American Medicine* by Paul Starr, a Harvard sociologist, provides excellent perspective. (This discussion is continued in **Appendix B**.)

All general progress in upgrading medical educational standards date from *The Flexner report* published in 1910. Not a bland politically correct self-protective treatise, Flexner baldly declared the issues, and medicine delinquently entered an era of chastised disciplining. Still, the struggle to emerge as a learned profession meant harness to the opportunities for scientific research. The advantages of the manipulative approaches did not do well and were further lost to the allopathic mind. The claims of osteopaths and chiropractors, with their differing theories of disease, some of which were, indeed, absurd, made the forgetting even easier. There is only a finite amount of new information and paradigm shift that can be absorbed, and in the priority of things, the concepts of manipulative care succumbed.

Over a relatively short time, the antagonistic influences that can plague the minds of the ambitious amalgamated, no profession exempted: power, pride, pecking order, turf, and what was sometimes prejudicially considered acceptable science. The big money flowed to allopathy. Its schools improved, and its students were predominantly intellectually superior to its competitors.

The burgeoning 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 established. The concrete was poured. 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.

To the negligible extent that any specialty became involved, concerns about manipulation naturally fell to orthopedic surgery despite its predilection to fix by surgery that even further alienated a method with a history considered dubious yet that distinctly required unique skills to appreciate. There is a saying in orthopedic surgery: "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." *Regardless, orthopedic surgery was imbued with authority to judge the manipulative therapies despite its disinclination to become even reasonably conversant about it.* For this it is responsible and bears the primary burden of responsibility for what ensued.

The Fundamental Flaw stayed silent as, within a few generations, the rut became a forbidding but familiar chasm assumed to be the normal scene having no relation to the alarming increases in the complications and costs of health care.

The culpability of organized medicine (The American Medical Association), under the domination of Morris Fishbein, was antagonistic to any therapy that especially did not involve the writing of “acceptable” prescriptions is tragically responsible, as well, for the developing of near terminal turn off. A visit to http://www.rense.com/general19/enemy.htm (Google search: Morris Fishbein) is a stomach jolter.

In the beginning of my career, I believed the AMA was medicine’s honorable arm. Sometimes the truth is a definition of pain.

X-rays, of course, another big expense, were largely depended on to convince people that their aches were “diagnosed” (or not) with the public indoctrinated never, never to argue with an x-ray. (I will expand considerably on this issue in the next chapter.)

Finally, the Fundamental Flaw and the Pain Pandemic faded into becoming the way things are supposed to be. If some people continued in pain and weren't being helped, what connected that to anything that might be done differently? Everything established seemed in order. Alva Gregory's prophecy was fulfilled. *They* couldn't be right because *we* had to be. So, like so much else that is neglected, the crisis grew exponentially while no one honest and 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 universally 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? What a miserable way to end a chapter on medical history.

CHAPTER TWENTY TWO

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 for 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. Arguably nowhere in medicine is the Fundamental Flaw more obvious, and certainly nowhere is it more blatant than in medicine and the law.

X-rays expose you to radiation. CAT Scan (Computerized Axial Tomography) is also an x-ray procedure. MRI (Magnetic Resonance Imaging) is not. The images of MRI and CAT Scan are computer generated, but MRI does so with magnetism. In general, I will refer to them, in general, as imaging, and my dominating purpose is to relate what you must know about their misuse and your consequences.

An x-ray exposure is permanent. Its effect on you never diminishes. It may not be much each time, but it accumulates. The radiation is never beneficial. Recent studies suggest a link of

incidental x-ray exposure to breast cancer. Regardless, the practice of taking lots of images is epidemic. It is very, very big business.[88]

Many desire to believe that the intense magnetization from MRI is innocuous. Others emphatically refute that. *This is neither an opinion concerning that issue nor an indictment!* It may be a long time before the issue is resolved, but there's no way to take them back.

This is a plea that each procedure be a considered act to assure that its need overweighs its potential long-term harm.

A major problem, however, is that you 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, and the doctor who doesn't order them is easily considered **C**areless or **I**ncompetent, so there is **D**emand for them. However, even though there may be some dissidents, it is still the unusual individual who is not convinced that x-rays are usually necessary for a complete examination.

As I write this, in January 1999, *The New England Journal of Medicine* is 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

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[88] When Alan Couch repeatedly reinjured 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, each progressively unsuccessful. I consulted on him after his second. 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 good 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 clinical radiation overexposure from chiropractic misuse in Canada."

they substitute for an appropriate examination.[89]

Of course, imaging procedures are of incalculable importance. The problems are in the order of things. Legitimately, 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 your x-ray must not be permitted of itself to question the veracity of your complaint, assuming that it is sincere. It is perverse to empower instrumentation to diminish your 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 your 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 that you have lived

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89 My sister was visiting from the Palm Springs area in late August 2000. She told me she'd seen her doctor for a few pains in her neck and low back, and he'd sent her for studies. I asked her what her *examination* had revealed. She told me he hadn't done one. Managed care, or otherwise… 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 in studies for no reason other than vague complaints in a woman who'd had them for years, which reported findings 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 some something positive or negative to somehow "justify" the procedure.

Sunday, May 20, 2001: I called my 91-year-old mother, as I do every Sunday. Then, she lived independently in Tucson, Arizona. Her dearest friend demanded that my mother tell me about her recent pain, which occurred in her low back about a month ago. 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 would telling me do

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 perpetuators 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, when a patient's history was presented, the orthopedic surgical residents, as virtually everywhere I am familiar with, 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 refuse to primarily view my patients *through* their films. I have learned and well proven that nothing must be allowed to interfere with first obtaining maximum information directly from the individual before one allows the influence of remote, technological information. To do otherwise distorts the relationship, impairs the excitement of the fresh hunt (and possible new discovery) while demeaning the priority to develop sensitive clinical skills including hands-on. And the patient knows it.

On the other hand, I freely acknowledge the "old-timer" who saved the chiropractic

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except make me further flare my anger? All over the world, countless times each day. *Fundamental Flaw.*

student's career with just one offhand look at an x-ray. And studying Sutherland's writing about x-rays *in the early 1900's* whose quality were a small fraction of today's but from which he commented on minor rotation of a rib that most allopaths don't even suspect exists because dysfunction has no clinical significance for them. Certainly many such abnormalities are dismissed as "variations of normal." It is the matter of the order of priorities.

When medicine, x-rays and the law meet (at least, in California Workers' Compensation),[90] the result can be bizarre. X-rays must obligatorily be viewed in categorically "black and white" prophetic terms. The courts routinely counterfeit justice using doctors who cooperate with rulings so deviant that they destroy any possibility of rationality - but which nonetheless adversely affect many very real lives. Testimony must be stated with absolute conviction in fiction because the court demands incontrovertible "evidence" that can only be accomplished by literally denying established definitions. It is a swamp of delusional denial, as I will illustrate, the result of demands to convert claims for injury or illness into dollars and benefits.

In the law, "reasonableness" is supposed to be the prime criteria. But should there be a total paradox between what medicine can reasonably testify to and what this area of law, at least, demands, the law will psychotically rationalize – and find doctors to do it.

To begin my illustration: When a patient's pain and impairment reasonably stabilize, the case is readied for legal resolution. At that time, Workers' Compensation law dictates that the doctor declare the patient's condition is *Permanent and Stationary*.

Nothing in this universe is Permanent and Stationary!

[90] Perhaps new law has been written, but the cases stated here are (?were) standard for decades.

No celestial body, no hillside, certainly no healthy person is. But that is the literal label the law conceived to describe you when, if you are (or were) seriously injured and will likely have to cope indefinitely with ongoing residuals. I do not know the history of that phrase, but while its official definition is reasonable, it isn't often read and the term stands largely on its own having little practical relevancy to what it is supposed to mean. That is why I refused to write it by itself. My reports always 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 the dark side. Since the law 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 incompatible responsibilities.** After all, if a doctor is willing to declare that if someone has become predictably permanently stable in his or her functional abilities, doesn't that make the work (and reputation) of the court that much more certain? **That preconceiving rigidity extends to the (ab)use of x-rays because overwhelmingly it erroneously requires them!**

Consider that you had an injury at work. You had therapy. Possibly you were another victim of The Fundamental Flaw, and now your case is being settled. In addition to the residuals of your injury, you may have another problem. When your case is finalized, you become involved in one of the most unconscionable arenas of your settlement, the requirement to *apportion* your disability.

Apportionment implies that a final impairment rating may be the result of your injury *and* the influence of unassociated conditions whose "natural progression" (absent the injury) would have produced disability of itself *at that particular 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 bewilderment. The deceit of it is implicit in this.)

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 "reasonable physician" may even cast doubt on his or her competency!

"*After all, aren't other doctors willing to make such pontificate statements (with assurance of a fee), especially the "most competent" doctors? and 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 the system does this – and is the recognized authority… doctor?"* 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 because its veneer seems enhanced. And, in tribute to such insanity, it gratefully confers the title of "medical expert."

I really didn't want to believe any of this when I was first exposed to it. Then I heard the instructional audiotapes of a well-known judge who teaches (taught?) apportionment and expressed them as the official position and necessary to state in order to pass the certifying

examination. (In common law, the same type of non sanity was burned into me during the so-called arbitration of a chiropractic related experience of mine in Visalia, California, which I will describe later.)

The law confers the word "expert" upon the doctor whose declaratory statement leaves no doubt in the court's mind that through his (or her) "superior knowledge," commingled with the "absoluteness" of the x-ray findings, s/he can provide authentic god like utterances - look at an x-ray, and, in essence, state what it looked like at some time in the past and what it will look like at some determinate time in the future, and what symptoms and restrictions will accompany that x-ray appearance. 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."**

As an example, the apportionment "expert" could testify that you would have had symptoms "X" by date "Y" regardless of any other circumstances including the effects of another injury that you might have had which is separately distinguishable. In any other setting, such repugnance would be, at best, transparent malpractice, but it can be a very serious matter to you if you are involved in such a case because the more doctors willingly comply with such insults to medicine the more your 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 from dedicated greed focused through professional shamelessness that perpetuates the Fundamental Flaw.

If the doctor down the street can make such a “valuable” contribution, and be paid so well for it, isn’t it reasonable that *I* am able to do the same? And be paid commensurately for being such a valuable officer of the court? Whole careers have been built and long sustained by selling one’s soul. All it requires is some credentials and the (wisdom) (compliance) (greed) (dishonesty) (naiveté) (stupidity) to (write) (utter) (profess) words that make the “expert” by definition because he or she declared them under oath.

While apportionment that mitigates damages is obviously dear to insurance companies and employers, no knowledgeable, honest physician would ever utter such incoherence. None of this is ever heard concerning non-Workers’ Comp patients and is certainly never part of a physician-to-physician conversation. That fact proves the lie - a sham that is almost always associated with x-rays.

At the same time, within the reported cases concerning apportionment in California Workers' Compensation, I found a fascinating statement referring to a doctrine called, "prophylactic retroactive work restriction." It refers to 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 preexisting 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.

That case happened. However, 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.

The fact is that the use of x-rays as prognosticators requires timidity at all times. I never saw a case that better illustrates this principle than that presented by Dr. John Wilson (the son) a short time before his death, while I was teaching at USC.

Dr. Wilson's father established one of the prestigious orthopedic surgical groups in Los Angeles that reached its zenith during the years after WWII.[91]. Dr. Wilson, Jr. was eventually elected President of the American Academy of Orthopedic Surgery, as his father had been. He was a *physician*. During one of his last presentations before he passed, at which I fortunately was present, 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.

After the large group of doctors had studied them and was 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 a sedentary school teacher. Both were fully functional women. Neither had ever reported having back pain.

[91] World War II

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 appearing x-rays!*

There is another factor involved in the interpretation of x-rays: The ability to perceive can be an individually unique experience, and that basic truth indelibly marked me. I had a patient at U.C. Davis. Louise had a chronic neck injury from which she persistently held 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 PM&R colleagues. Every one of them was vastly superior to me in radiology. Most 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 did not have CT scan or MRI in the 70s, 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 over the patient in the opposite direction under precisely angled coordination. 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.

I appreciated it.

But 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.

Sadly, I was more generally resented for it by orthopedic surgery. I got only one lonely "attaboy."

The chief of orthopedic surgery complained, "OK, what do you expect us to do about it? It's been that way for years."

That wasn't the point. The fracture was old and fixed, but Louise had been discredited and stigmatized, and it had influenced her care.

I haven't had such a singular experience again, but there is a lesson from it concerning the ubiquitous question: "Doctor, what did my x-rays *tell* you?"

X-rays do not speak.

X-rays are capable of presenting from which reliable information may be extracted. X-rays are not infallible. What they show may not be related to the presenting 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 be reasonably expected to be obtained through a careful clinical examination. The number was less than twenty-five.

Something else to consider is that if a condition may be efficiently relieved hands-on, why should an x-ray be taken first? From your standpoint, concerning your pain, with few exceptions reflect carefully, each and every time if instrumented procedures dominate your

examination.

CHAPTER TWENTY THREE

THERMOGRAPHY – VERY, VERY SCIENTIFIC AND

PRICELESS, BUT TOO MUCH A THREAT AND ABUSED

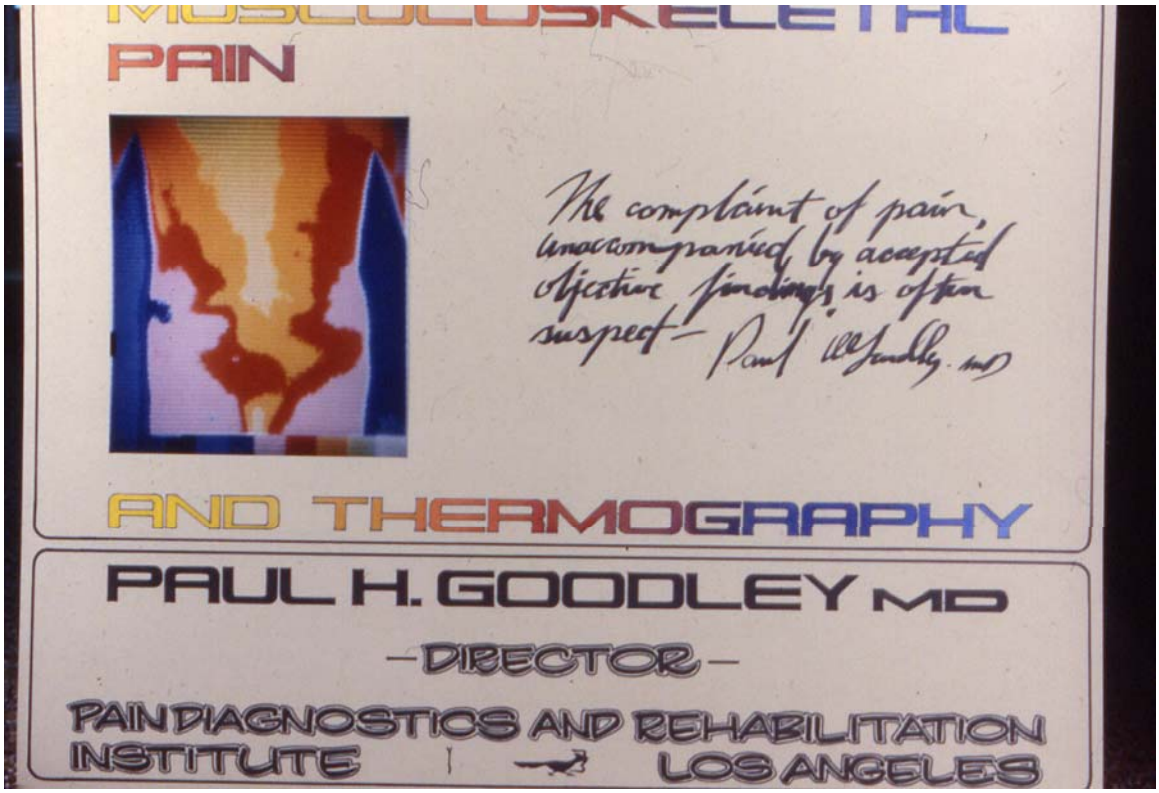
To bear all naked truths,
And to envisage circumstance, all calm;
That is the top of sovereignty.

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

- **Thermography objectifies essential, sometimes subtle signs**
- **How and why the "messenger" was killed**
- **Illustrative cases**
- **Website:**
  - **How I learned about it**
  - **How the procedure if performed**
  - **Details about how it was abused**
  - **Inter-professional misunderstandings of its basis**


MUSCULOSKELETAL
PAIN
The complaint of pain, unaccompanied by accepted objective findings is often suspect— Paul H. Goodley, MD
AND THERMOGRAPHY
PAUL H. GOODLEY MD
—DIRECTOR—
PAIN DIAGNOSTICS AND REHABILITATION INSTITUTE
LOS ANGELES

THERMOGRAPHY

RIGHT, A CLEAR ASYMMETRIC LUMBAR VASCULAR HEAT EMISSION PATTERN (VHEP), CONSISTENT W/HERNIATED INTERVERTEBRAL DISC.

PATIENTS MAY USE A POINTER TO INDICATE AREA OF PAIN.

LEFT, THERMOGRAPH S-1 RADICULOPATHY.

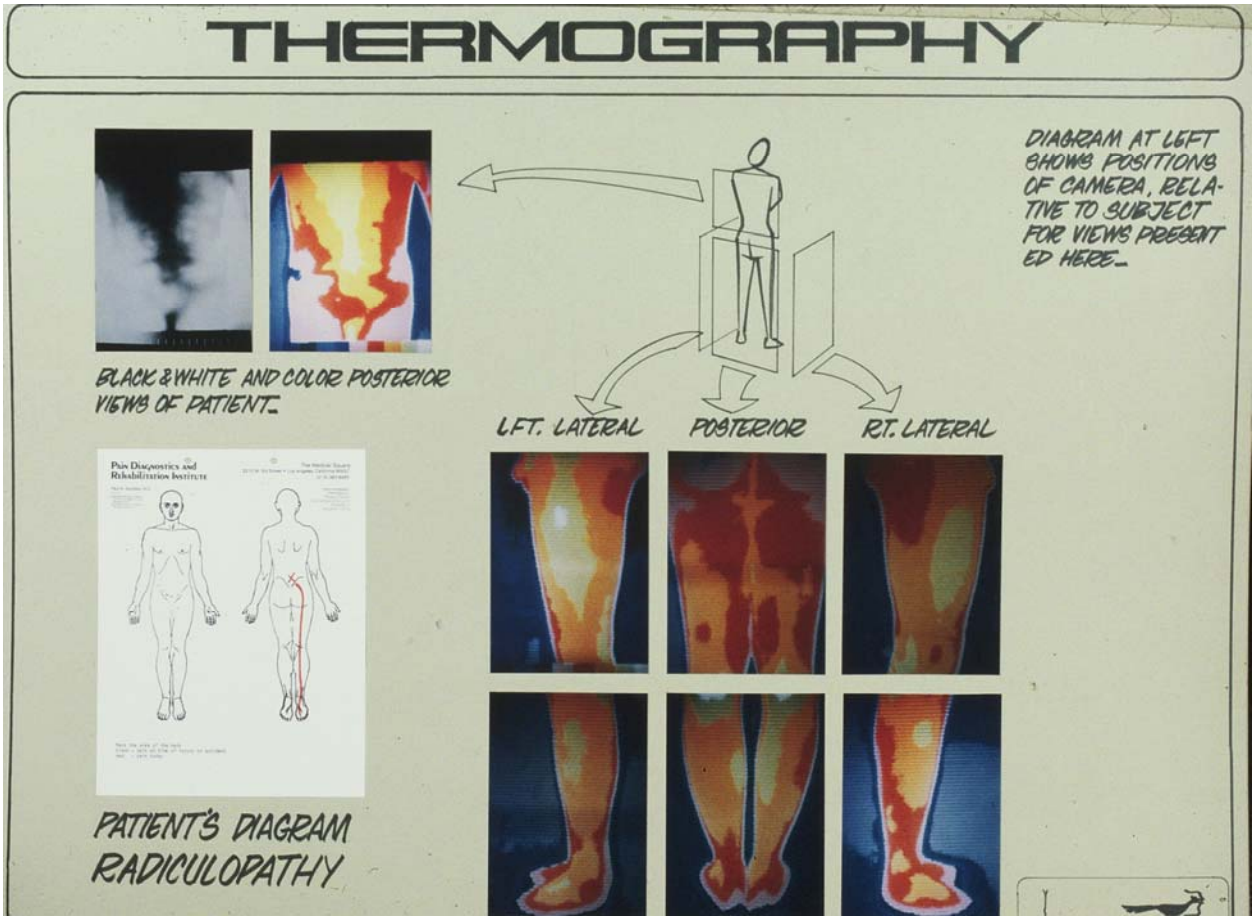
AT RIGHT, TWO NON-SPECIFIC THERMAL PATTERNS.

THE FIRST INTRODUCTION OF THERMOGRAPH IC EVIDENCE IN THE CAL. SUPERIOR COURTS (Toronto) WAS THIS PHOTO, TAKEN 4 YEARS POST-INJURY.

LEFT, TWO VIEWS OF EQUIPMENT FOR THERMOGRAPHIC EXAMINATION. A SPECIAL LIQUID-NITROGEN COOLED CAMERA FEEDS A SIGNAL TO A VIEWING SCREEN, WHERE A POLAROID CAMERA RECORDS IT.

THIS BLACK AND WHITE ISOTHERMIC DISPLAY SHOWS A THERMAL "CONTOUR MAP".

EQUIPMENT MFG'D BY AGA



"They" demand scientific studies. So 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 the patterns of heat radiation. In medicine, no other technology so elegantly, sensitively, objectively visualizes the tissue changes associated with dysfunction. It uniquely reveals their subtle abnormalities at their beginnings and their almost immediate normalization when abnormal influences are removed. The persistence of an asymmetric (abnormal) thermographic picture that agrees with a patient's complaints outvotes the clinician whose examination comes up empty. As I have commented many times, thermography is a trustworthy hone to sharpen diagnostic and therapeutic skills. As a literal revealer of the dysfunctional 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” instantly changes on the screen the when a blocked blood vessel is opened. While imaging depends on *structural* change, thermography exquisitely shows *function* as pure "living color."

With all that as a given, all that was necessary to keep thermography viable in orthopedics was a measure of humility, willingness to learn (that the earth is not flat) and honesty. Thermography got none of them. Science is only what the mind allows it to be.[92] “They” “near killed it.”

I was the white knight. I couldn’t prevent the final onslaught. The attack was mounted on one flank by those who hate thermography from fear and on the other by the ignorant who squandered its treasures in their fixed assumptions while the overwhelming frontal assault was by the lust filled masses of exploiters who had no sense or shame to reflect about what their greed was 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 beautifully detailed predictable patterns. If you are normal, one side of you will look very similar to the other, and if

[92] I finally decided to place my chapter commenting on scientific inquiry and statistics in Appendix B. Please read it.

you are injured, the picture is almost certainly disturbed.

But unless there is familiarity with segmental biomechanics and physiology, the sometimes-subtle changes may not be appreciated. It's the same as the missed broken twig on the hunt or flake of gold ore among the rocks. For those who don't know what they're looking at, the small appearing 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 it is not possible from the pilot's perspective to precisely name the culprit.

I saw thermography for the first time in 1972. Dr. Travis Windsor was on the USC faculty and the founder of *The American Thermographic Society.* He invited me to do consultations for him in his Wilshire Boulevard mansion/office that 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 its girders 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 U.S. military, and 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 at the 1980.[93] It was in the first booth just inside the exhibit hall, just to the right of the main entrance. I entered and casually turned to look around. 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 ballistic. 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."*

I had it immediately in my office for a trial. For careful work, a special temperature-controlled, draft-free room without windows is necessary, but on that fated day I used what I had. While exercising the evening before, I'd pulled my hamstring. I aimed the scanner at it first, and it was thrilling how spectacularly the inflamed area massively 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. An oncoming 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 posterior chest area, and he had to go on disability.

