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Your source of information for Chiropractic BioPhysics®—The Science of Spinal Health

An Aspirin a Day May Take Your Vision & Hearing Away

Non-steroidal anti-inflammatory drugs (NSAID's) are widely used for general pain relief and specific inflammatory control after an injury. Additionally, there is an increasing number of people that are using specific NSAID's and aspirin for perceived cardiovascular protective effects. Of concern, there have been a number of scientific publications discussing the potential negative health effects of regular use of NSAID's whether for prevention, pain, or other use. Two recent publications have identified some serious negative health risks that appear to be linked to regular aspirin and NSAID use:

The Beaver Dam Eye Study[1]

In a longitudinal population-based study of age-related eye diseases, Klein and colleagues[1] examined the association of aspirin use with the incidence of age-related macular degeneration (AMD). They performed examinations every 5 years over an approximate 20-year period (1988-2010). There were 4,926 participants between the ages of 43 to 86 years. Study participants were asked if they used aspirin at least twice a week for more than 3 months; which they termed 'regularly'.

The study identified that 'regular' aspirin use 10 years prior examination was associated with late AMD with an estimated incidence of 1.76%

See An Asprin a Day on page 9

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The Passing of a Chiropractic Pioneer, A Family Man, A Dear Friend & Mentor to Countless

Dr. Sidney Earl Williams
March 18, 1928 - December 27, 2012

Most of the profession is already aware that Dr. Sidney Earl Williams, founder of Life University in Marietta, passed away peacefully in his sleep early Thursday morning the 27th of December. He was 84 years old. Visitation was set from 2 to 4 p.m. on Saturday, December 29th, 2012, at Mayes Ward-Dobbins Funeral Home in Powder Springs and services were held at 2 p.m. on Sunday, also at Mayes Ward-Dobbins, located at 3940 Macland Road in Powder Springs.

Along with his wife, Dr. Nell Williams, Dr. Sid Williams founded Life Chiropractic College in 1974, which became Life College and is now Life University. Twenty Two students attended the first classes in January of 1975. These students became known as the "*Day one class*". Under Dr. Williams' direction, Life Chiropractic College became the largest chiropractic college in the world with an 89-acre campus and more than 3,500 students.

On a personal note, for me (Dr. Deed Harrison), I was deeply touched by Dr. Williams loss. Though I met Dr. Williams just a handful of times and exchanged only simple cordial conversation; it is a man like him that keeps a person like me continuing to strive for excellence through Chiropractic principles, purpose, and passion. When I heard of Dr. Williams loss, I was reminded of one of my late father's (Dr. Don Harrison) favorite sayings: "*The person who says it cannot be done, should not interrupt the person doing it*"! Looking at Dr. Williams' life achievements I bet that he lived by this motto in some regard. In the end, Dr. Sid Williams did what few of us can but all of us strive for; he left

See The Passing on page 9

Reverse Causality and Whiplash Injury: Three Recent Reviews

Dan Murphy, DC— Private Practice of Chiropractic; Diplomate American Board of Chiropractic Orthopedist; Faculty Life Chiropractic College West; Vice President ICA 2003-2009;
ICA Chiropractor of the Year 2009

INTRODUCTION

Reverse causality refers to a direction of cause-and-effect contrary to a common presumption. ***Reverse causality*** is cause and effect in reverse. That is to say the effects precede the cause. The problem is when the assumption is **A** causes **B** when the truth may actually be that **B** causes **A**.

It is usually stated in published studies, by insurance companies, and by their representatives (lawyers, claims adjusters, IME doctors, etc.) that injured patients who seek compensation (ask for compensation, hire a lawyer, etc.) (**A**), have worse health outcomes and slower recovery rates (**B**). However, such adverse health outcomes do not consider or evaluate the concept of ***Reverse Causality***: "slower recovery (**B**) leads individuals to claim, seek legal advice, and litigate (**A**)."

The contemporary leaders in the research pertaining to injury compensation, health outcomes, and ***Reverse Causality*** are Natalie Spearing and colleagues from the University of Queensland in Australia. In 2011, they published a study in the journal *Injury*, titled[1]: **Is compensation "bad for health"?** These authors performed a systematic meta-review on this topic, which constituted the most comprehensive review pertaining to compensation and health outcomes through the publication date. In this study, the authors used 11 studies that met their stringent inclusion criteria and noted that 9 of them were of low quality and suffered from a number of methodological flaws.

The studies presented in this review support these concepts:

- Studies that claim that those suffering from chronic problems following whiplash injury do so in hope of gaining financial compensation have methodological flaws.
- The best methodologically done studies show there is no association between litigation/compensation and recovery from whiplash injury.
- It is wrong to claim that chronic whiplash symptoms are primarily the consequence of litigation and desire for monetary gain.

These authors conclude: "*There is a common perception that injury compensation has a negative impact on health status among those with verifiable and non-verifiable injuries, and systematic reviews supporting this thesis have been used to influence policy and practice. However, such reviews are of varying quality and*

See Reverse Causality on page 24

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Foot Posture and Foot Orthoses— The Lost Connection? Part II

Dr. Ed Glaser, DPM
Dr. Glaser is the President and developer of Sole Supports orthotics.

INTRODUCTION

Previously, the midfoot was modeled as one rigid segment based on the assumption that negligible motion took place within the midfoot.[1] We now know that movements including walking and slow running involve considerable motion between midfoot bones.[2-4] With this knowledge of midfoot motion it is logical to consider these motions in any attempt to control the foot with an intervention such as a foot orthosis. Perhaps there is evidence that returning the focus to the midfoot, medial longitudinal arch and plantar vault, could yield measurements that relate more to the dynamic gait cycle and result in improved clinical outcomes.

One recent attempt called Foot Posture Index (FPI) was designed to be a valid, simple and clinically useful tool. Its most recent version is based on 6 static foot morphology criteria (talar head palpation, curves above and below the medial malleoli, inversion / eversion of the calcaneus, bulge in the region of the talarnavicular joint, congruence in the medial longitudinal arch, and adduction/abduction of the forefoot on the rearfoot), and although there is some improvement in intrarater reliability and validity with this tool, there continues to exist significant doubt as to its intrerrater reliability[5] and applicability to dynamic function.[6]

We now know that movements including walking and slow running involve considerable motion between midfoot bones.[2-4]

Another attempt at quantification called the Foot Line Test (FLT) which is a measure of the medial prominence of the navicular in a mediolateral direction, was developed to investigate the relationship between foot morphology and injury development. The measurement of medial/lateral movement of the medial prominence of the navicular is primarily a frontal plane measurement, and so while FLT has been shown to be a reliable measure,[7] future work is needed to determine if this measure correlates with dynamic function.

DISCUSSION

The longitudinal arch angle (LAA) is defined as the angle formed by two vectors—one passing through the midpoint of the medial malleolus to the navicular tuberosity and the other passing through the midpoint of the medial aspect of the first metatarsal head to the navicular tuberosity (fig?). What is interesting about the work done with these angles, is that they are starting to reveal measurements that show good interrater reliability,[8] are prognostic of dynamic foot posture during walking and running and may have some value in predicting the risk of lower extremity injuries.[9,10] This is good news for the clinician who looks to the published research to confirm and validate his clinical measures.