The company sent him to routine 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 bent over and touched his toes, nothing could be wrong, so he was ordered to return

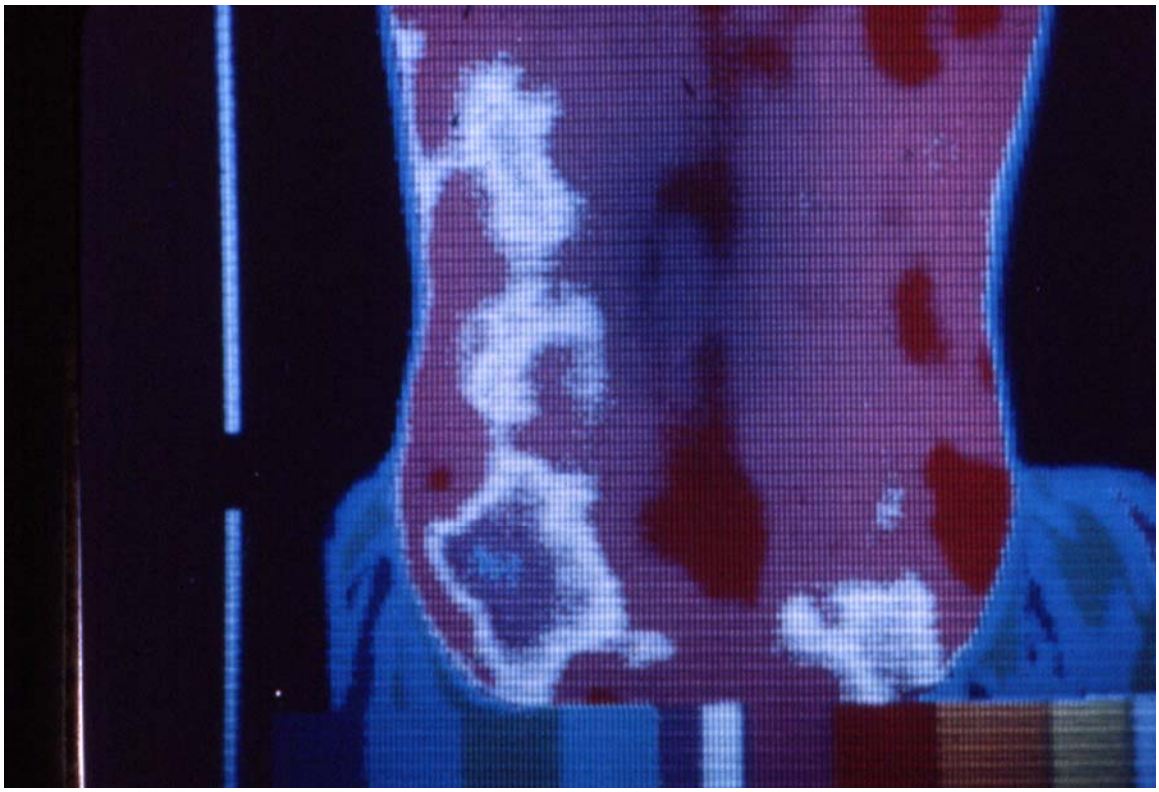
[93] The Annual Meeting of the American Academy of Physical Medicine & Rehabilitation, in San Diego.

to work.

Galvin couldn't. He was forced to see an attorney, who referred him to me. On my examination, he had serious dysfunction throughout almost his entire left posterior thoraco-lumbar tissues. The cutaneous hyperalgesia was remarkable. Several thoracic vertebrae and ribs were dysfunctional.

I submitted my report that included measurements of the size of the dysreflexic area and requested that the insurance company immediately authorize treatment, especially because the dynamics of his injury were 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 including copies of the thermogram. Galvin's case was authenticated and care was authorized. It was the first time thermography was used to settle such a dispute in a Worker's Compensation case, at least in California. 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 reconsider segmental dysfunction, and soft-tissue injury would be better appreciated and that "Findings consistent with the complaint" would be better respected.

The instrument then cost $50,000, and of course I bought it and eventually performed thousands of thermograms during the eighties and early nineties. Eventually I did a study comparing my thermographic findings with my physical examinations in 90 patients who had no hard-signs. It was published in *Acta Thermographica.* I found a 97.2% positive relationship. When I reexamined the one patient in whom the thermogram was abnormal but my exam was normal, from the added awareness I found the dysfunction that had been hiding and was able to relieve it.

A short time later, I had the opportunity to demonstrate thermography's legitimate use in the legal system when I introduced it into the California Superior Court (*Kavalovsky v A&P Liquor Store, Sacramento Superior Court, 247410, March 1977)* and into the Federal Court system.

Sally Kavalovsky had been referred to me from Sacramento. 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. That hadn't been noted in other reports. The finding was dramatic on thermogram extending in a band up her arm and across her posterior chest to her upper spine. Those photos became part of a teaching poster set I took around the country. Sally won her case, and some of her emotional burden was lifted.

Thermography, of course, entered the court systems rapidly, but because of the general lack of education, more to exploit its dramatics than to dissipate the fundamental knowledge from which its value would be appreciated. Concurrently, a plethora of predominantly poorly trained thermographers who had no understanding of dysfunctional injury appeared. They missed too much or asserted to much, which too soon discouraged thermography's dispassionate examination. Despite, the medical literature exploded. The perceived gold rush became a tragedy that I will discuss shortly.

The visualizing technique for thermography is not just a point-and-shoot operation as with an automatic camera. There is a fixed range of sensitivity that can be conveniently visualized on the screen, which became by convention about 10 degrees Centigrade. Each degree is arbitrarily assigned a distinct color though a convention did develop. The scale is displayed somewhere on the screen as a standard for the interpretation of the picture. On one side of the scale, it is black (out of range cold) and on one side white (out of range hot).

The patient is prepared by standing in a cool, draft free room so the parts to be examined

exposed so they can stabilize. Then the range on the instrument has to be set on the patient's relevant tissues to best demonstrate the heat pattern that the patient's part under consideration is radiating.

Because the accurate examination is *in* range, it is my habit to show only a little white where it is hottest on the picture to delineate where the border has been crossed. Any more than a little diminishes accuracy because there is no telling "how white" that area is.

To emphasize, because different body regions have different temperature ranges, the sensitivity has to be adjusted accordingly. *The test significantly depends on accurate comparative studies of the two sides of the body being studied, which depends totally on the integrity of the examiner! Because once the range is established for one side, the controls must not be touched when the other side is seen.* That is a vulnerable crux of the honest examination, and that is one place where the exploiters can do their mischief. . Exactly as it states, the sensitivity knob is very sensitive, and only a slight shift alters the picture. Carelessness and lack of understanding are problems of one order; but fraud, when a picture is "doctored" as part of a deception to "prove" a condition, is another.

If the picture is of the entire back, there is somewhat less of a chance for "artificial interference" because bilateral comparison is all on one film. The "problems" start when two pictures need to be taken, for instance, of the sides of each arm. The *comparative* views are critical. As example, conditions in the neck and back usually reflect their influences along their nerves into the extremities

While the instrument is total, indisputable science - as honest as technology can be – as any camera is - the human factor can easily corrupt the product. There are many ways to attempt

dishonesty. An area can be "sprayed" with heat from a hair drier, or cooled with ethyl chloride, or even rubbing alcohol, and pictures taken before the temperature changes dissipate. Even though the real patterns are delicate, and the attempts to change them are most often clumsy, nevertheless, they have been tried, silly things, like people being intentionally sunburned through a hole in a sheet, grossly unnatural, easily detected by anyone who basically knows what to look for - and wants to. Maintaining deceitful consistency in a scam-prone practice is difficult. “Mother Nature’s” hues are sweet and very difficult to mimic. In at least one "mill," which reputedly for good reason was largely responsible for thermography being discredited throughout Southern California, thermographic rooms were set up "back to back." Virtually every patient was "shot" with all the "cosmetic" touchup necessary to “prove” the referring attorney’s desires to deserve more referrals.[94] That one facility billed close to $1 million a year. All around, the temptation to deceive was great. Too many saw easy gold, and for a time wild, wild times were had. With its rampant exploitation, thermography was tragically headed for the gutter.

Just before I obtained my instrument, thermography came under the aggressive influence of Dr. Charlie Wexler, a radiologist. He had obtained the instrument for the performance of breast examinations, but when thermography lost out to mammography, he had it on his hands, and with no clinical experience in orthopedics, he decided to go into the musculoskeletal business.

We met soon after, and he candidly told me that he opened a *Ciba Clinical Symposium* pamphlet on low back pain one night and promptly became authoritative. He showed me his

[94] In its place there is much more to this story.

"rules" on how the procedure needed to be done. When I showed him obvious errors, he changed his "rules" on the spot, but 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. For months, virtually every day, he would call me and start with the same question, "Soooo, what do you think about thermography?" He became nationally famous and was widely considered the guru.

"The Challenge of the Lumbar Spine" was a well attended national meeting in San Antonio, Texas for years. It was run by two orthopedic surgeons. When they decided to include a program on thermography, they were advised to invite me. My issue of the Fundamental Flaw was known, to which orthopedic surgeons largely responded the way they did. They invited Charlie. I was there. He made about 15 gross errors ending with an offhand statement that if anyone had a problem case to send him the thermogram and he would diagnose it for them. The meeting was fair. It allowed comment from the floor, and I did.

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 in which I pointed out numerous errors that were of fundamental importance, among them his most grievous, that thermography stands on its own as a *diagnostic* tool, but sadly I stood singly against a horde.

Thermograms were alleged to show damage and pain. A system of contact plate thermography was advertised with, "*Have you seen a picture of pain?*"[95] It wasn't true. As example, a paraplegic has gross thermographic asymmetries with no correlation to pain. The same mistakes made with x-rays were repeated: extensions of interpretation far beyond their

[95] That advertisement by E-Z-EM Corporation began another misadventure that I will relate at another time.

legitimate boundaries. Just seeing *something,* especially in the painful climate of the Fundamental Flaw, seemed to be so relieving.

The notoriety became a deluge. In an eventually infamous New York case, a man was injured on the subway. I read his case, and, undoubtedly, he was injured, maybe $25,000 worth. But when the jury was dramatically shown a very enlarged color view of a thermogram, 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 now waited at the next station.

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 the other subject I lectured on. I had walked through the exhibits, and already there were chiropractic "textbooks" in which every single shading on an alleged thermogram had an exact diagnosis attributed to it. My reality-based presentation was appreciatively received, but the damage was being done.

Orthopedic surgery's reaction to thermography was plain fundamentally flawed. One of their own was considered the expert, a man with a Scotch name, I think McCullough. He studied a number of patients by comparing their lumbar myelograms (a dye is injected in the spine), CAT Scans and thermography for cases suspected of having a herniated disc. 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. *He threw out the cases as "flukes."* He simply couldn't acknowledge thermography's

supremacy for the subtle dysfunctions. Without realizing it, he defined (limited) objectivity according to what rigidly complied with his preconceptions. He presented his findings at a national meeting in Chicago, and he was listened to.

Thermography's demise at the *International Society For The Study of The Lumbar Spine* meeting came from the same reasoning. Alf Nachemson[96] told me emphatically that when the paper showed that thermography doesn't *diagnose* herniated disc it was dead. In his brief declarative conclusion, he didn't give me a chance to convince him of thermography's uniqueness that is in concept identical to what the well accepted bone scan is used for – to reveal *process.* (Bone scan objectifies the rate of bone metabolism, whether from cryptic fracture, tumor or whatever.) Regardless, both provide vitally important evidence to correlate with the whole picture that is not otherwise available, so a sound diagnosis can be reached.

Despite the abuse it has suffered, thermography remains the most important technology for objectifying the "soft tissue injuries" that medicine made so controversial. All that will be required to resuscitate it will be integrity and the desire to learn the fundamentals.

[96] I will describe my relationship with Alf in the chapter on orthopedic surgery.

CHAPTER TWENTY FOUR

OSTEOPATHY -HIPPOCRATES' HEIRS

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**

Osteopathy developed within 19th century medical ignorance when common practices more reliably maimed or killed than did neglect. When orthodoxy rejected A.T. Still's ideas, some encouraged him to teach his methods, and he eventually 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 traditional medicine would mount its almost century long attack intent of humiliating all osteopathic practitioners and destroying its profession.

I will introduce osteopathy through one of its most unique and continually controversial

contributions. You now know about O*steopathy in the Cranial Field.* This is how it happened.

In world history, very few singularly important medical discoveries are the result of the insight of just one individual. Dr. William Garner Sutherland is one of those 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 clinical implications are too frightening, its demands seemingly too distracting - break too many boundaries, make osteopaths *too* different in too many more 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 such as he had with, for instances, learning disorders, headaches and visual problems (remember Esther Sutton).

Dr. Sutherland was born a year before osteopathy's beginning, in 1873, and he died in 1954. He had an acutely analytical mind, and Dr. Still's comment that *"the human body is a machine run by an unseen force called Life"* impressed him. 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 *Beauchenne Skull,* a human specimen in which all 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. Despite the anatomy, medicine immutably taught (and teaches) that the skull is an unmoving protective vault. The conflict of fundamental fact contradicting dogma can be terrifying to unprepared minds. For half a century I have more encountered it than not. 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 discernable 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 these 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[97] 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, the reluctant maverick, 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, which must be applied to your symptoms. Regardless of the 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

[97] 8202 Clearvista Parkway, Suite 9D, Indianapolis, IND 46256 (317) 594 0411

of your body, as well, and attempts to improve it.

Instead of seeing disease purely as invaders, the osteopathic philosophy emphasizes that the state of the patient's health may be an active contributor to the disease. Osteopaths 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 the questions when allopathy neglected them so allopathy made it so. The osteopathic affront was that it gravitated towards practices that radically confronted what traditionalism had become.

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 as their academic standards improved along with their 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 osteopaths were hounded and humiliated at every opportunity 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). Osteopaths were rarely granted privileges in allopathic facilities. Allopaths who were sympathetic were subjected to ostracism and other pressures.

If there was adverse publicity about an allopath, it was reported about a "Doctor," but if

the doctor was an *osteopath,* the opportunity to again humiliate with the word was not lost. All of it “verified” that manipulation was quackery as generations of scorn accumulated and culminated into habitual derision of anything osteopathic.

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 of osteopathic allegiance to the antithesis of science never ceased.

Chiropractic, with its poor standards then with its total emphasis on manipulation for the treatment of anything, likely reflected adversely on osteopathy, as well.

Regardless, the osteopathic patient base slowly expanded particularly, as I described in Chapter Thirteen, by the Flu Epidemic of 1917 when word spread that their patients often did better than those under allopathic care. Regardless, though they were licensed as physicians, the prejudice was official. Osteopaths were not allowed to receive commissions as military medical officers during World War I and had to serve as enlisted men. (President Eisenhower's family physician was an osteopath. The regulations were finally changed in 1950 for the Korean War.)

I had another exposure to their pain when I studied with Loren "Bear" Rex at his facility in Edmonds, Washington, which he calls the *URSA Foundation,* where he cured my elbow. Ursa is Native Indian for bear, which he, in fact, resembles (the Teddy kind).

We were in the 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.

Every year, during one of his courses, Bear had an annual "duck race" in his large indoor swimming pool, the battery operated remote control kind, and 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 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 its hind 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 cost me over $600.00.

Osteopaths countered the unremitting stresses from traditionalism by influencing legislators. They took their portable exam tables into the state houses and treated them.

As a footnote to history, while the osteopathic schools were rarely well financed and did not have the quality of faculty that allopathic schools could afford, one exception was the college in Kansas City, where, allegedly, an osteopath successfully treated a wounded mobster. Thereafter, their needs were very well met as the relationship continued.

In California, for years, an allegedly mutually advantageous amalgamation between

allopathy and osteopathy was being worked out with the “understanding” that osteopaths would be granted M.D. degrees from which traditionalism would be infused with their concepts

The amalgamation finally happened in 1962. For a short time, a window opened, and on a one time only basis any California D.O. could trade it in for an M.D. license for $65.00. Almost all - 85% - stampeded to it. All they wanted was out.

Few remained, like Dr. Frymann who refused the trade, observing 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.

No infusion occurred. That aspect of the amalgamation was a charade. The truth was that 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.

In the last days of the *California College of Osteopathic Physicians & Surgeons* (COP&S), when manipulation was being taught many of the students were literally throwing paper airplanes out the windows, waiting anxiously - along with almost all practicing osteopaths - to be delivered from their humiliation. 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 "R.D.s" (real doctors).

Some graduates who later became prominent in allopathy shored up their defenses by declaring that manipulation was worthless. Their allopathic colleagues listened appreciatively, and since they were considered authoritative their comments did inordinate damage.

In the end, the amalgamation was a sinister attempt to destroy osteopathy in California

and then nationally. The "plan" that the California College 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 University of California Medical School at Irvine[98]. In addition, it was also promised that the credentials of osteopathic specialists would be recognized. They weren't.

As soon as the California door closed, 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 1000th 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,[99] 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. By opening his wound, I had vindicated him – and I had struck 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

[98] In very recent years, some research is being done.
[99] False modesty is another form of hypocrisy – Goodley.

came on, I saw the pain in the old-timer's 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. Because of my own circumstances then, I was extraordinarily grateful for my relationship with them.

*

The October 12, 1992 issue of *American Medical News* published a well-meaning letter under the byline, "DO's do it right." It addressed the concern for more primary care physicians..

> "Do we really need to reinvent the wheel to increase the number of primary care physicians?
>
> Apparently it is not evident to most people, politicians or fellow physicians that osteopathic medicine is primary care medicine. About 5% of U.S. physicians are osteopathic physicians. We treat approximately 10% of the population because more than 70% of our practitioners are in primary care.
>
> It's unfortunate that people are unfamiliar with our practice. It's also interesting to note that the majority of our colleges are private and do not receive state or federal funding. If the solution to some of our health care problems is more primary care doctors, would it not be prudent to increase osteopathic physicians, or at least ask the osteopathic profession why it has more primary care doctors than specialists? Maybe Congress and medical educators should visit osteopathic colleges to find out why and how we promote primary care."
>
> John J. Kemerer, DO
> Saginaw, Mich.

The letter's intent was laudable, but I sensed a threat of too great an assimilation, which is, in fact, has been happening. In fact, in the plea for acceptance, a cynic could see the opportunity for the insidious here. With the surrounding with too much “love,” there is a pervasive and powerful danger of divisions melting and further facilitating the assimilation.

The rebalancing - the restoration of regular manipulative practice - will require some who do not become so enmeshed in the overbearing demands of family practice that the opportunity to demonstrate the merits of manipulation will become too diluted. This is a critical issue that hopefully will be resolved and will involve chiropractic, as well. At present, however, there is a visibly widening gap between osteopathic vision and practice.

The April, 1987 issue of *The DO* carried a contribution from Philip Pumerantz, President of the College of Osteopathic Medicine of the Pacific, in Pomona, CA. The preamble said it was based on a speech he had delivered in March, 1986:

> "There is a revolution going on in medicine today. Many veteran practicing physicians are a little weary of this revolution ....We don't need to be superior in numbers to be leaders in society. Numbers alone don't necessarily lead to domination, but rather the strength of the contribution. After all, history reminds us that great ideas don't start with an
>
> army of supporters. Most of the time they are generated by one person, or a small group, like the Salk or Sabin vaccine, the x-ray...
>
> Osteopathic medicine will lead the way and a system will emerge out of the morass in health care today that will be revolution proof. Once it is put into place, it may be modified as time goes by, but it will never be revolutionized as

the old system was. In fact, history will record this new system as the 'golden years of medicine.'....Will there be a special role for us? Why go into osteopathic medicine?

When called upon to answer these questions, I remember a line from the Robert Frost Poem called *The Road Not Taken,*

'I shall be telling this with a sigh,
somewhere ages and ages hence;
two roads diverged in a wood and I---
I took the one less traveled by,
and that has made all the difference.'

In a real sense, this has been a major theme for the osteopathic profession. That is, when one chooses to become a DO he or she takes the 'path less traveled by.' It has enriched lives and has given meaning to those who have chosen to be osteopathic physicians. Also, to the countless patients who have been treated by DOs, it has brought healing and has improved the quality of their lives...

What we see today is defined by almost everybody as a series of problems, but I like to look at it as an opportunity. In the revolution in medicine today, people are crying out
for a new style of doctor. This style is reflected in the osteopathic physician --- the one who is educated to be both a humane physician and a skilled diagnostician....

Indeed, it has struggled to reach equality with the allopathic profession in

all respects and has accomplished this goal. But therein, may lay a trap. The osteopathic profession can become a victim of its success. That is, now that the struggle to equal them is over, it's too easy to blur the distinction between DOs and MDs. We must continue to enhance the osteopathic approach and accentuate its distinctness.

I'm reminded of Evan Connel's book, *The White Lantern* in which the arctic explorer, Mawson, is hanging precariously over a bottomless crevasse, just ready to let go, to give up, when he happens to remember a couple of lines from poet Robert Service, '*Just have one more try --- it's dead easy to die; it's the keeping-on-living that's hard.'* The poem saved his life because this incredible man scrambled to the top...."

Allopathy cannot afford to remain inferior in this fundamental from the delusional conviction that osteopathic principles are only worth a sidelong glance.

There are rogues in each of the tents - and there are heroes. Mostly, as everywhere, are practitioners just attempting to get by providing a useful and satisfying service - who need to be persuaded to the big picture.

And that is where this chapter originally ended in 1993.

The April 27, 1998 issue of *Medical Economics* carried a lengthy article as its cover story: *Are D.O.s losing their unique identity?* by Wayne J. Guglielimo, Senior Editor. The author fairly balanced and reported the issues. He related the history of osteopathy and its often-stormy relations with medicine, which has now largely calmed. It described how many osteopaths have adapted allopathic ways, a process that was accelerated by those D.O.s who took their specialty

training in allopathic institutions and by the restrictions on practice imposed by managed care. The central focus was the debate on the merits of OMT – osteopathic manipulative treatment.

It described a 1997 survey by *The Journal of the American Osteopathic Association* that revealed that of 1,055 osteopathic FPs (Family Practitioners), "only about 6 percent said they treated more than half their patients with OMT. Nearly one third indicated they used OMT on fewer than 5 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 efforts of such graduates.)

Further in the article: "One of the most prominent challenges has come from nephrologist Jordan J. Cohen, M.D., president of the Association of American Medical Colleges. In remarks delivered at a 1995 conference sponsored by the Josiah Macy Jr. Foundation, Dr. Cohen said that the debates about whether D.O.s or M.D.s are more devoted to primary care or holistic medicine raises a 'false distinction' that misses the essential point. The *real* issue dividing the two professions, he said is the 'appropriateness or utility of manipulative therapy.'"

"According to Dr. Cohen, the M.D. community has 'no quarrel over the utility of the manipulative methods' for disorders and injuries of the musculoskeletal system. The problem arises 'when it comes to the issue of applying manipulative therapy to treat other systemic diseases.' It's at this point, he maintains, that 'we enter the realm of skepticism on the part of the allopathic world.'"

"To bridge the gap between belief and skepticism**, Dr. Cohen suggests that the two professions mount a collaborative study to evaluate the utility of OMT. If it proves to be a valid approach to patient diagnosis and therapy, 'then…all physicians ought to utilize it to**

improve the quality of the health care that we deliver.'" (Bold mine)

(At that time, I wrote) Dr. Cohen's recommendation is, of course, a major remedy. He must be gratefully congratulated for his conceptual acceptance of the potential universality of the methods. As he educates himself to more understanding, hopefully the artificiality of boundaries between the systems of the body will become evident to him, and he will be able to expand his concept that neural activity in musculoskeletal dysfunction clearly has, at least, the potential to influence the visceral structures.