It seems plausible that the closer the measurements get to a measure of the medial longitudinal arch and plantar vault of the foot, the more applicable they are to the dynamic gait cycle. This correlates with the knowledge that significantly more motion occurs in the sagittal plane during each step of the gait cycle when compared to transverse and frontal motion. Put quite simply, there is an accepted clinical relevance to the arch of the foot and its perceived posture—either low or high—and it may very well be that the closer a measurement gets to describing this posture, the more dynamically relevant it is.

Therefore a distinction is needed between those foot type classifications that focus on frontal plane measurements, and foot posture that is evaluated by the medial longitudinal arch or a three dimensional posture. Looking at some of the more recent measurements that have focused more on the medial longitudinal arch reveals that there has been progress with regards to defining more reliable, clinically relevant measures.

To date, much of the study of foot posture has included discussions of frontal plane orientations such as calcaneal inversion. Given the above mentioned evidence it becomes clear that more clinically relevant measures may be found in the midfoot and medial longitudinal arch. Accounting for the entire plantar vault may give us a better understanding of what changes in foot posture are relevant to our clinical decisions. In an ideal scenario, a measurement would be accurate, reliable, backed by clinical outcomes, describe the entire foot and perhaps most importantly predict the dynamic function of the foot.

So what is the ideal foot posture? The MASS (Maximal Arch Subtalar Stabilization) theory as proposed by Glaser et al[11] is designed to capture the foot in the most corrective posture. It is defined as the maximal amount of closed chain supination that is achievable for any particular foot at midstance, with the heel, first and fifth metatarsals in contact with the ground. The goals of this correction include:

1. adequate supination at heel strike
2. the forefoot makes full contact on the ground at midstance
3. the majority of forefoot load is on the first metatarsal joint at heel lift
4. the first MPJ is not limited in dorsiflexion

This posture is captured using a gait-referenced sequence with semi-weight-bearing loading. The casting method is the same for all feet though each foot yields a unique three dimensional shape due to unique anatomical variations and flexibility differences. It is based on the concept that if there is a corrected foot posture that is to be achieved, it needs to be emulated and induced directly by the intervention, in this case a foot orthosis. This direct intervention takes the form of a full contact, weight-calibrated, orthosis. Recent investigations have shown that foot orthoses based on this corrected position (or posture) provide relief of lower extremity musculoskeletal pain[12] and improved economy of gait.[13]

The MASS (Maximal Arch Subtalar Stabilization) theory as proposed by Glaser et al[11] is designed to capture the foot in the most corrective posture.

SUMMARY

Foot posture measurements taken in the MASS posture may prove more applicable to clinical decision making with regards to orthosis manufacture as they can be compared volumetrically to a pronated foot posture or relaxed calcaneal stance position. Knowing that there is an optimal foot posture that may be different for each individual, but based on the same reference points, logic follows that there is a spectrum of function (or dysfunction) and a zone of optimal control. Future writings and investigations will focus on the zones of postural control and their application to treatment with foot orthoses.

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See Lost Connection II on page 18

CBP® NonProfit, Inc. Research Update

Check Out Our Research Reference List Online at: http://www.chiropracticbiophysics.tv/cbp-research/

Paul A. Oakley, M.Sc., DC
CBP Research & Instructor
Private Practice New Market, Ontario, Canada

Chiropractic Biophysics Non-profit, Inc. is a 501(c)(3) nonprofit corporation dedicated to the advancement of chiropractic principles through scientific research. Dr. Don Harrison (deceased) and his second wife Dr. Deanne LJ Harrison (deceased) founded CBP research foundation in 1982; it was registered as CBP Non-Profit, Inc. in 1989 by Dr. Sang Harrison (Don's 3rd and final life's love). Through this organization Dr. Don and colleagues have published 140 peer-reviewed spine and Chiropractic research publications. Further, CBP Non-Profit, Inc. has funded many scholarships as well as donated chiropractic equipment to many chiropractic colleges; always trying to support chiropractic advancement and education. Dr. Don Harrison was the acting president of CBP Non-Profit, Inc. since 1982. Currently, Dr. Deed Harrison (Don's son) is the President of CBP Non-Profit, Inc.

Results of our studies have been published in prestigious research journals and presented at respected conferences around the world.

Results of our studies have been published in prestigious research journals and presented at respected conferences around the world. Your (Chiropractic donations) support enables us to continue important research and gives you a voice in the course our studies take. Join today, either as a regular member or member of the President's Circle. The result will be better chiropractic techniques, stronger chiropractic practices, and healthier chiropractic patients.

CBP® research consists of studies on a variety of CBP® technique related topics including:

- Spine modeling studies evaluating ideal and average human alignment variables,
- Spine biomechanics studies analyzing loads, stress, and strains,
- Posture modeling studies,
- Reliability of measurements and evaluation of patients (x-ray, posture),
- Validity of the measurements and evaluation of patients,
- Randomized trials evaluating technique outcomes
- Non-randomized trials evaluating technique outcomes,
- Case series studies evaluating technique outcomes,
- Case studies evaluating technique outcomes,
- Literature reviews and professional commentaries. **AJCC**

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Chiropractic Biophysics Non-profit, Inc. is a 501(c)(3) nonprofit corporation dedicated to the advancement of chiropractic principles through scientific research. Results of our studies are published in prestigious research journals and presented at respected conferences around the world.

Your support enables us to continue important research and gives you a voice in the course our studies take. Join today, either as a regular member or member of the President's Circle. The result will be better chiropractic techniques, stronger chiropractic practices, and healthier chiropractic patients.

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	Index Medicus = 92		
JMPT	54		
Spine	8		
Clinical Biomechanics	6		
European Spine J	7		
J Spinal Disord & Tech	3		
Archives Phys Med & R	3		
Chiropractic & Osteopathy	3		
J Electromyo & Kinesiology	3		
J Rehab Research Dev	1		
J Orthopedic Research	1		
Spine Journal	1		
Clinical Anatomy	1		
Journal of Biomechanics	1		
	CINAHL& ICL = 39		
Chiro Pediatrics	18		
Chiro Technique	6		
J Chiropractic Education	6		
J Canadian Chiro Assoc	4		
J Vertebral Subluxation Res	4	2	
Chiropractic Sports Medicine	1		
Totals	131	2	

Secrets to Business Success

Eric Huntington, DC
Co-Owner Developer of the Chiropractic Business Academy
drhuntington@chirobizacademy.com

INTRODUCTION

Why is Business Success a Secret? There are many aspects to running a business which will determine its degree success. From delivering good service to honest dealing with your clientele to motivating staff—many of these things are "known" and applied broadly in our profession. But there are lesser known and applied business principles that really separate the proverbial men from the boys. It's these principles that remain a secret.

Secret #1

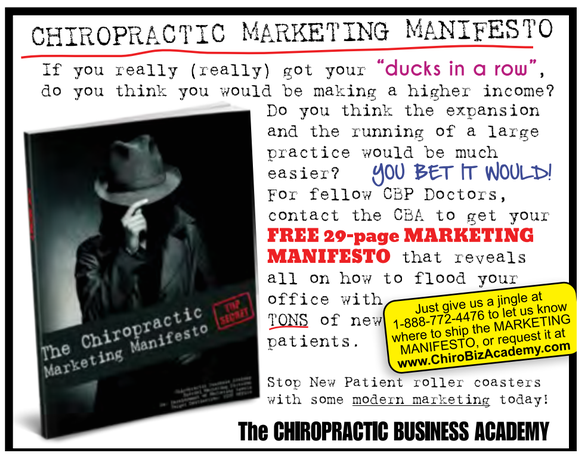
You must find out what is needed and wanted by the public, and then figure out how you can promote and deliver that item or service. This is best done by survey, formal or informal. How does this apply to chiropractic practice? Well, kick your ego to the curb and ask yourself this question, "Does the public want chiropractic?" I'm not suggesting blasphemy here, I'm suggesting we be literal. To be more specific, "Does an individual in the public want chiropractic?" No, of course not—an individual, to be interested in purchasing and receiving the services of a chiropractor, would want the BENEFITS of chiropractic.

The benefits of chiropractic are numerous and can include a healthy body, better movement, less pain, better posture, etc. It's worth listing out what you see as the benefits a patient receives when under chiropractic care. This list should be used to help formulate your promotion and technical delivery.

Secret #1 is that when you organize your promotion and delivery, you must do so keeping in mind what is needed and wanted by the public. As an example, this is why some of the marketing strategies taught by the Chiropractic Business Academy utilize massage. By survey, massage is a more needed and wanted service than chiropractic at the moment.

Secret #2

Secret #2 is that you must build a machine to promote and sell whatever is needed and wanted. By "build a machine" I mean you must hire or create competent personnel. Lines and flows must be efficiently organized so daily office traffic runs smoothly through the business. Training manuals are needed for reference by staff and to assist in training new staff. Written policy ensures that staff actions are coordinated and predictable. These are just a few building blocks taught by CBA that can assist in building your machine.



You know when the machine is built and operating, because it will run without you having to do most of the work. Depending on how you set it up, you may still work in the practice, wearing the hat of your choice, or you may phase yourself out completely. That's up to you.

At the Chiropractic Business Academy (CBA) we have helped thousands of chiropractors build their machine. Since we teach business skills, including marketing, sales, staff training, finance, leadership, etc, our program works for any practice style.

Secret #3

Once you have attained your ideal practice scene, you must continually monitor it using proper statistics. Secret #3 is becoming an expert at looking at what you are doing that works, and improving those things—and also determining what you are doing that is not working and making changes to those areas.

I think it's worth noting that more than half of the doctors that contact CBA for practice help are struggling to one degree or another. Good news is that we can help any doctor who is willing to learn and work. Our strategies are proven in every state and several countries for almost two decades.

Conversely, many doctors miss a huge opportunity because they don't think to contact us when they are doing well. This is the optimal time to hire CBA because we can help a doctor identify what is causing their success and strengthen it! In fact, the biggest practice gains from our program are routinely experienced by clients who were already doing well when they joined CBA.

Secret #4

Your own happiness in practice may be the most important factor. You get to define success in your life. You also get to decide how to measure your progress toward your goals. So this secret is unique to each of us. You may find it helpful to list out what would make you happy in practice. For me, my list includes things like:

- Providing high quality service
- Staff driven practice which I don't work in day to day.
- High personal income
- Freedom to choose when to work
- Freedom to travel

These are just a few examples from my list, but what is important is that you make your list and go for it! If you are certain that you can achieve you goals without the help of a consultant, that's great. If not, give my office a call and we can talk about how CBA can help you get there!

See Secrets to Business on page 9

Secrets to Buisness–cont'd from page 8

CBA's program is made to fit your practice and goals, not the other way around. Call us and let us know how we can help. We are so sure our program will increase your bottom line that we make that guarantee in our client service agreement.

Call my office today to schedule a free consultation to learn the exact system we have used to help thousands of chiropractors over the last 15 years!
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An Asprin a Day–cont'd from page 1

in regular users versus 1.03% in non regular aspirin users. Klein and colleagues concluded: "...regular aspirin use 10 years prior was associated with a small but statistically significant increase in the risk of incident late and neovascular AMD."

Hearing Loss from Department of Medicine, Brigham and Women's Hospital in Boston, MA[2,3]

In 2010, Curhan and colleagues[2] examined *"the independent association between self-reported professionally diagnosed hearing loss and regular use of aspirin, nonsteroidal anti-inflammatory drugs (NSAIDs), and acetaminophen."* The participants were 26,917 men between the ages of 40-47 beginning in 1986 and were administered a follow-up every 2 years for the duration of the study. They[2] found: *"For NSAIDs and acetaminophen, the risk increased with longer duration of regular use. The magnitude of the association was substantially higher in younger men. For men younger than age 50 years, the hazard ratio for hearing loss was 1.33 for regular aspirin use, 1.61 for NSAIDs, and 1.99 for acetaminophen".*

"For NSAIDs and acetaminophen, the risk increased with longer duration of regular use."

In a follow up investigation in 2012, these authors[3] prospectively evaluated the frequency of aspirin, ibuprofen, and acetaminophen use and risk of hearing loss in 62,261 women aged 31-48 years. In this study of females, the regular use (2 or more times per week) of ibuprofen and acetaminophen (not aspirin) was statistically linked with an increased risk of hearing loss.

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The Passing–cont'd from page 1

Chiropractic and the World a better place through his humanitarian, personal, and entrepreneurial achievements.

A Williams family statement Thursday morning (December 27, 2012) said: *"Doc was a person of immense presence and personality. He will be greatly missed by his family and many others whose lives he has touched."*

In addition to his wife, Dr. Williams is survived by his children, Dr. Kim Williams, of Powder Springs, and Dr. John Sidney Williams, of Pennsylvania; and three grandchildren. In lieu of flowers and cards, contributions on behalf of Dr. Williams and his family can be made to: The B.J. Palmer Historic Home Foundation, Inc. 1950 Old Concord Road, Smyrna, GA 30080 or at **www.bjph.org. AJCC**

In addition to his wife, Dr. Williams is survived by his children, Dr. Kim Williams, of Powder Springs, and Dr. John Sidney Williams, of Pennsylvania; and three grandchildren.

Fred DiDomenico, DC
Practice Coach and Mentor
www.elitecoachingllc.com

Learn to talk *to* a person *with* a subluxated posture at your ROF

INTRODUCTION

Most management groups teach you scripts of how to talk ABOUT a subluxation to a person at your ROF. What does this imply? You are talking about the facts of a suluxated posture to a person. It is as though the patient will understand the facts, see their x-rays and commit to care because it makes sense. Unfortunately it doesn't always seem to work that way, because there continues to be people walking out your door who, "just don't get it." Have you noticed talking MORE about the same thing doesn't make you more effective? Successful business people don't use the excuse, "they just don't get it," so why should we?

There are 5 steps a patient or any person who is going to make an empowered action toward a life change MUST progress through in a specific order.

People make decisions and buy based on an emotional progression of thought and feelings. There are 5 steps a patient or any person who is going to make an empowered action toward a life change MUST progress through in a specific order. These 5 steps incorporated into your patient management system will raise your percentage of people committing to your spinal corrective programs to SOAR HIGHER than ever before.

1. They MUST SAY they have a FULL spine problem:

Entrepreneurs solve people's problems for money. This means people MUST know their problem and be very clear. In a spinal corrective program we correct the WHOLE spine. Every spinal problem involves the WHOLE spine. The question is, *"Do you have the systems that have the HIGHEST percentage of patients understanding their WHOLE spine needs correcting?"* The next question is, *"Do they tell YOU they KNOW their WHOLE spine and posture is weak and subluxated?"* The fact is you can't tell them. They MUST Say it to you so they will understand. It's not what YOU say that matters. It's what THEY say that changes their behavior.