[I will interject a case, recent then, that I authoritatively heard about while I was studying with osteopaths in Phoenix, Arizona in the 80's. A patient was being operated on for an abdominal condition at the osteopathic hospital. He had ileus (his intestinal propulsive motion had stopped), and the resultant distension was preventing the surgeons from closing the wound. The staff physician who was the expert in manipulation was called in. He manipulated the patient's back on the operating table; the patient promptly passed gas, and the surgeons were able to complete the surgery.]

Osteopathy is growing and increasingly challenged by its success. It must decide what it will commit to in order to preserve the distinctive philosophy of its giants. At present, however, there is a visibly widening gap between osteopathic vision and practice

CHAPTER TWENTY FIVE

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 patient with a major rebuttal against the medical care she had received**
- **A major chiropractic complication from a "maintenance" manipulation**
- **More comprehensive description of medicine/chiropractic issues**
- **The "Yet" disease**
- **Overtreatment**
- **How I became involved with chiropractors**
    - **Horine and Lawson – my last bad experience**
- **"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**

As I read and revise this chapter in 2005, ten years after I first wrote it and edited it all along the way, I must begin with the statement that within recent years the top chiropractic institutions have made exceptional progress in bringing

chiropractic to high professional standards. I will discuss that more. At the same time, chiropractic's undiluted history needs to be understood for the prime purpose of this book, the eradication of the Fundamental Flaw.

Allopathy, osteopathy and chiropractic are not now what they were. Chiropractic began particularly badly in 1896.[100] 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*, that 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 who succeeded in taking over the school and publicizing himself as "The Developer" of chiropractic, which further infuriated his father who fought back by establishing other schools.[101]

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

[100] 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."

[101] 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.

early. 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, and manipulation's reputation is woven 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."[102]

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. The circular 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[103] and tuition is a secondary source of revenue, chiropractic schools have been essentially reliant on tuition, which could open wide the door. The schools proliferated. Scams were common. It was a charlatan's dream. 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 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

[102] The wise author is not known
[103] Which produced its own evil - generations of doctors indoctrinated to write prescriptions (because of the drug

chiropractic salesman" to whom droves would flock to Texas each year." They would 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 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 wondrously that 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 and relished. (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 American Medical Association published a book, *At Your Own Risk* that issued a blanket condemnation of chiropractic as part of a carefully conceived campaign. 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.

Responsible chiropractors do not defend the history or the unscrupulous exploitation that

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company supported research specifically with that in mind).

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 for a short time in Phoenix, 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 well impressed, as indeed, I was. “Criminally reprehensible” occurred to me.

And since there are so many nice 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 never saw a complication.

Over treatment occurs in any profession. Unfortunately, I have examined numbers of patients who had been treated by a chiropractor unsuccessfully for up to two years for a condition, like tendinitis, which would likely have responded favorably to one, or a few well placed cortisone injections. The passive poor trusting patient just kept going back. Any practitioner with such a predatory predilection is a danger. While chiropractors may more easily refer a patient with a frank herniated disc who obviously needs 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, are the many, many 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.)

In all, allopathy consistently had some reason to discredit anything chiropractic, and it seized every opportunity to emphasize any deviation and damaged manipulation's legitimacy with it. Physicians were inculcated with legions of documented tales about chiropractors manipulating for life threatening diseases, such as cancer. (In fairness, allopathy bears its own burdens for the multitudes who have been unsuccessfully subjected to too much medicine and surgery but who were promptly relieved with manipulation from whatever source. This book is obviously about such cases.)

As manipulation's over extension as a panacea deservedly incurred medicine's condemnation, again, *it fed the falsity that chiropractic and manipulation are synonymous*. Even today, people ask me if I "do chiropractic."

It has been my experience that most chiropractors use only one method. "Different strokes for different folks" was/is more the rule than the exception. (In the top schools, students are now taught at least three techniques.)

Of critical importance is that the specific treatment of soft tissues is not a historic aspect of chiropractic thinking however it may be essential to success. (This lack of comprehensive approach is, in my experience, true of virtually all "older" practicing chiropractors.)

Born in controversy, attacked in infancy and deserving much of it, chiropractic survived a delinquent adolescence.

It was one thing to learn the issues about chiropractic from within my profession. It was entirely another to experience the perspective of patients with chiropractic allegiance. Over years, I performed many consultations in various chiropractic offices. There, I was the minority

seeing people sometimes relieved merely because they were cordially receiving some treatment. Many of those people would never likely trust allopaths again.

One patient 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 medical doctor, she instantly unleashed a vitriolic torrent that increased in pitch and decibels until it was a storm (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 habituated 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 those doctors had to feel some sense of helpless desperation. They certainly wanted to succeed. I hope there was some consciousness, as well, that they were missing an essential - the Fundamental Flaw.

(On the other hand, for far too many chiropractors, “chiropractic manipulation” is the perennial “something,” that is doled out just like those 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 a different chiropractor for a number of months. No one manipulation or treatment had provided noticeable relief, but for some reason, perhaps 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.” I was just quoted, “*The art of medicine is entertaining the patient*

while nature cures."

He had gone on the road for his business for a few weeks and his injury remained stabilized, but he claimed that the chiropractor had told him to return for a "maintenance" treatment. When he did, he manipulated his completely asymptomatic low back "as an incidental," from which he instantly experienced intense, radiating pain into his left leg. For three months, his torso had increasingly developed such a dramatic shift to the right that when I dropped a plumb line from his upper spine, it crossed his buttocks two inches to the right of the midline. He had all the clinical evidence of a major lumbar herniated disc. He said the chiropractor had said something about having some of his associates look at him, but nothing was done. He looked at me helplessly.

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.

My last professional chiropractic experience was exceedingly costly and a bitter memory. Besides equipping me further for the intentions of this book, the only salvaging was the privilege to associate with and help some very special people. Diane Gates (Chapter Nineteen) and a few others will always be precious to me.

In this situation of allopathic ignorance about manipulation and (theoretical) chiropractic competence, dedicated association between the professions for the benefit of patients could (should) be a major answer, and, in fact, there are places where it is happening. I had tried to be part of such an undertaking before, and I wanted to prove that it could succeed.

The fullness of the story is not for now, but a fair amount of it cannot wait. People were hurt. It may still be happening. It was part of a national scam in which hundreds of millions of dollars were being fraudulently billed annually.

I had closed my last solo practice in 1995. A major factor was that I couldn't survive the brutality of managed care. California was the hotbed of the "efficiency" experiment. Eventually I lost my home and going downhill from there. For a time, I worked for commercial organizations providing consultations largely for litigated cases. In retrospect, and eventually sensing the fullness of this mission, some of the most important cases in this book are from those consultations. I was at the small end of an enormous referral funnel. Eventually I saw myself as a bee sent out to gather the nectar and register it in one place.

One of the organizations used chiropractic offices. It was inexpensive space because their contracts offered the possibility of the referrals receiving treatment there. Because of it, I gained the further chiropractic experience of working in about fifty of their offices all over Southern California. The companies lasted about two years.

An ad appeared in *California Physician* seeking a physician with musculoskeletal knowledge to become the medical director of a new medical group in central California. It requested a Curriculum Vitae. I faxed it.

Russell Horine cheerfully called the next day. He told me that he and his associate, Darrick Lawson, were chiropractors. The ad hadn't stated that. His voice trailed as he awaited my reaction. He said they had never expected to see credentials like mine, and they had to sit down, but they were seeking a high-road relationship to convert their office to a medical practice and come under the supervision of a physician.

He told me they had already rejected about twenty applicants. Either the applicant was the kind who would sign anything for a salary, or he insisted on taking over totally. They said that both were unsatisfactory, and they were anxious to meet me.

Their office was called the Visalia Back and Neck Pain Center. Visalia is in the middle of California's central valley about forty miles south of Fresno, the "Pearl of the Valley," entrance to Sequoia National Park. It is a nice place when the summer sun isn't scorching, and the Tule fog isn't slowing everything on the road.

He said a lot of the things I wanted to hear about why they decided to convert their office and about their desire to develop a comprehensive multi-specialty facility. It appeared we were on the same page.

We drove up to Visalia. They treated us well, and they said… they said… and when it was near over, Dr. Horine said that he had never encountered a better doctor or a better diagnostician, but in the end of it, none of it sufficed.

After our visit, they made it repetitively clear that they were very anxious for us to join them immediately. Horine promised lots of inducements that would supplement the salary he could "afford," about what a general doctor gets working shifts in an emergency room. Were his statements true, it would have culminated my career with a fulfillment of the vision. Visalia could have been a good place to establish a training program, facilitate my writing and establish a business for the inventions.

Because of the M.D./D.C. inter-professional relationship, extensive contracts were required to satisfy the legal requirements. They had a law firm that was experienced in that because, as I would increasingly learn, they were part of a national "program."

As the M.D., by law, I had to have full responsibility and authority for all care. Yet, it was their office, and I understood and had no problems with that. The balance was supposed to be provided through their management corporation that hired my medical group. In concept it was fine. Horine became my employer. That became deadly.

In all, the papers were a complex of three interrelated documents. They were anxious for us to be there because they couldn't start billing as a medical group until I was, and that required that, at least, that the employment contract was signed. Horine asked me to trust him concerning the prompt completion of the others, as well as his documenting the inducements. My attorney was comfortable that they were working in good faith. Everyone seemed to have good reason for optimism.

Before we decided, Horine asked me to meet him in Phoenix for a weekend together to attend a meeting concerning some medical equipment he purchased but couldn't take possession of it because it could only be in a medical office and the physician had to be certified in its use.

The meeting was conducted by an organization called the *Clinical Electromedical Research Academy* (CERA). The United States office is based in Las Vegas. The purchase of that equipment and much else was "influenced" by a Dr. Ron Halstead, a chiropractor/ business consultant who dominated Drs. Horine's and Lawson's conduct of their practice. I'd never heard of him. He no longer practices chiropractic, but he is (was) licensed, I understand, in California and Texas. He travels among a large number of clinics throughout the U.S. overseeing their practices to the tune of $4000.00 a day. He sells lots of equipment, and lots of paper systems for the purpose of "justifying" billings for lots and lots of technologic expensive "diagnostic tests." The paper is designed to overwhelm.

Halstead teaches courses how to bill for “everything.” For instance, in his manual he describes a consultation as one doctor talking to another about a patient. Therefore, he writes that every week two doctors discuss each their patients so the can add an extra $200.00 to the bill. Of course, I didn’t know most of that for a considerable time.

One of the several diagnostic instruments Halstead is an agent in selling goes by the name of a “Matrix” machine. It and its cousins were the focus of the Phoenix meeting. The instrument is manufactured in Europe, and it is, in fact, good electronics. The Matrix is predominantly an electrostimulator, but it can allegedly electronically perform all sorts of nerve blocks, and that is the big hook.

The insurance payment schedule for performing nerve blocks is based on injection procedures, but that is not explicit. Some of the injections distinct risk and should be performed only in a hospital setting under image intensification, which is expensive. At the meeting, they alleged that by simply placing a few pads on the skin and setting the dials the Matrix type instruments could accomplish the exactly what injections do in about twenty minutes (for which the injection fee could be charged). So, roughly five patients every two hours could potentially produce billings in the neighborhood of five hundred dollars an hour. Just one instrument. One small aspect of a practice. Not bad.

All that is required is patients with pains, lots of them, and compliant medical “professional judgment” that the procedures were “justified.” How many hours a day the instrument would run would, of course, depend on how much suffering had to be alleviated. For ethical comparison, in my consultative practice, I would have to resort to needle nerve blocks only a few times a year.

The principals laid out their facts and spent considerable time justifying the high fees that could be charged for the nerve blocks, and they explained at length how to counter the insurance companies when they balked. And, in fairness, they did spend some time explaining that the instrument was valuable for much else and at the ordinary moderate charges for electrostimulation techniques. But the message was clear. Get yourself a medical license in your chiropractic office Halstead's manual tells you how to do it within weeks.), and the sky's no limit. You'll be able to make a **G**ood living. Some chiropractors around the room were bragging they had paid off their approximately $14,000 instrument within "weeks."

As I got the drift, I looked about the room. Maybe seventy chiropractors had come from around the country, and a few were from overseas. I wasn't comfortable with what I saw. I was even less so as I watched Halstead. Most of the chiropractors had "their" doctor-with-*medical-license*-in-wallet with them. They mostly sat with glazed expressions. Many were elderly and appeared confused.

Horine and I went out to talk. He knew I had been willing to lose my office, my home, and my car rather than practice bad medicine. He reiterated his commitment that our office would become the showplace of how M.D./D.C. practices can be. I would be the Medical Director in charge of all care.

As we waited at the airport to take our flights back to California, he built the inducements. He had a publishing company. My books would be published. He had a company that sells supplements. They would sell my inventions. His office would staff my setting up training programs to teach. Visalia has a beautiful convention center that would be perfect.

Visalia is only a three hours drive from San Francisco. It has an airport. He had a video company to produce my training films. I was a Gold Medal winner in the California Pistol Championships in 1968, a Reserve Deputy in the Los Angeles Sheriff's Office for nineteen years, a member of one of the pistol teams, decorated for heroism. He told me of the shooters he was involved with and that he'd immediately introduce me to the community. They were about to do a video on defensive shooting with nationally known experts. I'd be part of it. All together, it looked like it could be a gratifying culmination of my career. We knew our circumstance. We talked, met with them again and agreed. They rushed us and sent a truck down, and we packed and moved.

Many names for the group were suggested. Eventually *Principia Medical Group* won out. I had suggested it. Many years ago, I adopted a motto: *Principia Primum – Fundamentals First.* It was good.

Then it was bad. All too soon all hell broke loose. All Horine's words were a ploy. In the end, almost four months to the day later, the staff was silently removed from the office, and about six roughly dressed men came in. I was assaulted and forced out of the office. One of them was a Visalia police detective. They'd lied to him about who I was. He soon learned he'd been had. They refused to even allow me to go to my desk for my personal belongings that included my Federal Narcotic forms. Thousands of dollars were illegally taken from my payroll.

My employment contract specified my responsibilities and authority as Medical Director. On paper, I had total charge of all care and all related issues and full oversight of billing. Within a few weeks of my arrival, they moved the billing to a building a block away. I never saw it. I have no idea what future governmental audits will reveal. (But later I learned they that it would be highly unlikely that any would be done.)

We had agreed that we would do a “systems analysis” as soon as I arrived. We would stop everything but emergencies for a few days and set up procedures. We would select about six patients and Lawson and I would work them together to develop a facilitation. (They. had an interesting relationship: Horine graduated himself to administrator. Lawson manipulated the patients.) The staff would be retrained for the pervasive responsibilities of a medical practice.

None of it came to completion. They wouldn’t stop for an hour, let alone a day. As their mill kept operating and I saw all the misdiagnosed patients who needed attention, my schedule confronted their demands for my peremptorily “signing off” on patients so they could “legalize” their billings on the Halstead plan.

They began advertising me heavily (so much of this is another story). I was to have seen it first. The initial release had implied warranty written all over it, essentially guaranteeing results. That is not only unethical, it destroys reputation. From their illegal advertising for patients, which I didn’t know about, in a short time, I, as Medical Director, received a certified letter from the District Attorney’s office. I was going to be criminally prosecuted. I was able to exonerate myself for obvious reasons, but that marked the real beginning of the end.

There was no respite from the conflict, and all the while patients in need had to be seen. I never got the personal assistant because Horine feared the person would be loyal to me, not him. Except for one, my dictation tapes were never transcribed, and I had to do my reports at night at home.

Immediately they wanted me to run a weight reduction clinic prescribing a then popular drug combination call Phen-fen to bring in more patients to feed into the process. I didn’t like that at all. They got my message, and an M.D. from San Diego, who had a successful Phen-fen

practice, came up to visit. Eventually I considered a modified program just for the obese patients we had.

I decided to take it for four days to see what its effects were. I shouldn't have. The day after I stopped it, during an early meeting Horine called because Halstead was there, I had sudden hypotension and went into shock. As they watched and continued their meeting, I lay down on the floor. No one inquired. I ended up in Intensive Care overnight. Thank God, no residuals.

Almost as soon as I arrived, I thought I had earned some good will from them. The week I arrived, Lawson was leaving to go home and sleep off a "bellyache." I touched his abdomen, and he was undergoing an emergency appendectomy a few hours later. If I didn't save his life, I saved him a long convalescence. Horine's mother had low back pain, and they hurt her every time they manipulated her. She is the office manager, and part of the operation. I treated her, and she was pain free with one muscle energy treatment, and Prolotherapy injections cured her. Dr. Horine's young son had knee pain and couldn't run. I manipulated his PTFJ, and he ran the mile the next day. His wife had a systemic disease. I helped her with intravenous ozone. There are several such stories. Made no difference.

In the end, there was so much that could have been done. The "fit hit the Shan" the day I saw three patients sequentially who had been injured by Lawson's care and who had been hidden from me. (While I was there, he went to court twice to defend bills over $10,000. He lost both of them.)

Two different documents typify the craziness of it all. Despite their promise to release nothing more with my name or Principia on it without my approval, one day the staff was

wearing T shirts around town. On the front was a very nice Principia logo and “Principia Medical Group.”. On the back were two stick figures of heavy weight lifters. (Dr. Horine is a heavy lifter.) Between them were the words, “ PRINCIPIA REHABILITATION ‘WHAT DOESN’T KILL YOU MAKES YOU STRONGER.” Great publicity for a new medical group. The other was my attorney’s incomprehensibly finally receiving the never completed legal documents even as everything was unraveling. For essentially accounting services it listed *$107,000.00 a month!* An indication of what they were working to run through my license.

I reported the illegalities of their practices. After about a year, the Chiropractic Board referred it to the California Department of Consumer Affairs that investigates all professional matters. I was referred to the National Insurance Crime Bureau, a private organization that investigates for the insurance industry. They all are bureaucracies.

The arbitration in December 1998 was another facet of the insanity. Of the approximately $90,000 owed us, I would eventually receive $22,000 over years if I signed some documents. Initially they included a demand that I write a statement exonerating them. They withdrew it as fast, but I would have to sign a non-disclosure that I would not in any way disseminate this information under threat of a $25,000 fine for each occurrence. They could of course assert at any time that their future difficulties emanated from my activities beyond what I had already reported to multiple agencies. So the sword would always be hanging there. (As this book goes to publication, I have no knowledge anything has been done to protect others from these practices.)

You may become involved in similar negotiations. If so, there are issues you need to know that I was not informed of until the arbitration was in progress. This alone can save you an

equivalent of what I lost financially and with lots and lots of grief.

I anticipated an arbitration. At the strong urging of Douglas Noll, the attorney we agreed to, I chose the route of what he called “conflict resolution.” His business card states “Peacemaker.” He told me how his twenty-year experience with arbitration had only soured him, and he related a number of examples to me.

Then he told me that if he had to decide on the law alone, as arbitration required, I would summarily lose. He told me that despite all the clauses in my contract concerning my rights and obligations as a physician and Medical Director, just the fact alone that I had told members of the office staff that by hiding patients from me they were participating in criminal activity gave my “employer” the legal right to fire me. Just displeasing him was enough.

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 CORPORATION.

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. Because I was an

EMPLOYEE, the words were worthless. In law, the employer has almost total rights. The employee's "right" is to quit.

I was driving up to my home in Big Bear Lake just at one of those times when the radio is perfectly set. I was listening to KPFK, and a woman associated with Harvard was talking about the "Master-Servant Act" that was written several centuries ago into British law, which is the basis for ours establishing the very limited rights of employees that I just alluded to.

That is what Mr. Noll categorically told me. Despite the professional situation, if I didn't like what my EMPLOYER was doing my only option was to walk out. And he was serious. I just should have deserted my patients. The world was mad and the law an ass.

My contract obligating me to provide care to my patients with all the protections of my professional oath and the law guaranteeing that they would receive *medical* care was worthless. My chiropractor EMPLOYER involved in criminal activity had every legal right to fire me. But that is how it is now, and I am telling you so you don't get involved in the same Kafkaesque nightmare. For your part, physician, you have to know such practices are happening, and that the investigative mechanism can be slow, delayed and cynical.

On February 2, 1999, I received a fax. My attorney had continued to attempt to negotiate with Horine's to get this settled. It reasserted, "Dr. Goodley is correct that each breach of the non-disclosure/non-disparagement provisions of the Agreement could serve as the basis for a claim against him of $25,000.00."

Noll's conflict resolution was also a farce. After, with a glazed face he exclaimed that justice had prevailed again. I got nothing, which even involved payroll theft. Eventually I may write the rest of the story which ended in a meeting a few years later with an agent of the FBI

and federal officer working medical fraud. In essence, he cynically said that with "Columbia" having recently settled its case for peanuts (over $800,000,000), what was a national fraud of a few hundred million a year.

The California investigation dragged on for years. It is another story. Horine's mother is a Ritchey (sp.?), a member of one of the old families in the region that went back to those who stole the land from the Spanish Land Grants and established dynasties. They are politically powerful people.

The insurance investigatory organization I was referred to knew "all about Halstead." They said that eventually "someone" would get him. They didn't do a thing. All over the country, M.D.s were being kept in back rooms, their licenses exceedingly exploited and patients harmed, and years of effort passed with no visible action by any enforcement agency.

When I started my general practice, I opened it for 24-hour care, and we lived next door. I was on duty for the first two years. I joined a club that sold lithographs by mail, and every month I would get a small catalog. From my first glance at the burro, I knew I had to see it "in the frame." When it arrived, my soul said, "That's you." (He) was standing with a large load on his back, but his stance and eyes said it all. He knew his purpose and had no arguments with it. I put it on the wall beside my main examining table in all my offices. After writing about this episode, I thought again of my burro.

From my experience, 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. Until time establishes its pattern, 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 intense an issue. What will help facilitate association in virtually any setting is for the M.D. to become familiar with what the chiropractor thinks and does.

Because of this long history of conflict, which, in fact, justified a considerable amount of allopathy's opposition, I am going to take time to sweep this area well so there is no misunderstanding and because of the abused hostage, manipulation, must be freed from the "old" chiropractic image: *Manipulation, it must be rearticulated is not synonymous with chiropractic!*

My personal experience with chiropractic began in 1978. Cynthia L. Preiss, D.C., was President of the Board of Chiropractic Examiners and a patient of mine. She 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 with relating to medicine. I spoke of the issues I describe here, and 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 as I projected 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

I took a photo of it. It is symbolic of much of this. What is read, 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 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 Sattra 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 the audience was more respectful thereafter.

Frank understood the implications of the sign instantly,[104] 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 had been awarded to the chiropractic profession for the study of manipulation, which had been funneled to them. Chiropractic leaders from the United States and Canada had been 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

[104] If you didn't get it, don't feel bad. Many never do. But realize how you likely have been indoctrinated. If

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 had ended it.

[As I read these words now and know what is coming up – and have been told of very recent advances in some chiropractic schools that are preparing students for medical diagnosis (so they will be aware to properly refer – and apparently in some cases to legally treat) I am faced with a dilemma I will resolve by leaving what follows. It is historical fact that happened when no training existed. It also exposes how I felt about such issues, which is part of history, too. Regardless, I have no way of knowing how many decades it will take for the new training to be accepted and settled.]

With the importance of manipulation and chiropractic's concentration to it, that conversation was only one of a few disturbing issues that focused during that time, and which is necessary to describe because of their bearing on the inter professional relationships that, in the broad scheme of things, need nurturing.

The issues cannot be comprehensively settled until the scope of chiropractic practice is defined.

During this 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.

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.”

More recently, 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 get a 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 did not likely 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 in the package.

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. Along with a few others, it was that issue which ended my consideration about teaching at LACC

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 and opportunity in this area if they are

professionally able to do so.

During the 70s, 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 in such a situation, others were out for my blood.

Chiropractic is not homogeneous. Roughly, they are divided into the "straights" and the "mixers." The straights are of the old school. They tend to confine their activities to manipulation (of the spine). My understanding was that the mixers also manipulated the extremities, but that distinction, I think, has expanded. It is from the latter group that the mischief of so-called medical exams arose.