2. They MUST say, *"I don't want to be like this anymore."*

Out of our GREATEST crisis comes our greatest breakthrough. Before people are willing to make a change in their life they MUST want to leave the condition they are in. They must reach the point of ultimate frustration to change and be ready to move. Many patients that don't commit NEVER said, *"I don't want to be like this anymore."* This is a CRUCIAL EMOTIONAL decision people MUST make to be ready to move in another direction. They must have a strong emotional desire to change or they will stay in their misery, whether it is their pain or their disease.

3. Eliminate ALL other options:

Once a person makes the emotional commitment to move in another direction, they need guidance as to the proper direction to move. You don't achieve this by telling them *"What to do."* You achieve this by telling them *"What NOT to do."* Research shows that people with chronic back pain who do only exercise have a greater probability of becoming disabled than if they did nothing at all. This eliminates traditional physical therapy, medical care, yoga, Pilates, gyms, and all the other exercise related excuses, including, *"Getting a second opinion."* If you don't eliminate all other options, you will receive common objections to care and non-commitment at your ROF.

Elite Coaching provides these answers in systems so the HIGHEST percentage of people commit to corrective care by directing their actions.

4. They MUST know what they DO want:

Once a person is ready to move in a specific direction they MUST have a goal. Without a goal they do NOT know what they want and will not buy and say, *"I have to think about it."* The problem is you didn't direct them to have a vision in advance. "Where there is no vision, people perish," right out of your office.

See Learn to talk on page 25

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The CBP Doctor Institute

Where Chiropractors Come to Sharpen Their Skills and Learn Cutting-Edge Professional Updates.

Dr. Deed Harrison is an internationally renowned professional lecturer and spine researcher in the Chiropractic profession. Usually, he's on the road 35-40 weekends per year teaching doctors around the USA and Internationally. Accordingly, Dr. Deed has chosen Eagle, ID as the new head quarters for CBP Seminars Certification Training programs for Chiropractors. Part of the Ideal Spine Health Center's facility will be dedicated to a state of the art Chiropractic BioPhysics (CBP) training facility. Chiropractors around the world, interested in learning all aspects of CBP Technique, will come to Eagle, ID to acquire the knowledge and skills necessary to practice CBP and become CBP Certified Chiropractors.

This is a dream come true for Dr. Deed Harrison and his wife, Dr. Shirlene. It has always been challenging to train Chiropractors in the technicalities and nuances of CBP Technique in hotel conference settings without the necessary equipment (adjusting tables and instruments, traction equipment, exercise and rehabilitation equipment, and radiographic facilities). Also, the perspective of how a full scale CBP office looks, feels, functions, and operates is lost in the 'hotel convention center' environment. This new facility will solve these dilemmas. In the end, Dr. Deed is finally trying to slow down his trips a bit so he can stay close to home with his wife and two young children.

Fifteen-Twenty conferences per year for Chiropractic professional post-graduate education will be held at the CBP Doctor Institute (over the weekends so as not to disrupt patient care). Here, Chiropractors will learn the clinically proven, scientifically verified methods that have made, and continue to make, Chiropractic BioPhysics an effective approach to improving the health of patients. CBP is practiced the world over, and taught in numerous chiropractic colleges. And it's continually upgraded through ongoing clinical trials, improved equipment, and refined techniques.

Chiropractors will love the hands-on approach and the state of the art equipment of this new training center!

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+ $75 for CE	+ $75 for CE	Except Workshop

*	Jan **25-27**	**Module 2.** Drop Table Adjusting & Lower Ext.	Eagle/Boise, ID	**Hilton Garden Inn** CBP Room Rate: $109 by Jan 11	208-938-9600
**	Feb **22-23**	**Module 12.** Scoliosis 1: CBP Analysis & Management	Park City, Utah	**Hotel Park City** CBP Seminar Room Cut-off Feb 1	435-940-5010
*	Mar **1-3**	**Module 3.** Upper Cervical & Posture Instrument Adjustment	Eagle/Boise, ID	**Hilton Garden Inn** CBP Room Rate: $109 by Feb 15	208-938-9600
	Mar **9-10**	**Module 10.** Pediatric Analysis & Adjusting	Marietta, GA	**Life University**	
*	Apr **5-7**	**Module 4.** Cervical Rehab	Eagle/Boise, ID	**Hilton Garden Inn** CBP Room Rate: $109 by Mar 29	208-938-9600
	Apr **27-28**	**Module 13.** Whiplash Trauma & Management	Morristown, NJ	**Hyatt Morristown, NJ** CBP Room Rate: $129 by April 6	888-421-1442
*	May **17-19**	**Module 5.** Lumbar Rehab	Eagle/Boise, ID	**Hilton Garden Inn** CBP Room Rate: $109 by May 3	208-938-9600
*	Jun **21-23**	**Module 6.** Thoracic Rehab	Eagle/Boise, ID	**Hilton Garden Inn** CBP Room Rate: $109 by Jun 7	208-938-9600
	Jun **29-30**	**Module 1.** Basics X-Ray & Posture	Dearborn, MI	**Adoba Hotel, Dearborn** CBP Seminar Room Cut-off Jun 8	313-593-1234
*	Jul **12-14**	**Module 7.** CBP Hands-On Workshop - $795 for This Event	Eagle/Boise, ID	**Hilton Garden Inn** CBP Room Rate: $109 by Jun 28	208-938-9600
*	Jul **26-28**	**Module 8.** Posture Neurology & Health (Dr. Dan Murphy)	Eagle/Boise, ID	**Hilton Garden Inn** CBP Room Rate: $109 by Jul 12	208-938-9600
***	Aug **16-18**	**Module 14.** 35th CBP Annual	Lake Geneva, WI	**Grand Geneva Resort & Spa** CBP Seminar Room Cut-off Jul 26	800-558-3417
*	Sep **20-22**	**NEW Module 15.** Mirror Image Taping: Rock Tape	Eagle/Boise, ID	**Hilton Garden Inn** CBP Room Rate: $109 by Sep 6	208-938-9600
*	Oct **11-13**	**Module 11.** Advanced Full Spine Analysis / Management	Eagle/Boise, ID	**Hilton Garden Inn** CBP Room Rate: $109 by Sep 27	208-938-9600
*	Nov **15-17**	**NEW Module 16.** Scoliosis 2: Mirror Image Bracing	Eagle/Boise, ID	**Hilton Garden Inn** CBP Room Rate: $109 by Nov 1	208-938-9600
*	Dec **13-15**	**NEW Module 17.** CBP Rehab Mirror Image in Motion	Eagle/Boise, ID	**Hilton Garden Inn** CBP Room Rate: $109 by Nov 29	208-938-9600

Note: Conferences are Saturday 9am-7pm (Registration 8:00am); Sunday 9am-Noon. Except Dates:

* Eagle Seminars Held at Dr. Deed's New Facility - The CBP Doctor Institute: Fri. 4pm-8pm (optional); Includes 2 hours of Mirror Image Trainings; Sat. 9am-7pm Catered lunch 1:00pm-2:20pm-2 hours of Mirror Image Training; Sun. 9am-Noon. Limited to the first 50 attendees!