In 1984, I was invited to teach at the Harvest Moon Festival, sponsored by the California Chiropractic Association (CCA), one of its larger annual seminars for licensure recertification. Over a thousand attended. My topics included: "Practical & Ethical Considerations for Patient Referrals" (to physicians).

My contention 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 many 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.

Attempted extension into medicine is ongoing, and it has many faces. I 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 vesicular 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.

Computer generated reports "worthy of Harvard" are now available. A few keystrokes can spew an encyclopedia of clinical tests (and results) in exceedingly less time than it likely takes to perform just one of them carefully. No thoughtful clinician would be so indiscriminate to perform so many duplicated tests on the same patient, as some chiropractic reports purport. 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 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.

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 does not yet seem motivated to do anything about it. The message isn't wasted.

All that stated, chiropractic won big in the courts in the past few years, and that may be a reason that allopathy is not doing what I think is its job in the public interest. 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."

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

refused to hear the case.[105]

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 after a number of allopathic approaches have been 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 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.

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[105] I published a letter about it in JAMA: Chiropractic and Judge Getzendanner's Injunction. Sept 23/30, 1988 – Vol 260, No. 12. Archived on this website.

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 at 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 solved one of their failures.

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. Workers' compensation in California is not a happy part of medicine. It is (was?) intensely polarized and driven by self-interest. The so-called reforms (years before Governor Schwarzenegger's "reforms.")) are akin to what the California Medical Association attempted to do the osteopathy in 1962.

After I accepted, my referrals from the insurance companies stopped until, after a few years, they realized that my reports hadn't changed. My focus remained on my patient's needs. But something else happened. I was appalled at the poor, even abusive, care that many of them had received from the insurance company doctors.

The circle closes. I had a similar experience while working with the chiropractors. 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 as a complete substitute for care. Using pills only to cloak undiagnosed pain demeans everyone involved. For the doctor, it's like sin. Getting away with it almost invisibly desensitizes, and too easily it can become a ritual and then a habit. The excitement is over. It's a hard fate when medicine becomes just a job.

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 and knew I was in trouble.

Foolishly, I 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 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, nonmedical 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:

The doctor of chiropractic locates and removes[106] 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 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 squabblings 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 once 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

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[106] I certainly hope not.

lead in the 21st century.'...."

I will discuss the dynamics of what is happening concerning chiropractic later.

CHAPTER TWENTY SIX

ORTHOPEDIC SURGERY – THE ENGINEERS

Of all the manifestations of power, restraint is the most notable.

Thucydides

- **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 and me**
- **Back Schools**
- **Stories of issues with orthopedic surgery**
    - **Experience with Orthopedic Hospital residents**
    - **Confrontation at Rancho Los Amigos Hospital**
    - **Tight hamstrings and lordosis**
    - **An orthopedic surgical conference at U.C. Davis**
    - **At the University of Uppsala**
- **Orthopedic Surgery's increasing sub specialization**
- **"Musculoskeletal Diagnostics and Therapeutics – Towards a More Rational Perspective**

It should be self evident that the orthopedic surgical mind thrives on advances *in surgery*. Its practitioners are largely athlete thinking born, competitive spirit dominating. 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. From English journals almost two hundred years ago, they raised their glasses in tribute to their description as a rather "cocky" lot.

Important note: *For fairness to understand what this is all about, 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 all 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 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.*

Orthopedic Surgery's surgical advances are wondrous, and when it has failed, it failed with courage to admit and recommit as it has repeatedly with scoliosis. Its recent humbling challenge is the July 11, 2002 NEJM[107] disclosure concerning one of its most heavily invested and popular procedures, arthroscopic surgery of the knee to treat osteoarthritis. The conclusion: No matter the millions of procedures performed at vast cost - the surgery is statistically a sham. In the necessary reflection in the aftermath, maybe orthopedic surgeons can be persuaded to examine the issues of the Fundamental Flaw. Maybe, in this declared decade to alleviate musculoskeletal pain, this essential is already happening.

[107] New England Journal of Medicine

The prime task among orthopedic surgeons is dispelling the commonly held myth that they are authoritative about all issues orthopedic. Despite their own aphorism: develop a new orthopedic surgical procedure, and every one will try it within a year; come up with a non-surgical idea and it may take (only) 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 in part, “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 do not resonate about “mundane” issues that don’t allow them to put a high tech instrument into their hands. So, I must candidly relate to you all that I will. You cannot choose wisely until you see the whole truth of this.

Person in pain, 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 at least predominantly through a *surgeon’s* eyes, which, in fact, may be most appropriate. *But approximately 80% of orthopedics is non-surgical!*

In *Orthopedics Today*, Vol. 4, Number 4, published around twenty years ago, 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 republished 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, valuable commentary couldn't have been made by a respected orthopedic surgeon concerning this.

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 overtreat 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 of thought while struggling to come to grips with it, for most orthopedic surgeons a real exercise in cognitive dissonance.

The merits of manipulation would never have come into question had orthopedics developed with *medical* as well as surgical perspectives - as neurology and neurosurgery and internal medicine and general surgery did - strong disciplines in dynamic balance.

And there we come 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 goes with 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 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,* ***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 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 game.

So-called 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 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 absolute domain of authority. It is, in fact, its prime reason for being. In 1972, not that many years ago, I was in my first year in PM&R residency at U.S.C. In all, it wasn't a good year, and I went looking. One day, I drifted into the orthopedic surgery section for lower extremity fractures.

I cannot exaggerate my reaction. It was a Dark Ages "*Twilight Zone*" experience. Ward after ward was filled with beds of young men whose fractured femurs, mostly sustained in motorcycle accidents, were suspended absolutely motionless in traction.

Because of the motionlessness, each ward was a mausoleum of once-viable legs that had been intentionally neglected into bloated yellow-green, wax infested, "limboid" masses sloughing grayish scales into piles on the bed sheets, the grotesque line of 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 near homogenized into mucilaginous bogs. No orthopedic surgeon can deny that this was the standard of care for the specialty.

The status of the *fractures was all that mattered!* No motion whatsoever was allowed until the *x-rays* were satisfactory. Only then would those ravaged limbs be dared with month after tortured month attempting to rehabilitate the function of those terribly neglected limbs. In

fracture care, orthopedic surgery's prime reason for being.

At the same time, such treatment to the upper extremities was known to be 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. The philosophical contradiction totally escaped them. This was well into the time of "modern" medicine. That was the way it was done. No controlled studies.

I was appalled. I went to Dr. Paul Harvey, 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. He looked through me without expression and tonelessly asked me to submit a proposal. I did. Twice. I never received a reply, and then I was gone.

Ten years later, CPM (Continuous Passive Motion) was introduced as a major advance in which the limb is set on an apparatus that provides very slow ongoing movement. Orthopedic surgery finally awakened to the penalties of its conscious imposition of neglect on (only) the soft-tissues. (And then came some papers that purported that there was no" long term" benefit, and I heard some surgeons reject it on the basis of that paper alone without any examination of the paper's validity.)

The wrist has a so-called "position of function." When the wrist is cocked up a little, grasp is stronger because the tendons that close the fingers are put on a little stretch. Therefore, if your wrist has to be immobilized, it is habitual to maintain it in that position, and off-the-shelf wrist splints have the "cock-up angle" built in.

Carpal tunnel syndrome (CTS) is common. It happens when your median nerve, which

runs along the "inner surface of your forearm into your hand, on the palm side, becomes relatively compressed under a ligament which runs transversely across at the wrist. Placing the wrist in a splint is common treatment. But in this case, the common cock-up approach is likely disadvantageous because it violates the principle of rest by tensing the entrapped nerve even more. Much of the reason for the splint is defeated.

Not until very recently has individual thinking been devoted to the problem and controlled studies done. As the information slowly disseminates, most patients with CTS still have the wrong splint applied. In principle, they should be slightly *"cocked-down" --- flexed.* There are many more examples of orthopedic assumption-based procedures, and they keep coming all the time.

I do not relate this to condemn orthopedic surgery but to level the field, and the only way to do that is to substantiate my argument. We all become entrapped in comfortable doings only to realize later, if we are fortunate, that we caught ourselves again in another trap.

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 which 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 all. Not another word was said. I left the funereal with an emptiness that I

wish wasn't and went into the darkness that for me was only literal.

There is one orthopedic surgeon, in particular, who chose to be his specialty's most vocal protagonist against manipulation. Dr. Alf Nachemson's opinion is internationally quoted and considered gospel by many. From that, our initial confrontations were bloody until our relationship happily evolved after a few years.

Because Alf is so influential, I must name him.[108] Alf's ill-considered statements concerning manipulation and thermography have caused inordinate damage because he is internationally acknowledged and elected to extend his authority beyond his experience.

Especially because he is so reputable, he has commensurately increased responsibility. I had heard him speak at a meeting on *The Research Status of Manipulation* at the National Institute For Neurological Disease (NINDS) in Washington, D.C., in 1975,[109] but our first personal encounter was a little later, in 1978, at a meeting in Long Beach, California when the same subject was discussed. He was 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!"* I was on my feet, my response dripping anger: "M*edicine 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 literally 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 can release a "safety valve"), bleeding is, in effect, possibly life saving! My final thrust was that instead of getting rid of

[108] 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.

[109] Footnote to history: The next time that meeting was held was thirty years later June 9-10, 2005. The only people there who had attended both meetings were Murray Goldstein, D.O., Chairman of both, and me.

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 confront him, and again there was no personal conversation.

In February 1979, Alf was on a program concerning low back pain, in Reno, Nevada that was arranged 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 me, 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 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.

Later, Alf became a notable advocate of ergonomically oriented "Back Schools" to teach people how to avoid accidents by using proper techniques in a safer work environment. While it is certainly a wise adjunct, it is a fundamental of another order. In some studies (and disputed in

others) training people how to walk, stand, sit and work with postural efficiency *statistically* diminishes *subsequent* injury rates.

Regardless if it is correct, or not, 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, that microcosm, must be the recipient of considered therapeutic decisions. Reductionism to school simplistics is one of the Pandemic's disgraces.

Some patients do, in fact, improve with general functional activity, like exercise. Sometimes pain is relieved. An entire program at the *University of Florida* is based on exercise and stretching. But it is no substitute for manipulation when it is needed. It would have been unconscionable to send an Ozzie Hansen or a Norm Cordle to school, yet that is exactly what is being done.

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.

There is another distinct disadvantage when the only approach to the back is to teach general stabilizing techniques before lifting. The teacher tends to reinforce (in himself) the concept of the back as a spring, a unitary structure.

When the practical implications of the back's real movements are not part of habit, it can all easily sink 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 in my chapter on

"scientific studies" (Appendix B) Deyo quotes Alf for his authority.

Dr. Harry and Sy Alban headed the largest orthopedic surgical group, in Long Beach, California for years, and we have been friends for almost forty of them. On a few occasions, Sy has introduced me to groups. He surprised me the first time when he said, "Dr. Goodley has influenced more doctors than he is aware of." He didn't elaborate, and I didn't ask, but I remembered the battles.

Every year in medical school I was positive what I would specialize in, and every year it changed until my senior year when I decided on orthopedic surgery. It's another story, but I was assigned a different mission.

Confrontation with my orthopedic surgical colleagues has sometimes been necessary. The fact alone that I am not of their fraternity too often spoiled relationships, and every time I have regretted that. This book has some of the stories, and this chapter converges the issues.

I again ask my surgical colleagues this time to maintain focus on the real issues for the sake of the advance of our art, for the good of our patients, for the honor of medicine. Please allow me a little slack where this sounds personal. I have good reason to have learned to despise power for power's sake. It is always self-destructive. Please, my dear orthopedic surgical colleague, we have the opportunity to share in a great restoration that history has positioned us to achieve. Please don't throw it away on ego issues.

Orthopedic surgeons are *surgeons!* They tend to brittleness when challenged on what they see as their turf, as in Pat's case. That professor certainly didn't desire to diminish himself as he had. He didn't want to be seen as spiteful. At that moment when he shoved everything out

of Pat's AC joint and then inviting me to see that nothing was there, he was obviously compelled by the dark side of abounding ego. That is what must be addressed. Orthopedic surgery knows its influence, and that is one of its biggest problems because human nature has difficulty reasonably moderating its sense of power.

Before finishing my residency at UC Davis, I taught for a year in the new Department of Emergency Medicine at USC. (That is how I was there for the opening story of this book, in fact, in exile, again.) Orthopaedic Hospital sent their residents to us for trauma experience. They tended to be as cocky as the bunch reported about over a century ago, and my using manipulation was an obvious target.

I'd offer them a proposition. I told them that sometimes that night someone would come in. I'd ask them to examine the patient. Then I would examine the patient, and I might manipulate. If I did and the patient improved and their objective findings changed from their first examination, 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 show them what I'd done.

During that time, I attended an orthopedic surgery staff meeting at the world famous *Rancho Los Amigos Hospital*, with which USC is associated. The late Dr. Verne Nichol, then chairman, was particularly proud that morning because 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 manipulation. His response was that those who "knew the back cold" said it didn'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. 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 we'll listen to you."

I told her I couldn't dishonor history and responded plaintively, "Jackie, a hammer is a hammer" to which she replied with smile and a wink, *"That's why we call ours a mallet." Touché.*

In *The History of the Peloponnesian War,* in the 4th century BCE,[110] 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 can be only four words repeated so often like a mantra that believing them seems essential to the ritual, especially so when they are professed by someone of acknowledged reputation.

Four words puzzled me for twenty years. I continued to hear them all the way through medical school and on the wards from so many orthopedic voices in so many places: “Tight hamstrings cause lordosis.”

Lordosis is excessive anterior/posterior curvature of the lumbar spine. The angle at the lumbar spine with the sacrum becomes excessively acute, and the normal gentle curve exaggerates to keep the body erect. In the process, the pelvic ring is pulled 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. In such a situation the hamstrings are, in fact, tight. 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. So, how could they be the *cause* of the lordosis? How could they cause the seesaw to go

[110] Before the Common Era

up if they are tight? Why wouldn't they be pulling down? Their tendency would be to restore the balance that would *diminish* the lordosis! Yet that is what was taught in medical school and onward, and so many unquestionably reputable orthopedic surgeons just regurgitated it.

One afternoon, at UC Davis, I was working in a clinic with Dr. Dick Riggins, the Professor of the Orthopedic Surgery Department, 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, and then he turned back to me and reversed the mantra almost as a question. Would I accept that lordosis *causes* tight hamstrings?

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 just keeps right on tightening. It is so easy to get trapped.

I had seen the seesaw problem from my first day on Orthopedic Clinic in medical school, and it was so illogical it stuck my gears. But I repeatedly concluded that something had to be wrong with me because people so superior to me in learning were so off-handedly saying it. So I stuck and wasn't able to take the very small step of logic. And Dick Riggins had to sweat before he ever really processed instead of just parroting it.

That's all that the Fundamental Flaw is. Falling into uncritical thinking by listening to someone trusted saying something. It is another seesaw problem playing games with irritable egos.

During my time at UC Davis, I was disappointed that I wouldn't be able to work closely with orthopedic surgery. They knew early on that I had developed skills that they hadn't, that had succeeded where theirs hadn't and that I wanted to share. I began to attend their weekly

clinical conferences, but their resentment was obvious so it only lasted a few weeks.

Later, Doug Allerdice, one of the residents asked me to critique his presentation on soft tissue injuries of the shoulder. I didn't want to because I didn't want more heat. I didn't want them uncomfortable, and I didn't want to get him in trouble, but he insisted and told me it had been cleared. As the chips fell, I sat opposite Dr. Paul Lipscomb, Professor Emeritus from Mayo Clinic.

Doug began his discussion about inflammation of the *supraspinatus tendon* (a tendon on top of the shoulder) and then asked me how I would treat it. I described an injection technique I had learned from Dr. Cyriax, whose injection techniques, in contrast to his manipulations, were impeccable. He used a tiny needle and very small amounts of cortisone and local anesthetic injected in a particular way.

Dr. Lipscomb was a kindly gentleman, but it was a non-surgeon's challenge kind of thing in a room full of macho, and he reacted. He threw his head back and guffawed, responding with unhidden sarcasm that he would just take a 10-cc. syringe, fill it with cortisone and local anesthetic (twenty time more than I had just described) and "shoot it everywhere."

The entire staff sat motionless as the air emptied from the room as I heard myself reply, "Since the tendon is only 1/4" wide, what's all the rest of it for?"

He'd choked and sputtered that he hadn't meant to imply over treatment. There was nothing to reply. I was never invited back, and whenever he'd passed me in the hall, he paled. I regretted that. I wish he had invited me to dinner, and we could have talked. I very much regretted having to leave things the way they had fallen. A few days later, Dr. Paul Chinaurd (sp?), the hand surgeon, who had completely ignored me in the past, passed me in the hall, and

as he came abreast, he offered me a very respectful, "Good morning, Paul."

This was the resident group that had invited me to dinner two weeks before I left the Sacramento Medical Center.

I have known great physicians who are orthopedic surgeons and who maintained their breadth of perspective. They were compassionate, gentle and wise. Orthopedic surgeons have their own to emulate. There is no equivocation or ulterior motive in who I dedicated this book to. And surely there are others, like Vert Mooney.

One of the great privileges of my professional life was sitting at rounds next to Dr. Charles L. Lowman, the founder of *Orthopedic Hospital,* in Los Angeles, while I was still in pre-medicine. As each patient was presented, he quietly leaned to me and 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. He was a model for keenly observing and following the clues wherever they might lead.

Adapting Dr. Lowman's manner of thinking would be a boon for many orthopedic surgeons today for whom "chiropractic" is only an increasing agitation. Some refer to it only as the "C word," clearly confusing it generically with manipulation. I first heard the expression during the orthopedic section of the annual medical meeting at Loma Linda University.

The subject was, "Pain In The Absence Of Objective Findings." (Objective Findings by the orthopedic surgical definition, of course.) The "C word" was said by the moderator who had unwittingly brilliantly expressed the frustration that accrues from manipulation ignorance in his opening comment, "*Patients with neck pain are a pain in the neck."…*

At a later time I returned to Sweden to teach at a program sponsored by the University of Uppsala. (Where I relieved Karin's rib dysfunction.) During one of the sessions, I had raised the possibility of dysfunction occurring within the small bones of the wrist when the forearm is fractured. If it happens and is not corrected before the cast is applied, unnecessary stiffness and pain can result which will complicate rehabilitation.

The chairman of orthopedic surgery matter-of-factly responded that such things don't happen. When I asked him why he would say that, he responded pontifically, *"If they did, we'd see them!"*

Of course, that is not true. The condition doesn't come with neon signs. Little is self-evident here. It has to be considered and searched for - or - as in his mind, "it simply doesn'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.

"Logic-tight" compartments that irrationally separate treatments, whether of legs or hands, athletes and the rest of us - or fail to distinguish good medicine, as well as good surgery from bad is not good. Albert Ellis, PhD, the father of *Rational-Emotive-Psychotherapy*, refers to such antics as "hardening of the categories."

All soft-tissue injuries that are diagnosable and treatable by manipulative means - the aches and pains that though they may not cause major disability, certainly impair quality of life - need to be reconciled to ordinary care.

The increasing popularity of sports medicine will hopefully assist to help resolve some of these problems. What is good for an athlete is good for anyone. If performance is adversely

affected by small changes, how can the same x-ray-invisible so-called soft tissue type injuries be so casually dismissed in the general population?

Regardless, orthopedic surgery is overwhelmingly interested in its surgeries. It is a specialty of surgeons for surgical personalities. Its fascination is the application of high tech instrumentation. The cost of the "hardware" exhibited at its annual meetings is equivalent to the GNP of some countries, all impressive and highly profitable. With such dazzle, mundane hand therapies cannot successfully compete for a totally committed surgeon's attention and understandably so.

Orthopedic surgery is increasingly sub specializing specifically because its knowledge base and its procedures are so rapidly expanding. The 1992 announcement of orthopedic surgery's annual meeting had a separate brochure that listed ten affiliate societies. Orthopedic surgery is in fact no longer a single entity except for shared surgical principles.

So now is a reasonable time for orthopedic surgery to evaluate how pervasively it will maintain its stake in orthopedics overall. If orthopedic surgery decides its overbearing business is surgery, which is virtually certain, then it is obligated to relinquish the myth of its authority concerning orthopaedic medicine. If its mission is orthopedics - including medicine - then it is obligated to significantly modify its present course. Even if it is only orthopaedic medical principles that become appreciated by them, progress will assuredly be made - and every one of its subspecialties will be considerably improved by it.

As Dr. Nirschl so eloquently commented and Dr. Mooney so accurately observed, orthopedic surgery is not (yet) seriously engaged at all. In the scheme of things, this weighs heavily that another specialty is needed, the *medicine* of orthopedics.

On individual basis, change within the specialty is already beginning, at least in attitude, and it might be a foothold to another resolution briefly discussed in the previous chapter. In the mid-nineties at another AAOS meeting it was reported that during a seminar regarding manipulation, 25% of the attendees acknowledged that they referred to chiropractors.
I accept Sy Alban's compliment. I have had something to do with it.

The first national meeting I organized was in Palm Springs, February 21-23, 1980. It was sponsored by the *American Academy of Physical Medicine and Rehabilitation,* my Academy, and *The Eisenhower Medical Center.* I called it, *"Musculoskeletal Diagnostics and Treatment – Towards a More Rational Perspective."*

During the social before the meeting, an orthopedic surgeon from San Francisco approached me. He was a big man, and he'd come with a neurosurgeon buddy. He was somewhat embarrassed and had to express to me that he really didn't know what he was doing there. I smiled and commented that maybe he would find a reason.

I knew that there would be a number of people like him. A non-surgeon talking authoritatively on orthopedics can be a big pill, and months before I knew I needed something up front to break through.

Each participant received a small sealed box with the registration materials, about the size a wristwatch could come in. It had a sign on it, "Please do **NOT** open until requested to do so! Thank you."

I opened the meeting telling the audience that I was well aware of some of their thoughts and that I was grateful that, for whatever reason, they had come. I told them the box on their laps addressed that issue and that it had something in it that if mishandled was dangerous. It literally

could permanently injure them or someone close to them. I assured them I wasn't joking because I wasn't. But, I reassured them that, in its place and properly handled, it was useful.

I told them it represented the best I could come up with that embodied the major obstacle to the meeting's success and how to resolve it up front. Then I asked them to break the seal and to carefully just remove the lid.

They did, and I had been convincing, and they were correctly cautious. What they saw inside was a plastic ring onto which was tied a length of monofilament nylon that went through a slit in a piece of cardboard that obscured the under contents of the box.

I asked them to carefully place the ring on their middle finger and then slowly lift it straight up. As they did, the cardboard came up, and they saw that tied to the other end of the nylon cord was a large fishhook with a plastic worm on it that was by then dangling in front of their faces.

The worms came in different sizes and colors. Some were all tied up in knots, some open and fully functional. Some pretty, some ugly. As they looked at them quizzically, I told them the fishhook was the closest I could come up with what an *assumption* might look like - useful and appropriate in its place but otherwise assuredly dangerous.

Then I asked them that, for the next three days, to continue with what they were doing at that moment – "*Please continue to suspend your assumptions.*"

And I had them, and the seminar began.

At the first break, the orthopedic surgeon came over to me broadly smiling, his face even redder than before. We shook hands, and he told me he sure knew already that he had to be there.

I had received a call from one of the Chiropractic colleges in the East. They asked if they

could send a few of their faculty. They selected well. Before the meeting was over, we convened a panel that consisted of a physiatrist, an orthopedic surgeon, an orthopaedic physician, an osteopath, a chiropractor and a physical therapist. It may have been the first.

One orthopedic surgeon was from Oregon. He was there with his wife, a pediatrician. As they left and we made our farewells at his car, he said, "It was more than a meeting. *It was an experience!"*

All of us in good faith accomplished much during those three days.

In the end, orthopaedic surgery cannot happily 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. So long as the manipulative approach remains outside its respectful concern, it will likely remain an awkward embarrassment to them. Even if it only studies orthopaedic medical principles to appreciate them, progress will assuredly be made - and every one of its subspecialties will be considerably improved by it.

CHAPTER TWENTY SEVEN

PHYSICAL MEDICINE & REHABILITATION –

A MIXED BREED & POTENTIAL

Medicine is concerned with all that is constant and grave in the affairs of men."

Anon

- **Pm&R's early undistinguished history**
- **The role of the physiatrist**
- **WEBSITE**
    - **My history with PM&R**
        - **Establishing the Task Force for Orthopaedic Medicine**
        - **Teaching the first course in manipulation**
            - **Groups of three's**
            - **Closet osteopaths**
    - **The video for the Academy**
    - **The Atlanta meeting – calling the Academy derelict**
    - **The Houston Academy night at the rodeo**
        - **A rodeo rider in shock and no one moved to help**
    - **The betrayal of the Special Interest Group (SIG) concept**

Physical Medicine & Rehabilitation (PM&R) 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 essentially untouched. There is no systematic manipulative training in the one specialty that might (could, may) balance orthopedic surgery.

PM&R is not now what I contended with when I entered in 1972. It took another twenty years before it was finally on its way to some semblance of what I envisioned. There may even be agreement on how to pronounce "physiatrist," which was a big issue whether the accent is on

the first or the third syllable and whether the first (i) is pronounce as an (i) or an (e). I once suffered a meeting of physiatric academicians where much of a forgettable morning was lost having to endure the drone of that argument, which was never resolved.

PM&R began as a specialty immediately after World War II amid a number of stubborn, conflicting influences. Commanders of military hospitals received orders to detach one of their medical officers for reassignment to New York to care for amputees. In the way of things, the transferees were largely the ones who, for whatever reasons, others were content to be rid of, and it was they who became the founders of PM&R. While there were some extraordinary physicians among them, it was a matter of numbers. The sum was weak. The name is conjoined because they couldn't even agree on the name so both were used. PM&R did not thrive and became a back water, subservient "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 marked down on her paper because the teacher insisted she had misspelled the name of her father's specialty. Obviously she was fixated on "psychiatrist."

As recently as 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 unambiguously to answer the obvious question: If PM&R is non-surgical, and the neurology-neurosurgery relationship is an appropriate template, why didn't it rise to the task? I am answering.

In the beginning, the problem was the bulk of the raw material - doctors who only wanted to be allowed to survive as administrators, especially if not questioned too closely about what they knew and did, who would genuflect fearfully to the surgeons, always grateful for any role such as performing electrodiagnostic tests.

Most of them made no claim to medicine's mainstream. Self-respect was not a driving issue. In truth, too many had too little to offer, and, for decades, applications for training were largely from foreign medical school graduates.

Orthopedic surgery largely chewed them up without a glance back. Especially in the west, many rehabilitation institutions, like Rancho Los Amigos, refused to have them. After only a few years, UCLA closed its department and didn't even list PM&R as a specialty for the medical students to consider.

Dr. Ian McLean became president in 1993. I was gratified to read his inaugural speech. It spelled the end of the old guard. He said that physiatry's future rested with its younger

members.

While the "Physical" of PM&R is expanding into thinking and procedures that might eventually lead to balance the specialty, it still remains diffused into many parts. Whether orthopaedic medicine, by whatever name, will cohesively emerge from it remains an hazy question.

I entered residency after twelve general practice years when I knew I had to specialize. Part of the fated story was that I had spent a summer in medical school at USC in a PM&R fellowship and knew the chairperson of the service.[111] I met other physiatrists in an organization I helped found.[112] I knew much of PM&R's history, but I entered filled with enthusiasm. I had much to reciprocate for the training I would receive, and I was anxious to give it.

Then, the training took only two years because I received credit for my GP years, and with five young children, that was an important issue, but in my case there was an unsolicited detour, an interposed year with the new Department of Emergency Medicine from which this book opens.

PM&R is a broad specialty that deals with diseases that leave residual functional deficits. It crosses many specialties. The *Rehabilitation* of it is predominantly involved with such diseases, such as stroke, paralysis, spinal cord injury, birth defects and the like. The intent is to assist patients towards maximal restoration.

The specialty is largely built around team effort, and many physiatrists work in institutions. A number of specialties, including neurology and orthopedic surgery have been reclaiming their own rehabilitation, if they ever relinquished it, as virtually all specialties have

[111] Dr. Elizabeth Austin
[112] The North American Academy of Manipulative Medicine now defunct. Another story.

been aggressively moving to grow their turf.

I finished my residency at the University of California at Davis under Dr. William Fowler. I can't pass his name without again expressing my gratitude to him. I arrived in controversy, and he learned to trust me and see what manipulative reasoning can accomplish.

Bill became president of the Academy in 1980 and permitted me to establish a task force to propose the direction the specialty needed to enter the mainstream in the care of musculoskeletal conditions. His only request, "Don't embarrass me." I didn't. It was the impetus for what became the SIGs (Special Interest Groups).

We initially named it *The Task Force on Orthopaedic Medicine.* It got the "old guard's'" attention real fast. We were being accurate, not impudent, but their mentality doesn't relish homage to resented masters, however self-imposed. They offered full cooperation if we changed the name, and we did - to *Musculoskeletal Medicine.* Score: Cooperation 1, Reciprocation 0, which never changed.

The *Physical Medicine* component of the name is technically supposed to imply the non-surgical treatment of musculoskeletal conditions, but the ubiquitous old guard leadership clung to limited therapies. My group persisted for ten years, and a few times we were resentfully *allowed* to put on a program. One of them once complained to me, "Paul, we *let* you put on a program. Why won't you just wait until we *let* you again?" For us to pursue our goal enthusiastically was life threatening to them.

In 1983, at the Academy meeting in Los Angeles, my group taught the first course in hands-on diagnostic and manipulative techniques. The room was enthusiastically overfilled. Unregistered members physically crashed the door. It was wall-to-wall examining tables.

I devised a plan for them to study in groups of three. One would be the patient, one the clinician and the third would concentrate on the demonstration and coach the table. Then they would rotate. It was so busy, we needed more instructors, and there weren't any --- we thought. Then, the closet osteopaths emerged, helped and later disappeared as if they hadn't been. But they are there. The next morning when I came down for the meetings, some of the younger members rushed me with bravos. They were starving for a place in the midstream, and they learned where it is.

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 were each given one hour.

An associate from my pre-med days, the one who had visited me in my office before he was to check into St. Vincent's for his abdominal problem that was cured with an incidental manipulation, was in the movie industry. He'd moved to Ashland, Oregon, where he had a studio. When I told him what I needed, he invited me to make a video. It took three days, and it turned out well. When it was over, Joe and George honored me by asking if they could use it to train their residents. That was the high water mark.

At the Academy meeting in Atlanta the general session business meeting was packed out in the huge banquet hall. Joe Honet was president that year. One of the members had stood and declared that we should go on record that what chiropractors do is quackery.

I was the "official" photographer that year and was standing up front. The heat rose, and my hand went up. I singed every word as I synopsized what you now know, ending that our specialty was derelict for its apathy. The only sound that followed was the gasp of people

breathing again.

Something unexpected happened during that time, from which I thought - for a few, brief hours - that, finally, maybe - I might break through. The Academy meeting was in Houston. The major social event was a special night of Texas rodeo, and we filled the stands.

I brought my beloved Leicas, two of them around my neck, about six extra lenses and a strobe. A protective netting ascended from the rail to the rafters almost all around except for a small opening midfield on each side of the arena. We sat at one of them with some friends in the bottom row so I'd have an unobstructed view, but when it was obvious that all the action was close to the chutes, I left them, got as close as I could and worked my lens through the netting.

Brahma bulls are dangerous. Monty Roberts writes that horses enjoy the bucking, but bulls are pure wild. One of the first riders out was a lean, good-looking teen-ager. 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 youngster's chest like a jackhammer.

Moans then screams followed the collective gasp as the pummeling persisted until finally somehow he released himself and slid to the ground where he stood morgue gray and dazed among the cowboys who had run into the arena and then just stood motionless looking at him.

Isolated in the far corner, I was increasingly incredulous that no one in the stands was moving to the openings to give treatment. I think such inaction would have been inconceivable in virtually any other medical audience. Someone had to treat him for shock *before* he collapsed and the situation seriously deteriorated, but no one was. It is jeopardy time when magical thinking can tragically pervade that "someone else will take care of it."

Fainting in a crowded elevator, or while sitting at a table and just slumping onto it, can become an obituary. *Anyone in shock has to get flat fast.* I hustled back along the narrow aisle, my cameras swinging, hitting seats, still not wanting to believe that that no one was up and moving.

Such events illuminate an essence. 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, and that unequivocally critical time of grace was fast passing for the Academy. The kid was in real danger.

I was at the opening, laid down my cameras, shrugged in disappointed frustration, climbed over the rail and ran. All around the boy, it was just as it had been. The closer I got the worse he looked. He stood unsteadily, his eyes glazed, his moist pallor frightening. I put my arm around him and checked his pulse. Left on his own, he just had to stay standing no matter what, a Texan *boy* among Texan *men*, his beginning manhood on the line unwittingly along with his life.

I jolted them. One of the cowboys, a tall muscular man, charged at me bellowing, *"Get the hell out of here!"* I whirled angrily and thrust my finger at 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, asking if a family member was there.

A quiet man with about the same slim build came to the boy's side, and someone courteously said that he was his father. I never heard him utter a word. He listened respectfully as I explained to him what was potentially happening.

I asked them to trust me. We took the boy back under the scaffolding, and he did what I asked and lay down in the dirt. Surprisingly, there was no medical service. No one else came.

When he stabilized, I urged his father to immediately take his son to the hospital

The only way back out was the way I came, across the center of the arena, a walk along the allegory. I had pleaded with the members of the Academy for the previous eight years to leave the backwater and move to the center of the room– to claim orthopaedic medicine, by whatever name they had to call it. Now fate was personifying it.

I fantasized that now they would listen, but it dissipated only a little slower than the dust settling in the arena. Initially, some smiled at me. One looked at me sheepishly and commented that I had done what all of them knew they should have. I wished he had fully grasped his words and applied them to how they practiced.

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, "I saw you running."

Leaving the arena, most of them shied away from me, and by the next day the reconstruction of chronically bruised egos was complete. The sullen, narrow-eyed expressions among the controllers let me know I would not be forgiven.

Some months later, I sat next to Dr. Ian McLean at a SIG chairperson meeting, in Oakland. Ian is a gentleman, a very pleasant and dedicated man who I first met when I took a course under him at Ohio State University, while I was still a GP. He listened as I poured out my passion about the mainstream and orthopaedic medicine. He ended the conversation by commenting that I would spend my life in frustration before seeing any of it happen in PM&R. I recorded his Presidential remarks a few pages ago.

That evening Drs. Joachim Opitz and Richard Herman invited me to dinner. They were secure in their professional status, and I sensed nothing to be wary of. There is more to it – much more. Maybe I will tell the stories in *Goodley Stories Of A Medical Maverick*, but there is an essence that must be stated here. Enthusiasm is a special gift. To be assigned a special mission, such as this is an honor. Suppressing one's natural qualities when they are directed for the good is a crime. False modesty is another form of hypocrisy. The message I was given is urgently necessary. Those two men, and others, had the power to support all this and produce visible results. I was enthusiastic, and in the end their expressions told me I'd pay for it.

One of the conditions that the Board made concerning SIGs was that each had to have a comprehensive cohesiveness. It was the right decision. It didn't happen. The back-roomers knew that splintering Musculoskeletal Medicine would prevent its having any real influence. If it could be chopped up and the meetings held at the same time in different places, they would be safe.

Dr. Herman chaired the committee of SIG Chairpersons. At the next meeting he declared the splintering as a fact accompli. I protested and reminded him of the Board's mandate. He stared Alcatraz eyes at me and flatly repeated his words. I looked around the table at the twenty some mute faces fixated straight ahead. We'd been set up.

Dr. Simons, a proponent of 'myofascial" pain, proposed his own group because "Paul's group is only interested in joints." No one was laughing. Dr. Opitz was sitting across from me, gesticulating almost comically for me not to oppose it. He had positioned himself for years as a controlling force throughout the hierarchy. This was a battle that could not be won. I held my silence as Opitz continued sending "stay pat, that's a good boy " signs. I assumed there would be an upside that he would explain to me. We left on the same bus for the airport. He sat only a few

seats away, totally ignoring me. I resigned my chairmanship.

Opitz was elected to the Academy presidency in 1985. I asked him why, after my SIG had complied with everything we'd been asked to do - for ten years - he (and whoever) had betrayed us. Resplendent in his tuxedo, he'd tilted his head back and looked along his nose at me in classic Aryan arrogance. Through a wide smile absent any confirmation in his eyes, he responded, "*That was then. This is now.*" I felt as if a horse had been lifted from my back. I was free. I didn't return to the Academy.

The Academy has, I am told, continued to mature. Physiatrists are considerably more respectable now, and many know who they are. Because the responsibilities of the specialty are so diffuse, orthopaedic medicine can get more attention, but it can never dominate.

CHAPTER TWENTY EIGHT

PHYSICAL THERAPY-HISTORIC ALLIES

Every science begins as philosophy and ends as art.

Will Durant

- **Physical Therapy originally subordinate**
- **And originally only followed routine prescriptive therapies**
- **The legal issues of P.T.s manipulating**
- **The physical therapy revolt**
- **Physical therapy scope of practice**
- **Peter Edgelow, PT – who a physical therapist should be**
- **Mobilizing the nervous system**

Like PM&R, Physical Therapy has many focuses such as stroke care, pediatrics, arthritis, burn care and orthopedics. It is not part of the inside manipulation story for reasons explained by its history, and relatively few of them are skilled in it, but there is considerable activity to change that now.

Physical Therapy developed as the natural ally of traditional medicine, and until the 60s was completely subservient to it. Therapists were hired by doctors or hospitals and did as they were told. To make matters worse, a large percentage of them were under the “administration” of the old physiatrists.

It was a time that too often justified the description of, "*Shak'em, bake'em and ultra-violate'em,"* the prescriptive, repetitive, ritualistic application of hot packs, or whatever that seems to perpetuate itself forever. Though it is contested in some places, physical therapists are

still obligated to comply with a medical prescription (so long as it is safe). It is a fine physician, however, who seeks competent physical therapists and honors the relationship by treating them as trustworthy colleagues.

Physical therapy increasingly asserted itself since the 70s, and the blind binding to the “prescription” is largely a relic. Good P.T.'s know much more about their art than most doctors. Incidentally, in the real world, anyone who administers what is billed as "physical therapy" is not necessarily licensed.

A big reason for physical therapy's difficulty with bringing in manipulation is the legal barrier. For them, it is in the gray zone. Except for physicians, the manipulation of joints is restricted to the chiropractic scope of practice, and it is intensely guarded. Some P.T.'s have avoided the legal challenge by becoming chiropractors, as well. It prepares them extraordinarily. And chiropractors cannot perform "Physical Therapy." In California, they can only advertise that they use physical therapy "modalities." Each State has its own laws.

Physical therapists have the right, however, to "passively move the joints." Some argue that makes the issue of manipulation moot. Be that as it may, the issue is beyond a battle of definitions, and off and on, is in the courts somewhere.

Another reason for the long delay in focusing on hands-on skills resulted from its crusade to achieve what its academicians perceived as professionalism – which meant academics. Craft was subordinated because ‘professionals don’t give massages.” Regardless, their professors had no more appreciation of manipulation than mine did. The foundation was suppressed for decades as their schools taught that hands skillfully dialing knobs on instruments were the true measure of competence.

When the mutiny started, massage became viewed as another hand of mobilization with is sibling, manipulation, very close behind, all reinforcing the conditioning and working muscle and other soft tissues that P.T.'s generally do very well, far superior to chiropractors and virtually all physicians, as well. Still, the general deficit in manipulation skills is all too evident. Basic truth obligates anyone who professionally treats these conditions to be familiar with them.

Regardless, most physicians are wise to find a competent physical therapist, then trust him or her and learn to monitor so they can *learn.* Physical therapists can save more tail feathers than an ornithologist.

In the bigger picture, how physical therapy's relationship with chiropractic will evolve is an important part of the health care equation.

When the mutiny started, hands-on began to be restored with a vengeance, and in the early 90s, The *Orthopaedic Section of the American Physical Therapy Association* finally became a full member of *The International Federation of Orthopaedic Manual Therapy (IFOMT),* a prestigious organization that began in the Canary Islands in 1972 during a month long meeting attended by physical therapists and physicians from around the world. (I was the only U.S. physician there.)

While there are a few post-graduate programs in manipulation that continue for a year, or more, most interested P.T.'s elect to take a series of short courses over time. Unfortunately, they are not usually in a clinical setting where students can work under supervision on real patients with real injuries and observe them over time.

In many States, physical therapists can open their own offices. Some try to see patients "right off the street." The legality is State by State legislated, but you need to consider a number

of factors if you receive care without a prior medical examination.

Physical therapists are not trained to diagnose across the span of disease (and they do not inject or write prescriptions, the same as chiropractors). A seemingly simple athletic injury may be just that, or it may not be. On the proverbial other hand, some are considerably more competent in soft-tissue diagnostics (though they are not permitted to call it that) than many doctors, and would likely be sensitive to what isn't right, whatever it is called.

I first met Peter Edgelow over twenty-five years ago. Peter studied manipulation with Geoffrey Maitland, in Australia. He was the therapist I chose when I was consultant to the Veteran's Administration for Orthopaedic Medicine. He is a very special person, one of the great physical therapists I have known. Peter further distinguished himself by developing a program for the treatment of "Thoracic Outlet Syndrome" type conditions.

Peter knew something was wrong with Jane Presta when her doctor had ignored her complaints for two months. Because of Peter, she had a lung scan that probably saved her life. Jane discusses it in her letter in the Appendix.

Some important manipulative advances are now emerging through physical therapy, such as the mobilization of restricted nerves. From the preface to *Mobilisation of the Nervous System,* published by Churchill Livingstone in 1991. The author, David S. Butler, is an Australian who studied in Adelaide with Geoffrey Maitland:

> "It seems remarkable that only 30 years have passed since Phalen's description of 'carpal tunnel syndrome' made it an easily recognizable clinical entity. Equally remarkable is that only 20 years have passed since the realization that there are specific pathways for pain. Research from

> the last three decades have provided a mass of information about the nervous system; much of this information is still waiting to be sifted and analyzed by those who have patient contact.
>
> In the last ten years, some physiotherapists have not been idle either. In the search for better results and answers for symptom and sign mechanisms and treatment responses, many orthopedically oriented physiotherapists have turned to the nervous system. A nervous system mobilisation treatment, based on clinical observations and research, is evolving. The examination carried out by many present day physiotherapists could well be called neuro-orthopaedic."

If releasing nerve tension is efficacious, it has to interrelate with historically osteopathic and chiropractic reasoning. The walls are coming down.

CHAPTER TWENTY NINE

QUESTIONS YOU MUST ASK ABOUT YOUR CARE

Which profession is more likely to help you?

Whom can you trust?

What 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 THT YOU WILL BE ABLE TO APPLY THEM TO YOUR CIRCUMSTANCE. ONLY YOU MUST BE ULTMATELY RESPONSIBLE FOR THE CARE YOU RECEIVE.

Attempting to get this book published while I was in the States was a (mis)adventure for years. So close so many times during which I would often be told, 'if only you'd written a simpler, direct book listing recommended sources for such care we'd publish it in a minute.' *"You understand human nature when you are no longer surprised by it."* What is happening now on so many fronts is impossible to both harness and provide a valuable list on. (I expect to do so

dynamically on the website, itself, if that is possible.

However it is desired, this book cannot provide you with individually reliable answers to all your particular problems, whatever your locale.

- **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 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 conditioning. It may have value to educate you and to facilitate treatment, but many injuries have been compounded when exercise is the primary treatment. Physical therapists are sometimes "jocks" who push you. Making you do all the work may have an undertone to it. 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

POLYAXIAL CERVICAL TRACTION AND A GOODLEY STRETCH – NEW PRINCIPLES - YOUR NECK KNOWS

Do not be angry with me if I tell you the truth.

Socrates

- **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**

This chapter was originally written years ago for a published book while I was working to get my inventions manufactured. They are well proven and needed, embodiments of the solution to the Fundamental Flaw, but it didn't happen, at least - not yet. Still the information is urgently essential. I am editing this chapter accordingly.

If your neck is injured, you might, or you might not, receive cervical traction. Truly there are times that it should not be used, but when it is, it is most often performed as a risky ritual because traction's conceptual clarity has been lost.

The common equipment that is used is not sound so it is not safe because it is not consistent with your neck's biomechanics though traction prevailed through thousands of years, so it must have merit. The crux is whether it is truly *cervical* traction - traction *onto* the neck -

consistent with its biomechanics - or not.

Cervical traction deservedly became controversial when it was dissociated from its requirements, another result of the Fundamental Flaw for similar reasons with manipulation, and their restorations depend on realization of the same principles.

HOW THE NECK WORKS:

In contrast to the low back, your neck relinquishes stability for mobility to give the sense organs in your head a satisfactory platform for assured reference to the horizontal. Only then may you successfully negotiate your environment.

To accomplish this, a myriad of reflexes throughout the muscle and tendon fibers of your neck must function with exquisite precision, however ordinarily unrealized, to harmonize and stabilize the tonal balance and reflex synchronization every instant you are upright. The complex sensitivity of it all can easily overwhelm the imagination.

Ordinarily, the ongoing adjustments in tension are imperceptible unless injury or excessive stress disrupts them. It can happen from what seems little, but when it does, what was once subtle become relatively clumsy dyscoordinate efforts that can spread their disturbances considerable distances.

Pain, nerve irritability, spasm - "the swamp effect" result. When tissues actually tear, the problems compound even further, and the longer the reflex irritability and tissue dyscoordination persist, the more chronicity is encouraged.

MY CONCEPT OF TRACTION

For the acute case, sound traction stabilizes the damage with gentle and assured alignment and rest. The supported tissues no longer frantically “grab at straws.” Relative quiet

soothes the spasm. Scarring and contracture are minimized, and healing is enhanced. With the restoration of tissue strength and balanced tone, homeostasis[113] may be reestablished.

If gentle *manual* traction relieves, then timely traction may be essential, and while it is rarely total therapy, it is, often enough, the essential adjunct that facilitates healing. Small force properly placed, is all you likely need 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 your successful traction need to be variable according to your need. *Only the neck knows.*

THE CONTROVERSY

The currently acceptable methodology incorporates a device called the *Sayre sling*, which over time became accepted, in fact virtually synonymous with, cervical traction. If you have had traction, it is probably what was used. Its straps would have circled *under* your chin and the back of your head, thereby pulling only your *head.* Likely, you would not have been able to open your mouth.

Such traction obviously has no *direct* influence on your neck since all the force is transmitted generally *into* the neck where it indiscriminately follows lines of least resistance regardless of what area of your neck might need the therapy. Regardless if the injury is low on the neck, with this traction *all the neck* must be pulled regardless. Since the force is only "from the top," a dysfunction at one segment may only be "pulled along" and not specifically treated.

The problems are obvious, especially when the force is excessive in a vain attempt to compensate for the Sayre Sling's inherent flaws. The risk of injury exponentially increases, and

[113] The normal, balanced activity of all related tissues

injuries compounded are often even more difficult to treat.

Of critical importance, ***the Sayre-type chinstrap obviously delivers its force through the temporomandibular joints (TMJs) and their associated tissues***, which you now know are vital structures especially susceptible to injury. (Sayre-type traction has historically been the second most common cause of malpractice suits because of such injuries.)

To sincerely rely on the Sayre sling requires thinking of the cervical spine as if it were a *spring*, rather than what it is - a linkage of several intricately articulating joints each of which contributes to the *appearance of* unitary motion.