** Feb 22-23: Friday 2pm-8pm; Saturday 2pm-8pm (lunch included);

***34th CBP Annual: Friday 2pm-7pm; Saturday 9am-7pm; Sunday 9am-Noon.

The Why and How of Practice Outreach

Yurij Chewpa, DC, RFCCSS(C),
Co-Head Coach, Warrior Coaching and Warrior Coaching USA
(www.WarriorCoaching.org)

INTRODUCTION

At the recent Warrior Coaching Leadership Summit in Toronto, the topic of the various presentations was practice outreach. Specifically, the speakers were discussing "the why"—why do we do outreach, and "the how"—how do we reach out into our communities effectively to attract the sick and lost. What strategies work best?

It is not unusual to schedule 50 to 100 great patients at a 2-day screening, or schedule 20 to 30 patients from a 20-minute dinner, or corporate, presentation.

The strategies being discussed were screenings, corporate talks, and patient dinners. These three strategies have been around for decades and many falsely assume that they no longer work. Nothing could be further from the truth. While internet marketing, a social media presence, and a great website are crucial in today's wireless world, they do not replace getting outside of your four walls and personally interacting with the people in your community. Warrior Coaching clients receive hundreds of new patients every month using these tried and true strategies. As a matter of interest, if done correctly they are more effective today then they have ever been in the past. It is not unusual to schedule 50 to 100 great patients at a 2-day screening, or schedule 20 to 30 patients from a 20-minute dinner, or corporate, presentation.

DISCUSSION

One of the advantages of doing the outreach in person is that the doctor has to wrestle with the question of why they are doing it, and face the fear of getting outside of their four walls. Are they doing this talk to get new patients to build their practice and pay their bills, or are they doing it to save the sick people in their community? The better the answer as to why the doctor is doing the talk, the more people will come in for a checkup. If it is all about the doctor, the potential patients will sense this and they will stay away. If the people have an understanding that the doctor is there to serve them, then that doctor has the capacity to attract as many patients as he can possibly serve.

Once the doctor knows why they are doing the outreach, they need to know how to do the outreach most effectively. The same doctor can give the same talk to the same group and change the content by five percent and get a 30, 60 or 100-fold increase in follow-through. Likewise, we have had Warriors do screenings and schedule 100 new patients in a weekend, and a chiropractor at the same screening one booth over only schedule 10 patients.

"The why" or "the how"?

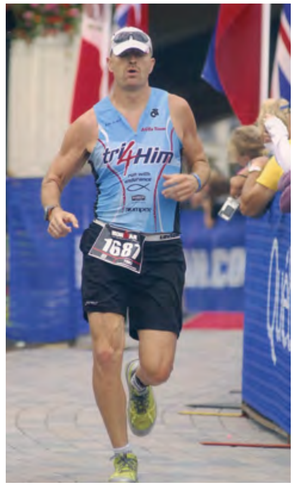
After the presentations at Leadership Summit there was a lot of discussion about what is more important, "the why" or "the how"? *Why* we do outreach, or *how* we do outreach? Obviously, both are important, but does either one have an advantage when it comes to building a lifetime, wellness, family, principled practice?

The why v. how question can be stated in other ways as well: inspiration v. perspiration, delivery v. content, passion v. procedure.

When it comes to practice, doctors have to have a certain amount of both. Everybody's personalities are unique. Some doctors gravitate towards why, others towards how. Both can be successful, it just looks a little different.

Here are my observations over the past 27 years of practice and 12 years of coaching. The *Why* practice tends to have more new patients and better initial conversion, but more early drop outs. This is because the doctor tends to be outgoing and passionate and has no problem attracting new patients, but lacks the procedures to start a patient well and doesn't have the process to guide them on their path of care. Practice tends to grow fast at the beginning, but plateaus because of lack of structure. This is a practice that tends to have a high missed appointment rate and high dropout rates, but can be high volume because the new patients are ever present. The inmates are running the asylum. By adding structure, this practice is ready to explode.

The *How* practice tends to have lower new patients and a slightly lower conversion rate, but a much higher retention rate, because the structure and procedures guide the patient through their months and years of care. Practice growth is slower because the doctor tends to be more fearful of outreach, and therefore new patient numbers are lower. Although practice growth is slow, it is more consistent and steady. The



inmates are not running the asylum like they are in the why practice, but it's hard to break into the asylum. By adding more new patients, this practice is ready to explode.

SUMMARY

As you can see, one is not better than the other, they are just different. The *Why* doctor is not mindful of structure and procedure. The *How* doctor is fearful of outreach. Both need to step into fear to reach their full God-given potential. Both doctors will have trouble

See Why & How on page 25

Randall Hammett, DC
Private Practice of Chiropractic

Certainty and 2013

INTRODUCTION

The one consistent thing is change, and I tell you for sure 2013 will be a challenge for many chiropractors. With changing health laws both federal and state changing insurance policies to cover shortages you can expect more financial stress and more focus on documented care with less reimbursement. In my own town I've already been notified that several government-backed insurance plans are increasing their deductibles and copayments by vast amounts to cover shortages. The good news is, and there is good news! The health industry has typically been inflation and recession proof. Don't get me wrong, doctor's incomes have dropped the last five years and yet it's been estimated that 5 to 7% of doctor's incomes have increased. The question is what will your practice hold for you in 2013?

One of the things I recommend that you do in 2013 is receive chiropractic care from a colleague near you and pay them their full fee for each treatment.

DISCUSSION

The last three years have seen unusual solutions to practice problems in chiropractic. One example is the low fee Doc in a box corporate chiropractor office that seemingly undercuts every chiropractor's fee in their path. As a practitioner for over 33 years I've seen many financial games played in the profession and in my experience the low fee high-volume chiropractic offices eventually collapse financially, it's not if it's only when. My opinion about your fees is simply charge what you believe you are worth and the true value of the services you provide. One of the things I recommend that you do in 2013 is receive chiropractic care from a colleague near you and pay them their full fee for each treatment. Psychologically, paying out of your own pocket for chiropractic care will put you in touch with the reality of what your patients have to pay and in some cases you'll find that you're not charging enough for the services you provide. The keynote for the year is to stay flexible in your business planning and in your practice marketing. Keep in mind that patients will always gravitate to the practice where doctors produce outstanding, fast symptomatic relief with good post pain educational information for patients to decide if they wish to continue with the chiropractic lifestyle.

Be sure in your practice that you offer patients at least three types of care for their health. Pain relief, corrective care and wellness or maintenance care are typically the three types of care that we offer patients. An important part to remember is that you must honor what patients choose and not step over your bounds. For example the patient wants relief care for a few visits than honor that and when they are out of pain release them and explain to them that they're always welcome back if and when the pain returns. Corrective care should be based on strict clinical protocols such as those found in CBP® so that patients can clearly understand what they're paying for and can easily see the postural x-ray changes you're providing. Wellness or maintenance care should be recommended for everyone but typically in the chiropractic office only 5 to 7% will follow through, if this is true in your practice then you're doing a good job and continue with your treatment plans. There has been in the last several years a propensity to base your care on what third-party insurance companies will pay for, and there could be no higher injustice to a patient than treating their wallet instead of their health.

There's an old saying, you can steal someone's money and they can earn it back, but if you steal someone's health they can never replace it.