Dr. Sayre was a notable orthopedic surgeon in the early 1900s who never intended his sling for "single flavor" neck pulling. At least, I found no literature to support that. He designed it because he was interested in treating patients with *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, and his body would be hoisted sufficiently so that the spinal deformity straightened. Then his chest would be wrapped in plaster and the sling removed.

With the advent of the automobile, neck injuries increased. "Whiplash" became a household word. Over time, its treatment became very, very big business. *In the 90s, it was reported that over $29 billion per year is spent on them and its litigation in the United States alone.* With such a rush of injuries to the neck in a Fundamental Flaw ignorance world, the promotion of the Sayre-type sling became a boon. If the doctor was not adept, at least there was something tangible to give the patient. Without ever having gone through the challenges of systems analysis or controlled studies, the Sayre sling became ubiquitous and exploited.

As complications compounded, self-defensively, the concept of traction itself, not the device, was blamed. Because of this, many doctors have been trained that traction is, at best, worthless. Especially for the lumbar spine, a general teaching is that any merit traction might provide derives from keeping the patient in one place for a time while any relief reported is placebo. In an attempt to compensate for its inherent inadequacies, "rules" began to circulate concerning its proper use, but they produced no improvement and often made things worse.

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 use this device and assume its authenticity. *Even osteopathy and chiropractic accepted it when allopathy did.*[114]

Over-the-door Sayre traction is cheap and easily available. While admittedly statistically it helps some, its discomfort and risks assure poor compliance, and they tend to end up in the closet, which is the safest place for them. Because of its mountain of failures, it has become a moribund routine, carried as a compulsory decimal point on the bottom line of medical equipment companies. It is what Ozzie was told to use through his interminable nights of misery.

I had an unforgettable experience with them in medical school when we were invited to a fraternity dinner hosted by the doctors in practice. A discussion about cervical traction's problems started. One doctor stood and stated that he had no problems with Sayre-type traction because he instructed his patient to sit facing *away* from the door. Another got up insisting the

[114] I showed Dr. Frank Schoenholtz my invention early on. 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

patient has to *face* the door. A third didn't even stand up as he 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. Every one of them was hanging his reputation on a failed technique. 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 literally visibly distracted, which assumes nerves were being "pinched." 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 as poundage was increased with hanging weights until x-ray visually demonstrated joint widening. From that, less force was *assumed* to be useless, and the times became even more predictably hazardous as the tissues in real patients were regularly subjected to excessive force.[115]

ORTHOPEDIC CLINICS OF NORTH AMERICA is prestigious and considered authoritative. Its books on single subject issues are published four times a year, but as I read the July 1992 issue (Volume 23 - Number 3) THE DEGENERATIVE NECK I suddenly became increasingly alarmed at entering *The Twilight Zone,* which progressively descended into what, frankly, soon became a devastating farce, the Fundamental Flaw in the frankest of expressions.

I refer specifically to the chapter entitled ROLE OF PHYSICAL THERAPY IN THE TREATMENT OF CERVICAL DISK DISEASE is written by a Ph.D., MD, PT and a DrSci, PT.

---

too shocked and grateful to have it off. The machine sold for thousands of dollars, and people obviously bought it.

[115] 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.

(All italics mine)

As an appetizer to the traction issue, this is the conclusion about the use of soft cervical collars:

> "…Some investigators have found them to have little value. In a questionnaire survey of use of the collar among 99 patients with cervical pain, Naylor and Mulley found that 76% reported pain reduction. Barnes and Saunders suggested that the variability in results *may have been related to patient compliance*."
>
> What does that mean? I don't know. In my judgment the use of collars in early neck injury shouldn't be an agonized deliberation. The decision should be based on simple questions. Do you have pain? Do you feel it is difficult to hold up your head? Do you feel relief if your head is supported? Then try a collar. If it helps, wear it, at least, for a short time, as the tissues begin to heal but not so long that the muscles weaken.

It is in the discussion about mechanical traction that the confusion of non sequiturs and unsupported assumptions consistent with the entire controversy is stamped:

> "Cervical mechanical traction is a commonly used modality for radicular neck pain. Rath reviewed the literature and reported on the following therapeutic effects of cervical traction: cervical joint distraction, prevention and loosening of adhesions within the dural sleeves, nerve roots, and adjacent capsular structures; reduction of compression and irritation of the nerve root

and disk; improvement of the circulation within the epidural spaces of nerve root canals; and reduction of pain, inflammation and muscle spasm. Colachis and Strohm demonstrated the separation of the intervertebral foramina with radiographs by varying the angle of pull and the traction poundage. The theory of reduced pain due to decreased muscle spasm has not been supported by recent findings.

Cervical mechanical traction can be given continuously or intermittently in either a seated or supine position. The weight applied ranges from 10 to 50 pounds for 15 to 20 minutes. As a general rule, the greater the traction force, the shorter the traction time needed. Using continuous traction in the supine position, Klaber-Moffett et al found greater muscle relaxation in the group with 2-lb placebo traction than in the group with 6- to 12-lb traction…"

That commentary so desperately expresses the issue that I must repeat it with dissection.

"Cervical mechanical traction is a commonly used modality for radicular neck pain. Rath reviewed the literature and reported on the following therapeutic effects of cervical traction: *cervical joint distraction*,

Distraction is a physical response to force for good or evil. It is certainly not a "therapeutic" effect.

…prevention and loosening of adhesions within the dural sleeves, nerve roots, and adjacent capsular structures; reduction of compression and irritation of the nerve root and disk; improvement of the circulation within the

epidural spaces of nerve root canals; and reduction of pain, inflammation and muscle spasm.

These. I conclude, need to be considered presumed effects, No criticism overall is implied.

Colachis and Strohm demonstrated the separation of the intervertebral foramina with radiographs by varying the angle of pull and the traction poundage.

You mean that if you pull enough on the spine it actually separates? And it takes x-rays to show that?

The theory of reduced pain due to decreased muscle spasm has not been supported by recent findings.

The statement is not amplified. It is my clinical, experience that spasm is a result of the irritability that is associated with pain. It is a complex. Spasm (and pain) are relieved when the incitement of the irritability is relieved. See below about "placebo" 2 lb. traction.)

Cervical mechanical traction can be given continuously or intermittently in either a seated or supine position. The weight applied ranges from *10 to 50 pounds for 15 to 20 minutes.* As a general rule, *the greater the traction force, the shorter the traction time needed*

For what to happen? The more the force applied, the greater the chance at further damaging the neck!

Using continuous traction in the supine position, Klaber-Moffett et al found greater muscle relaxation in the group with 2-lb ***placebo*** traction than in the group with 6- to 12-lb traction…"

Herein is the naked terrible truth:"… greater muscle relaxation in the group with 2-lb ***placebo*** *traction than in the group with 6- to 12-lb traction…"* I read it again as my mouth literally gaped.

Muscle relaxation is synonymous with diminution of spasm.

"*2-lb"* and "*placebo"* are compulsively conjoined as if congenital! The authors demand that despite what the subjects reported, nothing – *nothing!* - must conflict with their dogma that traction *must* visibly distract. *That's science?*

And nowhere is there any mention of how the traction was applied. The features of harnesses are not discussed. The Sayre sling is presumed correct.

The section on traction ends:

"For home use, patients may purchase a simple traction apparatus consisting of a head harness and rope and pulley system, which can be attached over the door, and a counterweight, usually a water bag. We have found home traction to be ineffective in most patients, probably due to incorrect use and poor compliance."

But something that is wrong cannot be properly used,

so where is the logic of this? And, compliance is usually a factor of the lack of observable success.

There are other opinions. Another article proximal to 1992 insists that force must, at least, exceed the weight of the head, which assumed traction in the upright posture, but then there are other factors: sitting erect activates the postural reflexes so that full relaxation is difficult to obtain especially when the tissues are injured and irritable.

A device that embodies sound principles and exposes the misconceptions would facilitate the reconciliation of the Fundamental Flaw for both manipulation and traction. To be able to literally grasp the concept, to hold it in one's hands, would be of inestimable value in sorting out the controversies.

In contrast, my device applies traction directly onto the neck at any level. Its simple versatility allows it to safely provide rotational force, as well, thus making it the first mobilizer. **It is so efficient that it can be effective with only *one pound of force* from which a realistic concept of how traction really works eventually emerged.**

Her car had been viciously rear-ended. When I examined her soon after, she was close to the threshold for major injury, but there were no neurological deficits. *Minimal* manual cervical traction was relieving. I went behind her bed without preconception. She had no idea what weights I was applying. I hung two pounds of traction. She groaned that she was becoming nauseated and the room was spinning. I immediately removed it, let her stabilize, slowly applied a one pound weight and waited. Almost instantly she was relieved of pain. No traction – intense pain. Two pounds – complications. One pound – distinct relief.

The "visible distraction" myth needs to be dispelled, but it is powerful and only

reasonable in “old cold” cases when inflammation is long extinguished and when comfort may be derived from stretching scars. Even a publication, in 1993 (which is recent time because of cervical traction’s obviously undeserved bad reputation) a physical therapist considered an authority on traction stated that any force below the magical visible distraction is "unscientific."

The first person to use my traction was Gloria Lee. She was[116] a beautiful person who I had treated before because of a low back injury. In the hour prior to my applying my traction, she had almost died because of Sayre-type traction. Gloria was my only patient ever whom 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 a Sunday. As they waited to reach me and the neurosurgeon I referred to through our telephone exchanges, they instituted established emergency procedures. As soon as she spoke with me on the phone, she told me what had happened and apologizing profusely she said they had almost lost Gloria. They had reflexively put her in a Sayre Sling, but 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 had filled with saliva and almost asphyxiated her.

I raced to the hospital about thirty miles away. I had “coincidentally” invented the

[116] Sadly, Gloria died in her early maturity a few years later of a heart attack.

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 almost always have a camera with me, and I took a picture of her in the Sayre. Then I applied mine and 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.

(PHOTO)

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 Richard[117] in demonstrating that 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

[117] Chapter Fifteen

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.

… A device that embodies sound principles and exposes the misconceptions would facilitate the reconciliation of the Fundamental Flaw for both manipulation and traction. To be able to literally grasp the concept, to hold it in one's hands, would be of inestimable value in sorting out the controversies.

THE BEGINNING OF CHANGE

I gave up on Sayre Sling traction many years before because it is clearly wrong. As Dr. Still could not reconcile his father's medical and 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 musculoskeletal system really works and how to use my hands more precisely. On the other, I was expected to accept a traction whose action is the same as 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 and deliver the force by gently pulling the towel.

It had the great advantage that there was no TMJ jeopardy and could be placed at any site along the neck *as well as deliver the traction with rotation or side bending*, which I learned is potentially of great value. But it had the insurmountable problem of compliance.

Traction can be given on a schedule, but it is far more valuable when given for *need.* Whenever pain, spasm or 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.

But no matter how carefully I explained it all and taught how to do it, in hundreds of attempts, there was never reliable compatibility. People are busy. There is always something.

In 1980, I was treating a Hispanic young man who had injured his neck. As part of my routine examination, I apply cervical traction manually to assess its potential, 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.

His mother was overburdened beyond her years. She spoke no English. Her eyes told me that her burdens had crushed her. 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.

For the clarity of the record, I will briefly describe the original traction although it has been supplanted by an even simpler device, as I will explain.

THE GOODLEY POLYAXIAL CERVICAL TRACTION/MOBILIZER SYSTEM (GPCT/MS)

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 its surface 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 is the means for 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.* Or, by unhooking the long strap to the feet, the unit converts to hanging traction, which I will explain. The *pulley* is constructed for virtually universal attachment. The most convenient way is to use a door hinge space as a vertical clamp as you lie on the floor. It can be used with almost any bed through an accessory, or it can be tied to anything stable.

You recline for your traction, which is the posture for best relaxation. You provide yourself rhythmic and gentle traction, like waves coming onto the beach and receding into the surf.

CONCEPTUAL RULES ABOUT HOW TO USE TRACTION

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*. (Please recall that Richard used it for ten hours the first time he used it.)

While a scale is built into the webbing as a concession to doctors who demanded it, there is no scale on a fishing rod, a toothbrush or a comb. Applying repeated constant force is not physiologic because the tissues change and accommodate as soon as any force is applied. Instead of relaxing and applying "what comes naturally," concentrating on a scale impairs relaxation.

The valuable purpose of the scale is as a *protective buffer* that eases the traction into your neck. Without something stretchable along the line, if you are startled while the traction lines are tense, the sudden increased tension can injure 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. 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. [118]

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, you cannot recognize force until it is about nine pounds, which is far excessive. Hanging weights early on is better. The storage bag becomes the receptacle for whatever is used.

Contraindications to traction

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 just sense that continuing to slowly work at it will bring relief.

As I described, because of the long controversy about cervical traction, traditionalism today is generally between antagonistic and apathetic about it. 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. For years, the medicine that treated and

[118] 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.

confidently billed however long the therapy were among those antagonistic. As soon as efficiency was demanded, the same people sought my traction. (Only God knows why the commercialization then didn't succeed, but from this vantage I think I know.)

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.

A GOODLEY STRETCH:

Polyaxial Traction is obviously vitally important for people with TMJD[119] because almost all of them have cervical dysfunction as part of the syndrome. Its simplification resulted largely from a comment by one of the dentists that their lack of training in neck disorders made them too apprehensive about making even the few adjustments on the Polyaxial, and couldn't I come up with something even simpler? It took me awhile, but one day I sat down and it simply fell together.

It's a combined unit in which the harness, like a Turkish towel, is unified with the mobilizer bar. All the rest is virtually rope, knots, and again, a universal pulley. The essential elastic that provides the buffer is in 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. In fact, a number of people who have used both devices prefer *A Goodley Stretch.*

I needed my invention with the suddenness of a placid snowy slope transformed in an

[119] Temporo-Mandibular Joint Disorders

instant into an avalanche.

I had been sitting in front of my computer without the proper glasses for too long, which I had compensated for by extending my neck perhaps a fraction of an inch so I could focus on the monitor. Suddenly there was a click in my neck as the pain shot from the right side of my head to my scapula. 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, my chiropractor friend in Big Bear Lake, California. Larry's diagnosis was a "Levator Scapulae Syndrome." It is a long thin muscle that runs from the superior medial angle of the scapula up to the skull. By its length, it is particularly vulnerable. My straining had provoked many of the muscles, and that one took the brunt.

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, then down my right arm as a number of accommodative dysfunctions followed. It was one of those times when I had my tail by its tiger, and I couldn't/wouldn't let go, 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 having to hold onto it and again even when I turned onto my side.

This never was intended as a contest between Larry's manipulation and the traction. It just happened. Manipulation alone wasn't resolving the problem, so, 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 mid 20th century, during the decades when gasoline cost less than twenty-five cents a gallon, **Burma Shave** signs strung out along the by-ways advertised and entertained travelers one line at a time. 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
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 ONE

A 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**
- **A Goodley Lift**

While teaching at USC, I was concluding my care of a man with ongoing low back problems. He was grateful for what I had been able to do for him, but he regretted the persisting pain that promptly increased during sitting and prevented him from taking his wife out for dinner and a show.

It was one of those helpless moments when something had been accomplished 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 why 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 obviously incredulous, and we repeated it several times, each with the same result. There was nothing about it in the literature. I'd apparently stumbled onto something new that would be consistent with my own experience with lumbar traction.

I was personally able to test the principle a few years later when I sustained a own back injury. It wasn't a surgical condition then when I was discharged from the hospital for bed rest at home.

As I touched in the last chapter, the traditional reasoning concerning the low back, then was that since the ligaments are so powerful joint distraction cannot possibly occur so 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. And from that I learned that no one is safe from the power of indoctrination.

But if gentle lifting can relieve pain, why? And why not at least try traction that way? I had a traction bed delivered to my home along with sixty pounds of weights in five-pound bags. I was still in considerable pain, and my family hung them one at a time at five-minute intervals. Until twenty pounds, there was no difference. At *twenty-five pounds*, the pain was *instantly* gone. It began to recur at thirty pounds, and by forty pounds the pain was approaching excruciating. *Up and down the scale, again and again, with exactly the same results.*

During that time, I became had considerably more experienced with the concept by applying it to fifty sequential patients who experienced sitting back pain (USC and UC Davis).

Eighty percent of them, four out of five, were relieved with less than 20 lbs. of lifting force. Regardless, my personal experience left me incredulous.

I became certain that something extraordinarily illogical was interfering with our understanding of the fundamental biophysics of what traction is all about. My cumulative experience in both cervical and lumbar traction was demonstrating that there is a critical therapeutic range far below what traditional thinking takes for granted as fact, which is, in fact, largely dogma.

ADVANCE for Physical Therapists is a well-read magazine. In the April 13, 1992 issue, an article *SPINAL TRACTION still plays a role in treatment of BACK PAIN* 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.

THE CONCEPT

It eventually became clear to me that traction for acute conditions is primarily *neurological,* not orthopedic joint-directed therapy. In fact, with few exceptions, trying to relieve acute pain by pulling sufficiently to distract a joint isn't sensible.

If you smashed your knuckle, no right thinking doctor would reach out and start pulling on it. If it did happen, what you did in response would be justified self-defense. So why should the spine be different?

Exactly as with the neck, the delicate, nerve-laden, injured and irritable tissues need gentle support so the reflexes that tend tissue tone can restore to normalcy. *Appropriate* traction provides that rest.

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 alone. 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 situation 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. It ends careers early and is a significant portion of the disability bill.

A working theory for vibration's effect 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 is then directly on the bones, further weakening the ligaments and causing further laxity that the body attempts to compensate for 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 inevitably results. The best answer is to avoid the problem.

There is good, at least, epidemiological evidence that sitting is not normal for anyone, that the spine was not built for it. The ever-so convenient chair may well be a cumulative culprit. Societies that squat, instead of sitting, don't have a commonly known vocabulary word for back pain. They don't see it unless somebody had a serious accident, like falling from a tree.[120]

I knew I had discovered something important, but it would be years before I realized how important. The pressing question then was how to come up with a practical device, 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." 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 isn't practical. I presented the problem to Alexander Shemet, a dear friend and engineer. We worked through a number of "Rube Goldbergs" until one Sunday morning, in 1982, 180º

[120] Personal communication from a Canadian orthopedic surgeon who crossed Africa in search of cases of back pain. Sorry, I think it was Harry Farnham. Apologies if the spelling is off.

accomplished it all.[121]

A Goodley Lift is so simple. Its action is similar to pontoons on a seaplane or flying buttresses on a Gothic church. A belt holds pads about the rib areas from which adjustable struts *descend* to the sitting surface to diminish 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 forces that are exerted from the curves and shocks of the road if one is driving. As a totally unexpected gift - that is the soul of the therapy - the Lift is *dynamic! Wearing it while sitting on a bathroom scale reveals a continuous fifteen to twenty-five pound weight change during each respiratory cycle!*

Instead of the constant spinal compression of sitting progressively squeezing out the disc and subjecting the spine to unremitting pressure that initiates the degenerative cascade, the Lift institutes a dynamic "pump" that *tidally exercises and nourishes the disc mechanism*. The effect is profound. Wearing *A 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 heavy, cumbersome and the strut length adjustments soon failed, but they worked, regardless, because the physics of it is sound. One broke in half after about ten years, but the user taped it together and continues to use it. I want that one back for a museum piece.

Al needed one. He had pain driving, and he said that the trip to and from Hughes Aircraft

[121] There's a marvelous line in *Fiddler On The Roof*. Tevya's horse is sick so he has to pull his cheese wagon. He complains to God that he's tired of pulling the wagon, then throws his hands up to heaven in abject resignation. "I

"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.

I used mine on a lot of grateful people and built up the score. Insurance companies bought the others within a few weeks. The people who got them had been totally disabled because their jobs required sitting. They were all back at work the next day.

Years later, I located "Lou" Maiorana. Lou is one of the sweet people of this earth, and her experience with the Lift became the classic case. I treated her in 1983 when she suffered 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, then the largest hardware store in Glendale, California. She tried the Lift one day, and she was back at full-time work the next. She continued for a few years until her condition deteriorated, and it became clear that she needed surgery. Happily the pain was relieved. She gave it back to me, another museum piece.

I treated Logan Hardison[1] while I practiced in Redlands, first for a neck injury, then when he injured his back. His work required him to drive to Santa Paula, about a three-hour drive, a few times a month. It was always disabling both ways, and he would be bedridden sometimes for a week. With the Lift, he has no trouble at all. His was the Lift that I don't know if I was more impressed, appalled or amused at its state of disintegration - maximal testimony to its effectiveness.

My famous Alan Couch of the other stories was a "million miler" trucker. Alan evaluated the Lift, as well, and became my "poster boy." At the time, he was living in Blue Jay, in the mountains while he was working in Long Beach on the coast, a long drive away. He'd injured

---

know. So *push!"* And that was the way it was.

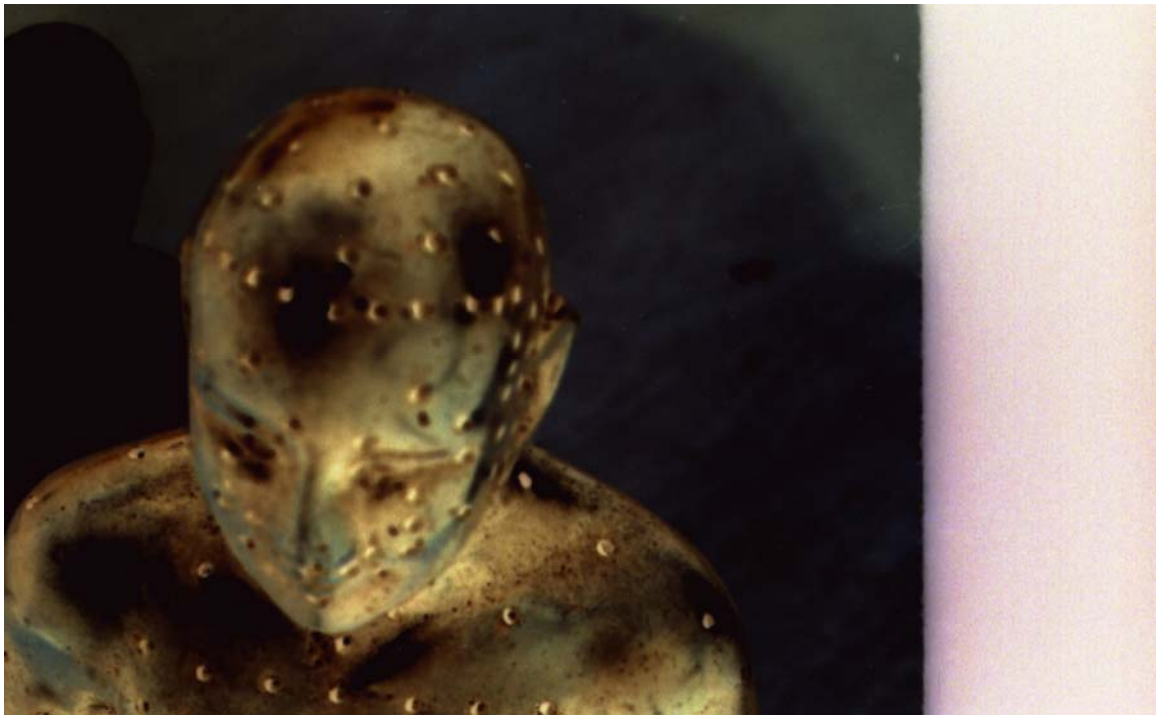
his back again. Driving the curves was a special torment, and after each trip, Alan would have to crawl awhile before he could walk. But wearing the Lift, he arrived comfortably and immediately able to go about his business. Sadly, Alan eventually decided to try surgery from which he sustained three failed procedures.

CHAPTER THIRTY TWO

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 satisfactorily relieve the pain of it. The inciting cause must be relieved first before reaching for the needles, but if pain persists because

of a “stuck circuit” acupuncture may be excellent therapy. 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, and his time had almost run out. The man had spinal cord cancer.