SUMMARY

So, when recommending care to patients, tell them the truth, let them decide what's important at that time to them and not necessarily to you. Lastly, what's your plan for 2013 to increase your practice a minimum of 25 to 30%? If you've not taken a day to sit down and write out what your plan is for the next twelve months I guarantee you that your practice will decrease and your income will fail. Those of you reading this that got into chiropractic because it was a good career move, or good way to earn income I suggest you become quickly reacquainted with the purpose and philosophy of chiropractic because if you're in it just for the money you will never survive and you will always struggle financially and emotionally. It amazes me to today how many chiropractors practicing have never read any of the green books, have never attended a chiropractic philosophical seminar like DE in Atlanta. The chiropractors who have survived and thrived in the last 100 years have done so by first providing outstanding results, second by educating their patients as to why they need chiropractic for a lifetime, and third understanding the limits of the care that they provide and the extent to which a chiropractic adjustment, performed correctly can change people's lives.

Till next time, **AJCC**

Corrective care should be based on strict clinical protocols such as those found in CBP® so that patients can clearly understand what they're paying for and can easily see the postural x-ray changes you're providing.

Combining Specific Chiropractic Adjusting Techniques with CBP Corrective Care Techniques: Case #2

Todd Pickman, DC
Private Practice of Chiropractic Eagle, ID
Gonstead Technique & CBP Trained Chirorpactor

Deed E. Harrison, DC
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Chair PCCRP Guidelines
Editor—AJCC

INTRODUCTION

In our previous article (*AJCC October 2012*)[1], we suggested that the astute Chiropractor should become skilled at administering both a segmental specific adjustment technique (such as the Gonstead system) and a full spine corrective technique like Chiropractic BioPhysics (CBP). In this manner, patients will experience the benefits of segmental motion restriction improvement and the restoration of proper full body and spine alignment. The case presented herein attempts to provide further rationale for the combination of these two uniquely distinct, but complimentary full spine Chiropractic Technique systems.

CBP/Gonstead Case Study #2:

In 2012, an 8 year old male, who had no overt symptom complaints was brought to the author's (T.P) Chiropractic clinic for postural evaluation and a spinal checkup. His parents had noticed significant posture abnormality and were concerned about underlying spinal disorders.

- **Postural Analysis:** Posture analysis revealed a significant left thoracic translation, a right lateral flexion of the ribcage, a right posterior pelvic rotation, a suspected left leg length inequality, a large posterior thoracic translation, and a slight forward head translation.
- **Radiographic Analysis:**

1. In April of 2012, a modified AP femur head-ferguson view was obtained. On the left of Figure 1, this x-ray is shown. The PostureRay x-ray software system was used to identify and quantify the extent of leg length inequality. A 9mm left leg length inequality was identified with consequent spine abnormality.
2. In April of 2012, a full spine lateral radiograph was obtained. While in June of 2012, a follow up full spine lateral was obtained to document the response to intervention and potential modifications that might be warranted. Figure 2 depicts these full spine radiographs.

- **Interventions:** A total of 24 treatment sessions over the course of 2 months was utilized in this case. For segmental adjusting technique, the treating Chiropractor (TP) exclusively adhered to and utilized the Gonstead Technique system for identified spine subluxations including:

1. Abnormal temperature differential patterns (nervo-scope / tempo-scope).
2. Static palpation data indicating the presence of edematous tissue around the injured segment.
3. A decrease in motion of the segment in question, as compared to the surrounding area.
4. Palpable muscle spasm or splinting around the area in question.
5. Visualization of the area (looking for presence of pitting edema, asymmetry in the tissues, etc).
6. Then, consulting the 3-shot, digitally stitched, AP full spine x-ray and the lateral (2 shot) full spine x-ray to analyze the "foundation principle" and relate this to the examination findings.

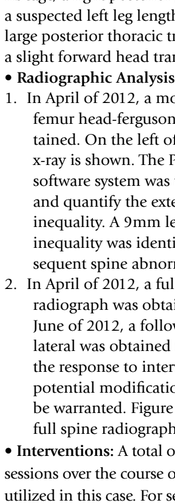

Figure 1. *Before and After AP femur head / ferguson tilt up x-ray. On the left is the initial neutral film. On the right is the follow up x-ray taken in June with a 9 mm lift in the left shoe.*

For the full spine and posture corrective care, CBP® mirror image® adjusting, exercise, traction procedures were utilized. Additionally, body weighting using the thoracic belt from Circular Traction was applied 5 times per week for 15 min walking intervals. These procedures were administered on each visit to the patient. Lastly, a full foot lift of 9 mm was administered to the patient and was placed in the left shoe.

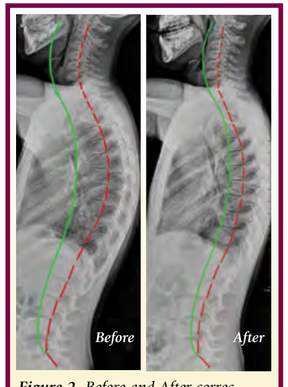

Figure 2. *Before and After corrective care full spine lateral radiograph. On the left is the initial neutral film demonstrating a significant posterior translation of the ribcage. On the right is the follow up x-ray demonstrating considerable correction of the spine and posture abnormality.*

Mirror Image Adjustments

The patient was administered mirror image adjustments to correct posterior thoracic translation with hyper-kyphosis and anterior head translation with head flexion postures. **See Figure 3.**

Mirror Image Exercises

The patient was administered mirror image® exercises to correct posterior thoracic translation with hyper-kyphosis and anterior head translation postures. **See Figure 4.**

See Corrective Techniques on page 18

Figure 3. *Mirror Image® adjustment. This adjustment focuses on positioning the ribcage into anterior thoracic translation relative to the pelvis.*

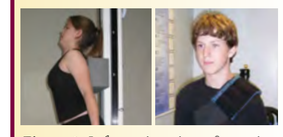

Figure 4. *Left— mirror image® exercise focusing on positioning the ribcage into anterior thoracic translation relative to the pelvis. Right— mirror image® body weighting to reduce the left thoracic translation.*

Figure 5. *Mirror Image® denneroll traction using the thoracic denneroll and the translation support block. This traction system focuses on positioning the ribcage into anterior thoracic translation relative to the pelvis.*

All New PostureScreen CBP® Mirror Image Exercise Content

Joseph Ferrantelli, DC
CTO CBP Seminars;
CEO PostureCo, Inc

David Cruz, DC
CEO WebExercises, Inc.

INTRODUCTION

We are excited to announce all new content has been added to the PostureScreen Mobile Mirror Image® Exercise Section. Many of these exercises now feature instructional videos taught by Dr. Deed Harrison CEO of CBP® Technique and Seminars; these videos can be emailed to your patients in seconds using your iPhone or iPad. These new videos provide the necessary follow up patient education that will support your in office care.

Mirror Image® Exercise Videos

As a recap, once you have performed a postural analysis you can then choose Mirror Image® exercises to prescribe to your patient (assuming they are in the rehab phase of care). These static exercise images were hand selected by CBP® as the most common postural abnormalities and have been available in PostureScreen Mobile for last 6 months. Now with the recent January release of the new video content, your patients will be guided through their mirror image exercises by Dr. Harrison himself.