I was nominally co-chairman of acupuncture research at U.S.C. in 1972. I purported task was to select studied the patients with musculoskeletal conditions on whom acupuncture would be attempted. Acupuncture was *new*. The Department of Emergency Medicine was new. I recommended 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, for me, acupuncture requires a different mindset. Doing both caused me extraordinary mental distress, and persisting risked sacrificing more than I was willing to relinquish, from which Dr. Joe Keating, my new-found-friend and reviewer of this book, commented that I am “a mechanist rather than a vitalist.”

Much good did come from my involvement. I discovered Lisa’s soft tissue hip entrapment because her mother brought her to clinic.

The most dramatic success 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 ICU (Intensive Care Unit).

He had been suffering almost continuously with migraine headaches for over twenty years and been unsuccessfully treated at medical centers throughout the world. He had just arrived from Mayo Clinic. I'd seen him briefly, saw Yu Wing insert the first needle and with sympathy for him gone back to my patients.

Six weeks later, I was walking into the video studio and turned to see a tanned, distinguished, 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 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 had remained pain free, a case of a controlled series on one patient. (Please read the chapter on such issues in the Appendix. I didn't put it there to hide it, but it deserves its own space.)

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. Hypertension is mostly asymptomatic, but it damages, and the price can be suddenly severe.

During that time I met a most incredible physician. His name was Dr. Voll (pronounced "fall"). He visited from Germany and returned periodically. He had developed his own system of diagnostics and the instrumentation for it[122], 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 dose as well, which would then be administered. For us, it was a time of culture shock.

[122] ElectroAcupuncture According to Voll (EAV)

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 "50" was perfect, the range of abnormality progressing from both sides. Each of the acupuncture points, including some he discovered, represented a different organ.

From personal experience he was not always correct. And when it happened, he didn't know how to reconcile it, but clearly he had tapped an interface with the Chinese system - the body's harmonics - with the electronics to read into it.

The 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 as he probed the patients who were being presented to him. You have to have a completely open mind for such events, and fate dealt me into the picture early in the afternoon session.

In respect to his host, Dr. Voll inquired through Dr. Schulte,[123] 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 acquainted with manipulation, and a few heads turned. I deferred that I

[123] I can't locate my notes or the books right now. We moved again. I hope I'm spelling his name correctly. He was a most helpful and amiable man.

wouldn't attempt anything without examining her first, and I did, and I manipulated her, and 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 there was a bond. 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.

The circuitry is delicate. I purchased an instrument and used is periodically for years. I do not doubt that the "electric field of the operator" influences the results, but I don't know. Only once did I have a response that unequivocally satisfied me.

Dr. Voll checked me on two occasions. The first was part of a demonstration. I was feeling fine. Dr. Voll was convinced 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 him each time he returned to the United States. One story came back from Germany that one of the doctors had visited him in his office. He had developed a troublesome 'floater" in one of his eyes and hadn't been helped by his ophthalmologist. Dr. Voll had tested him with his ampoules, given him an injection with one of them, and he reported that his 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 or she will eventually run into problems.

While I was at UC Davis, I taught manipulation and acupuncture to some interested residents. A mountain man with 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 home welding, "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*.[124]

I matter-of-factly told the mountain man we could try acupuncture. A few neurosurgery residents were with me, and I matter-of- factly told them that the meridian down the front of the

[124] "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."

leg, is considered "Earth" by the Chinese. Matter-of-factly, I said that earth is supposed to cover fire. If they wanted a little experience, I'd show them the appropriate acupuncture points.

As I had during my first experience at USC, they self-consciously inserted the hypodermic needles because we didn't have the traditional ones. My first patient was a woman with a painful 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. I returned about fifteen minutes later without preconception. She had 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 tooth extraction 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. The episode of the needles had faded as I asked him how he was. He looked at me strangely. "Funny thing. Remember those needles? Haven't had any burning since."

My experiences leave me with the 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 THREE

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

September 5, 2005

I have been maybe finally editing this book maybe for the past month. I wrote much of this chapter over ten years ago. Much will be revised.

In my opinion I was born to write this book. Many times in its preparation, I was warned not to straddle, not to write both for the individual who desperately needs a navigation aid in a health system that has other interests than valuably informing people in pain whose condition is not life threatening – and to write to professionals, as well. Some editors almost promised to publish if I would make their lives simpler by giving them a book that has a clearly defined section in a book store to put it onto. That was very important to them. In fact, one editor was infuriated that I had written a book so "comprehensive." I could only sit mute as she ranted. I did try to help, but each change only neutered the content, and didn't get it published anyway.

It may be only my problem, but straddling as I have is the only way I could accomplish what

I believe I have to. Yet, if I did have to choose, I would have chosen *you* because you need to know – because the pressures for change do not yet exist within the medical establishment, so change must originate from who medicine is supposed to help - *you*. This is true despite the fact that the medical soul today is desperate – however desperation is a chief ingredient of revolution.

The fact that *Release From Pain* will be offered on my website, within a dynamic structure, also gives me the opportunity to keep it alive and current. (If I do get a publication offer, we will see what changes will be requested.)

The story is told that Helen O'Connell was once asked what it was like to be a singer during the Big Band era. She'd replied, "*Had I known it was an era, I would have paid more attention."*

Please pay attention to what is happening in health care.

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 were little whiffs of smoke that something was 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, 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 deeply 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 over forty years. Fast in my movements, often being told, "Slow down," enormously energetic, I was "Roadrunner." Over time, roadrunners accumulated in my office: paintings, made of wood, leather, whatever.

The man cured of his chronic, disabling foot pain when I examined their joints 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 symbol can represent all that is near-ministry about medicine, or it can just be a sneaky snake on a stick.

If you could sense a refrain 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..."*

If we do not resolve the Flaw now, then when? Who will have better reason? How many more have to be hurt?

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 delivered a speech to the British Medical Association on its l50th 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 some thing 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 training with a Fundamental Flaw. It is especially difficult if the physician was successfully convinced (deluded) that s/he is a scientist, which, in

clinical medicine is a rare event. As much as some 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.*

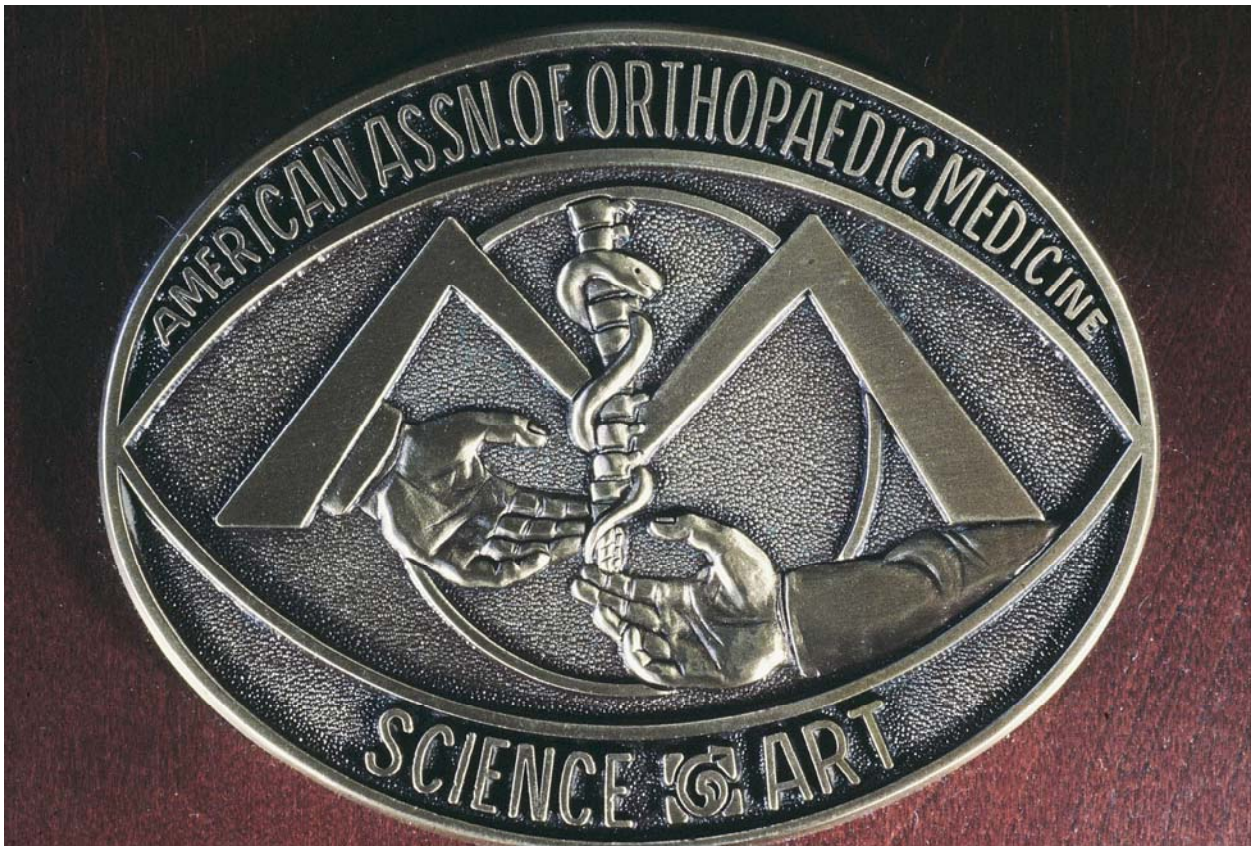
Organizations are always susceptible to the human weakness for status and self-interest. "*They"* are always around, and given opportunity, always move in. Then, the energy flow reverses. Instead of radiating, it sucks. The organization eventually withers as the purpose for which it was born dissipates.

In 1966, I was one of the founders of *The North American Academy of Manipulative Medicine* (NAAMM). Seven of us, all M.D.s, flew into New York from around the United States and Canada during one of the worst cold spells in the city's history. We met at 11:00 p.m. at the Waldorf Astoria. The energy in the room was high though none had any degree of manipulative competence. No osteopath, certainly no chiropractor, was invited. There was general sincerity, but one of them, with evident self-satisfaction, uttered that thereafter we would be manipulation's judges in the medical world.

I was the only "young man" there and was elected secretary and editor of the newsletter for the fragile first six years. I poured myself joyfully into it, but eventually the self-interest-dominated revealed themselves. Their unleashed egos reversed the energy, and eventually NAAMM withered and died some years after I was gone. A history of the world could be written around blood lust for

power and recognition. There are so few who will dedicate to the primary mission. There are so few who will battle when it is necessary to preserve principle. It was a painful time and another story that I will eventually relate of the website. Some of the photos are already there.

I founded another organization in 1980, *The American Association of Orthopaedic Medicine.*



It was extraordinarily successful early on. Because the idea is powerful, we had over four hundred physician members, allopaths and osteopaths, within the first two years, and it was time to offer membership to qualified chiropractors. It could have been the nucleus that, by now, would have changed the face of medicine, but blood lusted for power again. It is another story to be told so the history of orthopaedic medicine will be an honest one.

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, including the wise, deft chiropractor who cured the chiropractic student's elbow (though his symptoms had not persisted for "years."

. I hope Dr. Sportelli eventually reconciled his doubt. I offer two explanations, one of which I am certain: This book was destined. Fate delivered those particular cases. The other was selectivity. I don't manipulate everyone in pain. I had 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. Nevertheless, we *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 everything s/he 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 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 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 myriad of topics 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 to sit down and used me as an example of how not to respond. He never called on me again.

When a time is given, there may never be another. *What is not communicated - that must be communicated - has been deprived of its purpose! Communicate this*! Communicate it to all you know who are in some way associated with what I have discussed.

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.)

There is a very practical reason for ideals. They give you 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.

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."*

CHAPTER THIRTY FOUR

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 and associated concerns are 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 September 6, 2005 (The last time I wrote, it was November 12, 2001) in a world that is only slightly less divorced from outside influences than it was when the manipulative practice was in conflict around a century ago.

Change will only come from unrelenting social acknowledgment and the reassertion of character and principled effort among the professions.

These are my current thoughts about some specifics. We did it wrong. We can do it right. Make no mistake, *you* are important to accomplish this. This is not someone *else'*s responsibility. There are no *others* to do it. There are just ***us.***

Medicine will most easily and gratifyingly move towards resolution if the American Academy of Orthopedic Surgery commits to its responsibility towards resolution.

As I described early on, the ***"The Bone and Joint Decade, 2000 – 2010, for Prevention and Treatment of Musculoskeletal Disorders"*** is now in midstream. I will attempt to place this in the appropriate hands within the next few months, and I hope that it will be read as a contribution. The Fundamental Flaw is at the core of its entire effort. If I were asked to participate in any way with either of the organizations, my immediate response is, "Yes." I would be honored to do so.

I must comment that names are powerful. "Bone and Joint" is what surgeons call what they believe they are about, and it is the name of its major journal. What is obviously missing is reference to the "infamous" soft tissues – collagen – ligaments, tendons and fascia. You now well know that their problems are absolutely paramount in the commonness of what are called by habit and convenience *musculoskeletal* conditions. So the limited perception of the "Decade's" early-on perspective is obvious. The mind of it appears to have (comfortably) settled on the way 'things have been done.' Hopefully, the realization has happened.

What ultimately will count is the truth of the idea. I pray it will not be long before it is accepted.

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.

Resolution by whatever means will require the labor of reputable professionals. Young clinicians need to participate. The work will get down to reality when the speeches are over and 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, this must be brought to their attention.

From within, a number of avenues are already opened. A few medical schools are already associating with chiropractic. This is a quantum leap forward!

A relationship between the *Michigan allopathic and osteopathic schools* has been going on for years. I am not aware if the influence is diffusing. It is my understanding that their students associate during their pre-clinical first two years. If there has been a study concerning what the students concluded from their interrelationship, I am not aware of it. It would be a source of invaluable information.

In other places, *The University of California at San Diego Medical School* broke new ground with its seminar on the sacroiliac joint, as did the *University of Wisconsin Medical School* with its course on prolotherapy.

A number of other medical organizations focus on these issues. I founded *The American Association of Orthopaedic Medicine to* assemble clinicians to significantly influence this purpose. It might still come to fruition. *The American Academy of Pain Management*[125] is a dynamic, multidisciplinary organization that attends many of these issues. There are others, and I have already commented on some of them.

125

American Academy of Pain Management, 13947 Mono Way #A, Sonora, CA 95370 Office: (209) 533-9744 Fax: (209) 533-9750 aapm@aapainmanage

Initial inter-professional meetings will be a welcome beginning and starting with addressing the issue of common vocabulary. It will take money. There is no incentive among the pharmaceutical companies. Somewhere there is someone with a source who (will/may) be influenced and see the need and provide. May (he, she, they) be specially blessed. (The Bone and Joint Decade activities are likely already addressing this.)

It's easier to count money than measure suffering. *If statistics are believable, the current cost of medical care, for back pain alone, in the United States alone, annually, with the Fundamental Flaw unresolved, is "in the neighborhood of $100 billion."* It is not likely that the penalties of the Fundamental Flaw can be overestimated.

The specialty of radiology could well play a pivotal role. It is a mature specialty, attuned to change and not threatened by clinical implications. It is among the most scientific of specialties. Its practitioners are adept at absorbing new perspectives. They could take this in stride. Meetings between the radiologists of the professions could plant profound changes in thinking. (Again, it may already be happening.) Certainly, it is already being done individually.

In the early 90s, I read a few reports written by Dr. Tony Roitz, a radiologist in Chino, California. In them, he attempted to introduce a biomechanical vernacular: reconciling his radiographic findings with positional changes in the segmentation of the spine. I had not seen that from an allopath before, so I called him. He surprised me by not appearing to recognize its importance and near uniqueness.

He told me some medical groups that he consults for have chiropractors in them. He responded to my compliment by stating that, obviously, he did not read x-rays as experienced

chiropractic radiologists do. He did not have that exposure, but he had the desire to improve his understanding, and he was trying to adjust his thinking to absorb their view. Dr. Roitz is doing something important.

Our conversation started this idea concerning the potential for inter-professional radiology to be among the prime movers. They would achieve a remarkable goal if only they came to a mutually understandable vocabulary.

There are a number of well trained chiropractic radiologists ready to contribute. When Joe Howe, D.C., was Professor of Radiology at LACC, he turned out excellent chiropractic radiologists who reputedly met with their allopathic counterparts on even ground.

To the allopath, slight positional changes on x-ray may off-handedly be dismissed as artifacts or normal variants. Nothing encouraged them to think otherwise. To an osteopath and chiropractor, they may be important. But there is only one human mechanism. What is significant for one profession should at least be appreciated by the others.

There is a precedent. The "through the mouth" view of the upper cervical spine is universally accepted. X-ray is directed through a patient's open mouth for a clear view of the upper spine. It was a chiropractic innovation. There must be others.

I envisioned that the insurance industry would be greatly interested. Then one of them published how they were following the Deyo guidelines, so I offered them a copy of an earlier manuscript. I never heard a word.

In a more recent experience, I offered to visit one of the largest insurance companies to demonstrate how using *A Goodley Lift* will remarkably reduce their exposure to injury, especially by those who sit in vibration for a living. There was no one to listen to the message.

There was no provision for such savings and service. I was told there was plenty of money to pay for claims but none for considering such fundamental issues - at that pinnacle of influence in the health-care industry!

"*If you think education is expensive, try ignorance."* That is where some, or most, of them are now, but somewhere in the industry, there has to be some who care about such issues and comprehend how their organizations can greatly benefit. Of course, they are inextricably blended with managed care, but its financial interests parallel what these concepts and therapies offer.

While fee-for-service care was plagued by lack of *cost* controls, now care is managed with too much lack of *quality* controls. *When there is general realization that real resolution requires related* ***cost- effective-care****, the virtues of resolving the Fundamental Flaw will be self-evident.*

If managed care really wants to save money and not kill its golden goose, resolving the Fundamental Flaw is one of the first realistic steps it can take. Funding well-managed programs at medical universities could be ideal. What incentives might be practical to help achieve that is outside my ability to suggest.

Might orthopaedic medicine eventually become a specialty? It is possible. It meets the criteria of holding in itself a body of essential knowledge not engaged in by any other. Theoretically, it could develop through the assistance of *dedicated* osteopathic physicians who are most fundamentally prepared to extend its philosophy into specialty status.

Chiropractors are now powerfully asserting their reputable interests. They are already on hospital staffs and employed in medical clinics. But that does not imply that a *relationship* with allopaths really exists. At one HMO, at least, they were there because of patient demand while

the allopathic department head had no idea what they were doing. Of course, cohesion is happening elsewhere.

You – people in need - will always be the catalysts, and that is how it must be, because the point of all of this is *your* well-being.

I was amused by editors demanding that I provide a list of resources. This world of hands-on therapies has been moving increasingly faster each day of the past five years. You have a better idea what to look for for your needs. I can't do more.

While I was in my early editing this manuscript 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 after several months of treatment that had included prolotherapy.

For no apparent reason, Jim was suddenly in more pain than he could remember that began as he awakened two days previously. He'd already been seen in an emergency room, and they hadn't helped. When I heard his voice, I knew I had to see him immediately.

I opened a portable examining table in the dining room. Jim came in contorted and in marked pain. He could barely walk. A full breath, or a cough, shot sharp pain into his mid back.

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 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. Again, it was painful. I don't know why, because I've never seen it or done it before, but I placed my hands firmly on the front of his hips. I held him firmly on the table and asked him to cough again. He did, and 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 and completely pain free.

I cannot give a rational reason why I treated 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 don't know if it is repeatable, but it obviously is remarkably simple to do. After all this time, I have not done a study on it. That embarrasses me. Frankly, as I close this out today and read this, 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 stayed for about ½ hour, smiling and walking normally about the room. He left a very happy man.

Memorial Hospital of Glendale, Glendale, California, 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, especially one, was respectful, and I valued that greatly.

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 her and relieved a part of her pain with a muscle

energy technique on the bed. 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 lots and gotten used to it. Mimi was right. My practice is *Orthopaedic Medicine*. I am an *Orthopaedic Physician*. There are others. 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 permits 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 (and long-decided) titles till the very end when it emerged so naturally to link the ancient with posterity.

I think of a man I well met over twenty years ago who had recently sold his business for "lots of money" and who had come to my financially troubled Institute smiling graciously as he told me he was looking for something else to get into, and 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 professional and other battles I doubted I'd survive; my inventions were being treated shabbily -and he was asking me to help him find another business.

Right in front of me was my possible financial salvation and success - and I didn't see it and didn't for twenty years. (And he didn't clarify if, in fact, he was referring to associating with me. If he had, I would have cried at his feet in gratitude.) Yet, had 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 are the soul of this book. There are no coincidences. I wish all of what I offer will work out, but I have no doubt that writing this book fulfills my professional destiny.

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 but produce only a mouse."[126] History's greatest blunders happened from simple

[126] From a psychiatric book by Carl Menninger – Menninger Clinic

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 achievable.

The twenty first century has a futuristic sound about it. All sorts of advances may be imagined. *Principia Primum! Fundamentals First!* It would be far more honest entry if we are 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's Ulysses

APPENDIX A

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
0542 460 992
goodley@zahav.net.il

Current Practice	Private Practice – Orthopaedic Medicine Telz Stone, Israel
	Consultant Tel Hashomer Rehabilitation Hospital, Ramat Gan, Israel
California License	A19122
Israel License	74205
Birth date	February 6, l932
Education	University of Southern California, B.A., Cum Laude, l955
	UCLA School of Medicine, l959
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

Board Certification:	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 **O**steopathic 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 2001-2
Visiting Professorships: (Orthopaedic Medicine)	Uppsala University, Sweden 1982 University of Auckland, New Zealand 1984
Inventions:	The Goodley Polyaxial Cervical Traction\Mobilizer System 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

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, l973	"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, l973	"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, l980 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	Manipulation in Physiatric Practice PM&R Resident Staff Loma Linda Medical Center Loma Linda, CA
6/10/92	Musculoskeletal Diagnostics of the Cervical Spine Temporomandibular Joint Clinic White Memorial Hospital, Los Angeles
7/22/92	Musculoskeletal Diagnostics of the

	Cervical Spine - Goodley Polyaxial Traction Temporomandibular Joint Clinic White Memorial Hospital, Los Angeles
9/16-22/92	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
1/17/96	Foundations of Clinical Orthopaedic Diagnosis & Treatment Kulpat Cholim Klallit Jerusalem, Israel
2/14/96	Foundations of Clinical Orthopaedic Diagnosis & Treatment Meier Hospital – Department of Orthopedic Surgery Kfar Saba, Israel
4/28/04	Muscle Energy Technique The Israeli Society of Musculoskeletal Medicine "Myofascial Pain & Disability" Tel Aviv
Scheduled 12/15-15/05	Synovial Entrapment Syndromes – Concepts & Treatment The Israel Medical Association Annual Conference Physical Medicine & Rehabilitation Tel Aviv, Israel
11-12/05	Muscle Energy 16 hour course for P.T.s Maccabee Health System

PAPERS PUBLISHED

Acta Thermographica, January 1980

"Musculoskeletal Pain and Thermography"
"Thermographic Findings in Patients With Musculoskeletal Pain Complaints"

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)	14th Annual Meeting American Association of Orthopaedic Medicine Las Vegas, NV
8/13-15/99	7th 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

Letter from Jane Presta, pain patient 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

June 30, 1994

Dear Dr. Goodley:

I hope you don't mind my writing to you again. A friend of mine has agreed to type this up so I feel free to ramble on.

I have repeated Dr. Jean Marie Charcot's quote to many people. It amazes me that in 100 years, physicians haven't improved in that regard.

You mention Peter Edgelow in your book. He is a wonderful man as well as an exceptional Physical Therapist. I am alive today because he recognized in one visit what my doctor and my pulmonary specialist didn't in over 10 weeks and many visits, and that wasn't why I was seeing him.