Denneroll Prescription Feature

In January we will also be introducing video instruction for Denneroll use, again demonstrated by Dr. Deed Harrison. These videos will provide your patients with instruction on the proper set up and use of the Denneroll traction device. Both the corrective exercises and Denneroll videos are delivered to your patients via email utilizing WebExercise's secure cloud based system. This will allow your patients to review their personalized rehabilitation program anytime whether traveling or from the comfort of their home. **(Figure 2)**.

Motion Capture Analysis

Additionally, coming in early 2013 we will be releasing full Motion Capture and analysis as an in-app upgrade. This new module will give you the ability to quickly assess any movement pattern from spinal ROM to a golf swing. Full running gait analysis can also be performed as well as pre- and post Rock Tape movement analysis. The videos will all be stored under the patient accounts providing comparisons that you can review later to track functional improvements with your patient.

Posture Screen Mobile continues to strive forward giving the structurally based rehabilitation specialist the tools they need to accurately assess posture and movement patterns while aiding in exercise prescription —all within the palm of the clinician's hand.

PostureCo, Inc. is a technology company focusing on radiographic and postural based EMR products. PostureScreen Mobile is available in Apple iTunes AppStore as well as Google Android Play Store. The exercise module for Android is targeted for release in mid 2013. **www.PostureAnalysis.com**.

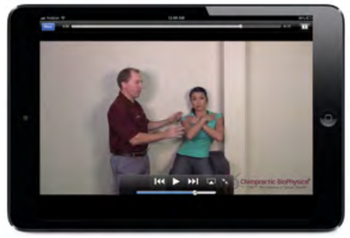

Figure 1: *Video instruction of Ribcage vs. Pelvis Mirror Image Posture Exercise*

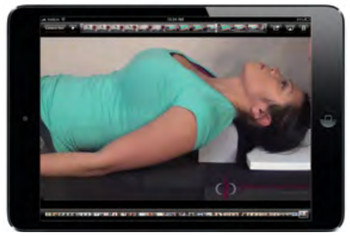

Figure 2: *Video instruction on how to use Denneroll Cervical Orthotic*

WebExercises, Inc. is a cloud based exercise prescription and management platform with thousands of exercises. **www.WebExercises.com**. **AJCC**

Corrective Techniques–cont'd from page 17

Mirror Image® Body Weighting and Denneroll Traction

Mirror Image traction care was administered to the patient. The patient received the denneroll traction system to correct the abnormal thoracic translation posture as shown in Figure 5. In addition the patient was instructed in the use of the denneroll thoracic orthotic and was advised to do this 5 times per week at home.

Case Outcome

Subjectively, at the end of 2 months of corrective care, the patient's posture was remarkably improved. NRS = 1-2 / 10. According to the patient's parents, in their own words, "It's great to see how quickly he has improved. The leveling of his shoulders and hips is apparent and how he carries himself; he is dramatically more upright and balanced".

Objectively, the patient's follow up full spine radiographs in Figure 2 show remarkable reduction of the spinal displacements.

CONCLUSION

The authors' opinion is that the patient's improvements were directly related to both the segmental adjusting and spinal corrective procedures applied using CBP Technique. Accordingly, for optimum patient response, traditional Chiropractic adjustments would seem to be enhanced by the addition of spinal corrective procedures as in CBP. In the end, it is the positive response of the patient that should dictate this combined approach of classical Chiropractic care, with more contemporary corrective Chiropractic systems.

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Three Point Bending Traction for Scoliotic Curvatures Using the New 3-D Denneroll Traction System: A Case Report

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INTRODUCTION

In a study from 1893 regarding scoliosis treatment, Bradford and Brackett[1], stated, *"there is not only nothing irrational in the method of treatment by forcible mechanical correction when feasible, but it is manifest that when shortened ligaments in spinal curvatures are situated so that they serve as a check to muscular action."*[1] They continue, *"when they [ligaments] are strong enough to withstand muscular action, gymnastics [exercises] alone are inadequate as a system of correction."* [1] Bradford and Brackett's[1] mechanical traction protocol required patients to undergo traction for a half-hour daily. Because this study was done prior to the invention of x-ray, reported results were not very accurate. More than a century later, CBP® researchers and clinicians have found agreement with Bradford and Brackett that exercises should be combined with short duration, high-force mechanical traction in order to obtain the most effective results in scoliosis reduction.

CBP's Mirror Image® Traction for Scoliosis

The traction employed by the CBP® practitioner for scoliosis management requires critical reasoning and a thorough understanding of the displacements of the spine and posture. Generally speaking this traction is of the 3-point-bending type of load application or a transverse load applied at the apex of the curve with and without lateral bending, axial rotation, or other movements depending on the specific case. The traction set-up must always be performed in a pre-determined optimum sequence of movements using stress x-rays to guide the decision making process. Mirror Image® traction sessions and duration should be a minimum of:

Bradford and Brackett's[1] mechanical traction protocol required patients to undergo traction for a half-hour daily.

- At least 3-5 times per week. If the patient will traction more than 1 time per day this would be beneficial as long as the patient is not becoming overly painful from the increased frequency of treatment.
- Traction duration should be 20-30 minutes. The patient starts with 2-3 minutes and over consecutive sessions progresses in time.

CASE REPORT

The current patient had a history of thoracic pain and had been under chiropractic care for many years which she indicated gave her temporary relief. Now at 13 yrs old, her pain and frequency have worsened over the last 4 months to a stage where she was experiencing daily headaches and thoracic pain rated as severe on a numerical rating scale (7-8 / 10).

Initial Radiography

1. Primary Right Thoracic curve = 43 degrees (see Figure 1).
2. Secondary Left Lumbar Curve = 28 degrees (see Figure 1).

1st in traction x-ray using the Denneroll Table and the Scoli-Roll Fulcrum System

The first in-traction x-ray showed that the thoracic spine was well effected however the lumbar spine was bending and under the stress in the incorrect direction (see Figure 2). This showed us that we needed to raise the lumbar spine off the table to help stretch the lumbar spine correctly.

2nd in traction x-ray

In response to the first in-traction x-ray, we decided to raise the pelvis to a level of +2 (two blocks under the right hip to address the concerns of the lumbar spine translation. You will see in the 2nd in-traction x-ray that raising the pelvis height did not decrease the effects of the ScoliRoll under the thoracic spine. This is obviously achievable due to the downward pressure of the two straps pulling on the thoraco-lumbar spine and upper thoracic region. The specific effects of using the block system to raise the pelvis is really evident when you look at the stress x-ray in figure 3.

From these in-traction x-rays we can accurately assess that the block under the pelvis is best for the patient's spine.

From these in-traction x-rays we can accurately assess that the block under the pelvis is best for the patient's spine. It also shows how x-rays are essential in establishing the best possible traction position.

CHIROPRACTIC INTERVENTIONS

Due to the positive findings of the stress radiographs, the patient was recommended to undergo corrective chiropractic care including Mirror Image traction on the denneroll table, Mirror image adjusting, and Mirror Image Exercises. She was seen for 3 x week for 1-month (with a couple of interruptions) and was advised on doing home exercises on the days she was not being treated in the office.

• Mirror Image® Exercises and Adjustments

We believe that both postural based exercises and adjustments are

See Traction System on page 21

Traction System–cont'd from page 20

vital in consolidating the benefits of the effective spine stretching using the denneroll 3-point bending traction table. During the patient's exercise, neurological stimulation was added by impulsing the spine during her exercise movements; thus turning the exercise into the adjustment.