Years ago, while spraining an ankle, or jamming a finger playing softball, I looked for an orthopedic doctor. I could only find orthopedic surgeons. I didn't need a surgeon, just a doctor in the orthopedic field. I was too embarrassed to ask how to find one and finally just went to the orthopedic surgeon. I was glad when sports medicine physicians started popping up. It was interesting reading about the advent of orthopedic surgeons and the need for orthopedic medicine in your book. You are so right.

I spent 2½ years being sent from one doctor to another because of a problem I was having with right shoulder, arm, hand and neck pain. I was unable to work during this time because of the excruciating pain. At least the doctors didn't suggest the problem was all in my head. They just couldn't figure it out. Each would try different drugs, physical therapy, etc.,

until they realized it wasn't anything they could diagnose, and then they would refer me on to another physician. One doctor very positively told me I had a pinched nerve in my neck; he could remove it, and in six weeks I would be fine. "Great," I said, "go ahead and operate." Six weeks passed after surgery with no improvement. The doctor then said it takes six to eight weeks, so I waited. Ten weeks later, he said there must have been an additional shoulder problem and sent me on to a shoulder specialist.

Several doctors later, I ended up at the University of California at San Francisco where the orthopedic surgeon sent me to physical therapy. The physical therapist who specialized in neck and shoulder problems couldn't figure me out so in turn had me see one of her colleagues. It was that therapist who changed my life. She had attended seminars/classes given by Peter . and was familiar with Thoracic Outlet Syndrome. She said she would treat me as though that is what I had, and she wrote a letter to my doctor documenting this. For the first time in 2½ years I had some relief. Would you believe, though, she got in trouble for doing this? My doctor called her superior and was angry that she "diagnosed" and had no right to do this since she wasn't a doctor. Needless to say, I quickly changed doctors to ones who are familiar with TOS. The first chapter of your book easily could have been written about the first nine doctors I saw!

I developed severe complications following surgery to help my TOS. I won't go into the details here, but it was Peter to the rescue! When I read what you said about the prescription from the (orthopedic) surgical resident, "Teach this woman to use her right arm!" I could fully understand him. My pulmonary specialist would have loved to write a prescription something like, "Teach this woman to breathe!" I saw him every two weeks and each time I was weaker and having a harder time breathing. He just kept telling me that people with only one lung do

better than I was doing. He never seemed to take my complaint of having a hard time breathing seriously. Finally, after the first time I saw Peter, he took a little more notice and it was still an afterthought that caused him to request a lung scan. He even said, "I know it won't show anything, but I'd sure feel like a fool if it did." The findings were that my "right lung was obliterated with blood clots." A few days later he apologized to me and said he'd been treating me "like a "hysterical female who wasn't recovering fast enough from surgery."

Near the end of your book where you quote from an except from the AMA - Minneapolis, I laughed out loud. Once again, what you have to say speaks directly to me!

Another thing you said means a lot to me, and may I take it out of context: If I had only one thing I could take from you it would be this: *"You have no right to make me feel uncomfortable...or confused."* In your book, that was the feeling patients are given by the doctors. Yet, because of your book I will never again let a doctor make me feel that way. Because of your book I have the courage to make physicians take my symptoms seriously, to make them look further, deeper, elsewhere, to find the problems. I won't let them stop at what they've been taught. I will make them look beyond!

In my first letter to you I wrote Capital Hill needs you. The reason for this comes from something near the end of your book...referring to managed health and what will happen to the people whose real and salvageable problems are not within certain limits... "Health must not be endangerable by policy."

I feel your book would be the perfect gift for the young person going off to medical school. Also, it would be a good book for all patients to read. We, the general public, need to know what good medicine can be. In this day, we are more aware of the fact that doctors are

human. We do question them more, but we have only scratched the surface. Your book will enable us to know what to accept and what to expect from doctors.

I would hope all of the physicians and other care givers will read your book with a truly open mind. They would benefit so greatly, and their patients would benefit so greatly.

Let's be realistic, should half the people reading your book actually realize what the fundamental flaw is and decide to do what they can to alleviate it, we would have a medical revolution. How wonderful for all of us.

I sincerely hope your book is published soon. I will keep abreast of its progress through Peter. When you see a run on sales in Northern California you'll know it's me.

Sincerely,

Jane Presta

Perspective of John C. Porter, M.D., a friend, a former student while a resident physician (John's professional life has also been challenging. He wrote this in the mid 90s.)

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.

Communication from J.C. Keating, Ph.D. to Lou Sportelli, D.C.

From: JCKeating@aol.com
To: PMP@aol.com
Cc: DrGoodley@earthlink.net; samhomola@panamacity.com
Subject: Re: Sportelli response - Medical Students Lack Sufficient CAM Training
Date: Monday, October 15, 2001 12:26 PM

Hi Lou,

I caught a piece of your feedback re: complementary & alternative medicine (CAM). In a message dated 10/14/01 8:35:00 AM, PMP writes:
Rob, they have a similar program of CAM education at Harvard headed by Dr. David Eisenberg. It has been ongoing for many years now and essentially they do the same thing as others in the country, try to educate the medical students about various "alternative" health care practices. The problem with all of this, in my opinion, is the fact that CAM is everything from Acupuncture/Aromatherapy to Zen. It covers the waterfront. Most of the CAM procedures can be done by a medical physician hiring an acupuncturist, a massage therapist, a yoga instructor, a nutritionist, a herbologist, etc.
These are tangible services which can be added to the "medical armamentarium" . Chiropractic on the other hand is a licensed discipline in every state, fully able to be practiced without the oversight of an MD and essentially presents a different paradigm of health care. It is critical that the chiropractic community not get totally caught up in the CAM issue or we may find that we are treated as "ornaments" on the medical Christmas tree.

I believe that what needs to happen in medical education with respect to chiropractic services is something akin to Paul Goodley MD's concerns: they need to learn a whole lot more about the musculoskeletal system. In fact, the right chiropractor would probably make an excellent instructor in the medical faculty. Medical students would come to appreciate the knowledge base and skills of the DC through contact with their own (DC) faculty. The goal would not be to turn the MD2Bs into chiropractors, but to help overcome the "Fundamental Flaw" in medical education that Paul wrote about. IMHO, chiropractic care may be complementary & alternative in many ways (e.g., internal disorders, mental illness), but it ought to be a "mainstream" component of medical education when it comes to the musculoskeletal system.

How to implement such change in the typical MD curriculum is another issue. I had hoped to see something along these lines emerge from the Florida State possibility, but it seems the University had already decided to keep the MD and DC programs widely (geographically) separated.

JCK

Joseph C. Keating, Jr., Ph.D.
6135 N. Central Avenue
Phoenix AZ 85012 USA
(602) 264-3182; JCKeating@aol.com

APPENDIX B

Continued from Chapter 21

. *The Social Transformation of American Medicine* by Paul Starr, a Harvard sociologist, provides excellent perspective.

From the first chapter:

> "The Dream of reason did not take power into account. The dream was that reason, in the forms of the arts and sciences, would liberate humanity from scarcity and the caprices of nature, ignorance and superstition, tyranny, and not least of all, the diseases of the body and the spirit. But reason is no abstract force pushing inexorably toward a greater freedom at the end of history. Its forms and uses are determined by the narrower purposes of men and women; their interests and ideals shape what counts as knowledge."

Starr's history of how allopathy evolved in America is consistent with other texts. Medical education commenced with students paying their teachers directly. Notable changes only began at Harvard in 1871. Then there were almost two hundred freestanding so-called medical schools. In most, anyone with the entrance fee would likely be acceptable. The

academic year may have been only a few months. Stringent standards were almost unknown. It was not until six years after osteopathy started that, only at Harvard, 48% of medical students even had college degrees. It was not until 1893, when Johns Hopkins Medical School opened in Baltimore, that all students had to be college graduates and undergo four years of training. It would be almost twenty years before general change would develop.

From Starr:

> "(by 1900) Despite the new licensing laws, the ports of entry into medicine were still wide open, and the unwelcome passed through in great numbers. At proprietary schools and some of the weaker medical departments of universities, the ranks of the profession were being recruited from workingmen and the lower middle classes, to the dismay of professional leaders, who thought such riff-raff jeopardized efforts to raise the doctor's status in society.... Medicine would never be a respected profession --- so its most vocal spokesmen declared --- until it sloughed off its coarse and common elements."

During much of that time, as standards purportedly increased, they were as easily circumvented. By 1910, one hundred thirty one schools still were graduating M.D.s. The American Medical Association established a grading system on them but would not violate its code by making the list public. It invited *The Carnegie Foundation for the Advancement of Teaching* to independently investigate. It selected Abraham Flexner, a young chemist, to survey all the schools.

From Starr:

> "Though a layman, he was much more severe in his judgment of particular

institutions than the AMA had been in any of its annual guides to American medical schools. The association was constrained by possible suspicion of its motives; Flexner felt no such compunctions. Repeatedly, with a deft use of detail and biting humor, he showed that the claims made by the weaker, mostly proprietary schools in their catalogues were patently false. Touted laboratories were nowhere to be found, or consisted of a few vagrant test tubes squirreled away in a cigar box; corpses reeked because of the failure to use disinfectant in the dissecting rooms. Libraries had no books...."

APPENDIX B

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 there is always the "other side" that suppresses the energy to really look, and thus it has been so 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 were sufficient to condemn it, and, in fact, it did because "unscientific" is imbued with so much power.

For all that, what "science" really means needs to be resolved here because throughout this conflict it has been invoked as the prime reason to deny manipulation's merits. The ideal of science implies an appropriate skepticism of unproven and unambiguous rules of investigation. It implies the fearless search for clear criteria for what constitutes proof.

But medicine is never pure science. A multitude of other factors known and unknowable are involved. And any product of thinking, called science or not, is susceptible to error, attitude, prejudice, bigotry, self-defensiveness and envy. The self-perceived need to protect the veneer of one's professional status is near overwhelming and unavoidably disturbs rational thinking.

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. W*e 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 job is to understand the abnormal process as 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 must 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. During the treatment of an active disease or injury, there is no opportunity to disappear for unlimited time into the laboratory to settle some problem. We are in the trenches, and the ideal is always elusive. No warranty can ever be implied. We can give no guarantees except the promise to do our best. The final results of our treatments are truly out of our hands. We perform treatments. We monitor. *But we never heal*. I believe that only God does that. Concerning my responsibility, my dominating question at the end of the day is this: "From the decisions I made concerning my patients today, will I sleep tonight whatever the result?"

Amidst the 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. Concerning the manipulative therapies, hiding behind "science" almost always arose from ulterior motivation to assure they were discredited.

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 recently published in the October 8, 1998 issue (volume 339, number 15).

The lead article, in particular, allegedly concerns the efficacy of manipulation. It compares "Chiropractic Manipulation" against two "therapies" – a particular technique of physical therapy (MacKenzie) 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 of such papers 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 and will discuss my concerns shortly.

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) and that condemnation, even merely implied, through statistics devoid of allowance for individuality in

the case of manipulation 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 such statistics. Pre-medical education stopped teaching the skills required decades ago. Life just got too busy. Or they may know how, but lacking intimate knowledge of the subject, become so engrossed in the irrelevant that they miss the essence. Most doctors may find time to only scan the summary where conclusions that don't seem to need reflection are particularly gratefully accepted. The consequences of such summary judgment, however unrealized at its inception, 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 it 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 a 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 stripped of its presumed innocence.

“Anecdotal” gets only sidelong glances, is almost a pejorative, a code word for a suspect event not acceptable for serious discussion. 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 has historically been *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” became a mantra that assumed to elevate the critic to the status of scientist. George Will says it better[127]

The generally accepted benchmark of scientific investigation is the *controlled study* that alleges science's rigorously disciplined approach, 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.

[127] (Newsweek, November 14, 1994). He defined anecdotal as "today's preferred description of inconvenient evidence. A multitude of anecdotes make a pattern..."

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.

Only in the last decade is the placebo beginning to be appreciated for what it really is[128] – 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 whatever was offered in trust. From that faith in the healer, the body released "*endorphins"* (naturally produced morphine like substances) that relieve pain, promote rest and enhance healing. All scientific studies have to account and balance for 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 and much else. But as I have alluded, regardless 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 80s 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 the conclusions the medical researchers had extracted and published from them.** Those

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[128] An excellent monograph that discusses placebo: Wall, Patrick. PAIN: The Science of Suffering. Columbia

cases involved very 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. Individual anatomy, the influences of other injuries, associated conditions, marked variability in how manipulations are performed, make strictly scientific-type statistical analysis extraordinarily difficult.

There are a number of types of manipulation. They work in different ways. One cannot currently predict which person may respond particularly to one of them. Frequency of application is a major variable: When? How often? How much? All are variables that are inherent in the therapy and can only be considered theoretically.

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 they couldn't provide for patients whose problems were within their spheres of alleged competence.

For many, 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 (had) 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 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, anticonvulsant medications are regularly used for certain types of pain. Thalidomide, a sedative, produced many thousands of children with limb defects before its affect on pregnant women was realized. Years later and serendipitously it is now realized that it is remarkably effective against major manifestations of leprosy. Now new AIDS drugs are approved before rigorous study because people are dying. Later, sometimes much later, the documentation may, or may not, catch up.

Still, manipulation remained medicine's scapegoat - for "lack of science."

Many studies concerning manipulation have been conducted, regardless. 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.[129,130,131,132,133,134,135,136,137,138,139,140,141,142,143,144,145,146,147]

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[129] 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

[130] Anderson RM, Meeker WC, et al. A meta-analysis of clinical trials of spinal manipulation. Journal of Manipulative & Physiological Therapeutics 1992; 15: 181-94

[131] 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

[132] Assendelft WJJ, Koes BW et al. The effectiveness of chiropractic for treatment of low back pain: an update and attempt at statistical pooling. Jour Jrnl of Manipulative & Physiological Therapeutics 1996 (Oct); 19(8): 499-507

[133] 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

[134] Hadler NM, Curtis P et al. A benefit of spinal manipulation as adjunctive

The papers that minimize or deny the value of manipulation tend to focus on a non-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

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therapy for acute low-back pain: a stratified controlled trial. Spine 1987; 12:703-6

[135] Hsieh CJ, Phillips RB, Adams AH, Pope MH. Functional outcomes of low-back pain: comparison of four treatment groups in a randomized controlled trial. Jo Journal of Manipulative & Physiological Therapeutics 1992; 15: 4-9

[136] 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

[137] 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

[138] 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

[139] Nansel DD. Peneff A, Quitoriano 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

[140] 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

[141] 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

[142] 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

[143] 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

[144] 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)

[145] Shekelle PG, Adams AH, Chassin MR, Hurwitz EL, Brook RH. Spinal manipulation for back pain. Annals of Internal Medicine 1992; 117: 590-8

[146] Triano JJ, McGregor M et al. Manipulative therapy versus education programs in chiropractic low-back pain. Spine 1995; 20: 948-55

[147] 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 &

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 none that took the benign back pain group *and then carefully identified those with findings that suggested the need for manipulation and then divided those into treatment and 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 then 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, with Ozzie Hansen and others. Still, statistical study is often quoted as the holy grail and sounds sacred to the unacquainted.

Statistics are, of course, important in the real medical world when they are honest and applicable. But they must not obstruct that individual patients can rationally provide a

sufficiency of their own controls that have relative value, that avoid the dilution problem, sample imprecision, and numerous other factors.

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 *Murphy's Law 2000* (in the title, the 2 is inverted) *What else can go wrong in the 21th century*! Author, Arthur Bloch: GRIFFIN'S LAW: *Statistics are a logical and precise method for saying a half-truth inaccurately.*

Even when studies have, indeed, shown earlier improvement in a group of patients who have received manipulation, the traditionalist conclusion tends to demean nevertheless with a comment that it was only "early-on" and that eventually, *statistically*, the groups were similar. But even from that "conclusion" *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" of faulty biomechanics 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. (And again, now in 2005, when emergency medications were withheld from a group of cardiac patients to determine the mortality rate as compared to a treated group.)

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).* Once the terrible sequence starts, it can be irreversible. The pain can be so devastating that the sufferer justifiably elects suicide. Even its possibility is a defined orthopedic neurological 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 prompt and sometimes 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 to *prove* it, and she proposed the first controlled study to demonstrate "once and for all" whether ultrasound had any effect.

So, in the name of "science," every "subject" in the study was jeopardized. Each either received the useless ultrasound or, as "controls," intentionally received nothing either. 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, weak egos that had to write a paper, and easily consciences easily compromised, the almighty god "science" had been appeased.

I seethed as she read the paper with obvious satisfaction and was on my feet raging as the only commentator from the large, otherwise passive audience (which infuriated me even more).

Passivity is a sign of remoteness to an issue as passion is certainly a sign of intimacy. I thought of the "old days," when there were doctors who dispassionately consoled themselves that, with all their ministrations of noxious purging and bleedings, they had to have done something right because, after all, before their patient died s/he had passed a formed stool.

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 already 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.[148]

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.[149] It is a remarkable book within which the battle between the conflicting ideologies in health care is seen in a brilliant light.[150] Summarizing one aspect, the

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[148] The basic instruments of the surgeon are the scalpel and hemostat. 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. Where anyone can see the need for the clamp, so the 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 immediate and always visual. 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 likely be visible.

[149] published by Tapestry Press, copyrighted 1988.

[150] Dr. Black's attack on the presumptuousness of the "double blind" method is relevant here. He lucidly explains how, by their very design, these studies are designed to fail to provide the proof they purport.

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.[151]

Allopaths (had) never (or hardly ever) study or refer to the osteopathic or chiropractic literature. Obviously their own dominates their thinking, a big reason for my concern about the NEJM paper this year. This is a critically important issue I will illustrate as I now begin to wrestle Dr. Deyo’s influential and damaging conclusions.

Chapter Six is titled, *Medicine and the Context of Helplessness,* the subtitles: *The Physiology of Helplessness; Provoking the Physiology of Helplessness; Can Double-Blind Studies Prevent Therapies From Working?; No "Paradigm" May Demand That Other Paradigms Meet Its Standards of Proof.* Chapter Seven is titled, *The Perils of Double-Blindness.*
Dr. Black dissects the conditions on which the assumptions of the double-blind experiment may betray themselves thus subverting the experimenter's intentions. Numerous examples from nature show that the intent to assert power against the subject of the experiment can result in serious counter reaction. He coins the phrase, *The Whoops! Factor* --- the comeuppance for challenging "mother nature." He quotes from another report that concludes, "Nature has its own laws and may not allow intrusion without revenge."

[151] Another example was given by Norman Cousins' experience. In his first book, *Anatomy of An Illness,* he 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.

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.

THE DEYO CONTROVERSY

The internationally reputable *Journal of the American Medical Association (JAMA),* as recently as the August 12, 1992 issue, published a paper[152] whose senior author is Richard A. Deyo, MD, MPH **(**Master of Public Health).

The low back pain problem is so immense that it commands great attention. In the United States alone, annual cost estimates (early 1990s) vary from $80 - 200 *billion* depending on what is included. Whatever the real number, it is astronomic and increasing. Its deleterious effects on quality of life cannot really be calculated. 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 regarding the efficacy of joint manipulation from published studies[153]

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 broad professional experience in the treatment of low back pain from which he might have drawn independent conclusions. He publishes 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.

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[152] *The Rational Clinical Examination --- "What Can the History and Physical Examination Tell Us About Low Back Pain?*

[153] Conservative Therapy for Low Back Pain: Distinguishing useful from useless therapy. JAMA 1983: 250;1057 - 62.

To me, it is a 'tangled web,'[154] but his writing is clearly influential, as evidenced by his recent publication in NEJM. This is cause for concern because the authorities he cites represent *allopathy's* (recent) view about manipulation. So he circles the loop of the controversy in a manner that is likely not evident to the casual reader. *Unwittingly he declares the full consequences of the Fundamental Flaw by stating,* **"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 more than 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 that authority, practicing M.D.s can rest more at ease and assume that, under such circumstances, they are justified in providing the host of nonspecific therapies that are now the general rule. Despite the fact that neighboring professions claim that they do not have nearly that degree of difficulty in ordinarily coming up with a diagnosis from which to begin what they consider**

[154] "Oh, what a tangled web we weave; when first we practice to deceive." Sir Walter Scott

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 is accountable to the rejection of the thinking involved in manipulative approaches.**

Despite the title, the authors' conclusions are distinctly *not* "Rational," 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."

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 neurological 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. But it is difficult to conceptualize such a "serious" disease that does not offer some rather precise evidence, and it does not fit with "weak associations in most such cases."

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 lines are joined in question (3): *Is there social or psychological distress that may amplify or prolong pain?"*

From the inherently self evident, Dr. Deyo leaps wildly into the abyss with a question so premature, no science can resuscitate its mockery of the diagnostic intent itself. **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)!

Precipitously questioning motivation is repugnant! Except in demonstrably bizarre cases, psychologically based questions may only be appropriate after the fullness of the physical examination has been explored!

(3) is among the most despicable consequences of the Fundamental Flaw and should have been unconditionally condemned!

Despite grossly inadequate data, *they*, the ones who feel defended by such a question, feel free to focus attention on the possibility that you have causative emotional difficulties. **The attention shift gratefully relieves their collective mind about having possibly missed something - and having to search for it. Instead, your mind is put on trial.**

Then *they* may attempt to justify their professionalism by prescribing *education*:

psychological testing, “back schools” and mind game skewed pain clinics with categorical answers-to-all-questions. The 80’s, when those practices peaked, was a time of too frequent warfare for me.

I do not demean psychology! It was my major in college, and I continue to study it. It’s the matter of priority. Whether CMA,[155] or otherwise, there is no justification in harboring psychological suspicions about reasons for your pain if you haven’t been fundamentally examined! And I assert that premature psychology’s primary justification is its illusion of defense against responsibility for the Fundamental Flaw. Yes, there are hypochondriacs and all other emotional sorts, but their unfortunate burdens did not come with absolutions 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 it 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 - 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 debacle. 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, they delved heavily in “statistical analysis.” (check it out)

[155] Cover My Ass

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 realizing it.

Such issues were remarkably elaborated in a TV series, released in 1993, called, "*Healing and the Mind,"* with Bill Moyers. The series explored the hazards of falling into traps by unwittingly mixing attitude and ego with indulgence for science.

Moyers[156] 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 realize 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.)

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

[156] This should not be construed as endorsement of some of his other works.

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 a millennium, at least, 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, so there must be others. One of their hurdles will be to realize the limits of the relevance of the isolated statistical.

Since the implicit design of statistics is to impress a point, there are always those who exert themselves to exploit it. People are well paid to successfully lie with figures, and there seems no end to their cleverness. Setting aside the decades of alleged statistical studies by the tobacco industry, let’s glance at real power - Nuclear Power.

The problem was, and is, that the power of fission is frightening. Overwhelming concentration of power, from whatever source, 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. The available statistics are (conveniently) skewed. Many variations could have

contributed to the known bottom line. Those who lived longer could have been genetically pre selected - the survival of the fittest. The limitations of the values in the studies were not obvious in the statistics the nuclear industry offered.

Then in 1979, the *Three Mile Island* disaster happened, and again statistics had to dominate, and they continued 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 reports.

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 concludes there is no relationship.

A lawsuit was filed to disallow the report because the investigators were fiscally associated with company's that manufacture the product. A comment was made that eventually they had to go "all the way to Canada" to presumably find an honest voice. Then further inquiry revealed he also had financial dealings with the companies. None of that proves dishonesty, but the problem is older than the Bible.

With statistics, every number, its source, its reliability, its applicability, on and on, 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 one unambiguously expose innate prejudice?

Obviously, none of the above is intended to generalize on the potential value of the

scientific method and statistical analysis. Two recently released crushing studies of incalculable magnitude amplify on that and the 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 (was) a stable 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 Veteran's Affairs and private insurers."[157] The paper, accompanied by an explosion of disclosure heard around the world, reveals the procedure is statistically a sham.[158] 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.

23 New York Times, July 11, 2002

[158] A Controlled Trial of Arthroscopic Surgery for Osteoarthritis of the Knee, Mosely, O'Malley et al, NEJM, Vol 347:81-88, July 11, 2002, Num 2

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