After 5 weeks and 13 sessions, we can see the corrective improvements in the patient's spine. The patient's symptoms have been reduced 90%. Thus, she is symptomatically doing very well and began improving after her 1st session and has reported no symptoms at all for the last 3 weeks.

• 5 weeks-Follow up Radiography

A one month follow up radiographs of the thoracic and lumbar spines were obtained to identify if the recommended and applied treatment was having the desired effect. Obviously scoliosis of this magnitude might require more frequent and increased numbers of sessions. However, only a follow up radiograph can truly determine what extent more care or different care is required.

After 5 weeks and 13 sessions, we can see the corrective improvements in the patient's spine.

A remarkable reduction of the PA Thoracic scoliotic curve was identified from 41 degrees down to 28 degrees on the post (a 13° net improvement). Similarly, the PA Lumbar curvature demonstrated improvement. **See Figure 5.**

SUMMARY

This case presents the initial successful reduction of a primary thoracic scoliosis in an adolescent female with a history of chronic pain. After 5 weeks and 13 sessions, we can see the corrective improvements in the patient's spine. The patient's symptoms have been reduced 90%. We believe the results are due to the combined effect of the Mirror Image treatment methods including the 3-point bending traction employed using the 3-D Denneroll Traction Table. The patient is continuing care and perhaps a future article will address her response.

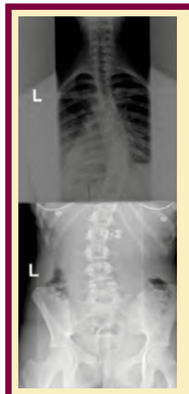

Figure 1. *Pre PA Thoracic and PA Lumbar Stitched together for convenience of showing.*

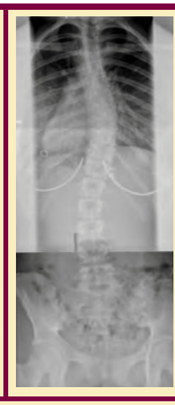

Figure 5. *Follow up PA thoracic and PA Lumbar radiographs after only 1-month of care demonstrates considerable improvement in the scoliosis curvature.*

A remarkable reduction of the PA Thoracic scoliotic curve was identified from 41 degrees down to 28 degrees on the post (a 13° net improvement).

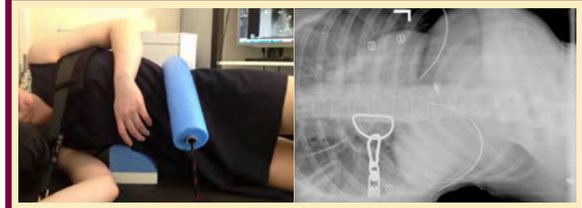

Figure 2. *Shown on the left is the three-point Stress radiography setup on the denneroll table. Note that the scoli-roll denneroll orthotic is placed just below the patients apex of the thoracic scoliosis. On the right is the actual stress x-ray.*

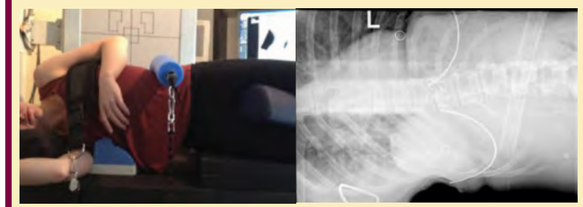

Figure 3. *Shown on the left is the three-point Stress radiography setup on the denneroll table with 2 blocks placed under the right side of the pelvis to create thoraco-lumbar translation. Note the improvement in the appearance of the lumbar curve while simultaneously decreasing the thoracic curve.*

Figure 4. *On the left is the Mirror Image® Postural based exercises the patient was instructed to before. Note that the movement is actively performed in the upright posture and is nearly identical to the traction setup used on the denneroll table. On the right is the Mirror Image® adjustment used.*

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AJCC

Kinesiology Tape for Postural Control

Leslie Trotter BSc, DC, MBA, MSc
Dr. Leslie Trotter co-owns a sports medicine clinic in Ancaster, Ontario, and is Canadian contact for RockTape brand kinesiology tape.

INTRODUCTION

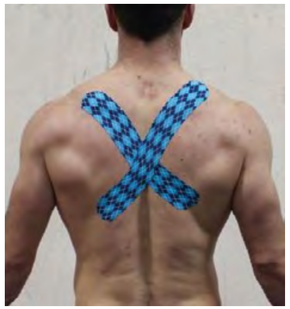
As chiropractors, sometimes our efforts become frustrating if our careful attention to adjusting, stretching and strengthening, is undermined by patients resuming the same postural flaws that landed them in our offices in the first place. How exciting would it be to have a sticky, stretchy little assistant that reminded our patients for 2-5 days about positional awareness? Enter elastic therapeutic tape!

By now, the vast majority of practitioners have had some exposure to elastic therapeutic tape or "kinesiology-tape", the commonly used brand name of developer Kenzo Kase. Tape companies claim it "reduces muscle soreness, improves function, decreases bruising, and decreases pain" and to some extent, these claims appear to be accurate.

Anything that touches our body's biggest organ, the skin, has a cutaneous mechanoreceptor effect that stimulates receptors to enhance body kinesthesia or movement awareness. By stimulating large skin mechanoreceptors, kinesiology tape can also downgrade painful stimuli from the nociceptors, which decreases pain perception.

How exciting would it be to have a sticky, stretchy little assistant that reminded our patients for 2-5 days about positional awareness?

Early and persistent reasoning suggested that using the tape in an "origin to insertion", or "muscle action" methodology, best serves to support/stimulate external body areas. While this approach probably makes the most intuitive sense to medical practitioners as it follows anatomical "rules of engagement", emergent theories, which consider entire postural muscle groups, are making a strong case.



Dr. Steven Capobianco, chiropractor and developer of the Fascial Movement Taping (FMT) method argues, kinesiology taping should be *"based on the obvious yet largely overlooked concept of muscles acting as a chain… the body's integration of movement via multi-muscle contractions as a means of connecting the brain to the body's uninterrupted fascial web in order to enhance rehab and athletic performance via cutaneous (skin) stimulation. By taping movement rather than muscles, FMT has demonstrated greater improvement in both patient care and sport performance."*

Dr. Capobianco is not alone in this line of thinking. Leading fascia researcher, Robert Schleip PhD, underscores movement and its role in pain and dysfunction[1]. Additional support for this model comes from Thomas Myers in his ground-breaking book, "Anatomy Trains"[2]. He offers a template to assess, treat, and manage body-wide motor dysfunction based on myofascial meridians, and movement impairment.

Physical Therapy professor, Heather Murray, makes a strong case for the use of elastic therapeutic tape in those who maintain abnormal postures of the head and neck (i.e. in the work place). Her team conducted a pilot study[3], which seemed to suggest that taping for scapular protraction could maintain better posture and decrease perception of pain.

Recent research indicates that kinesiology tape has a greater stimulatory effect with compromised tissue (due to injury or fatigue due to poor posture). Thedon, et al[4] conducted a study to evaluate body sway in individuals with and without tape. They found that the tape showed very little change in the uncompromised condition, but when the subjects were fatigued, the tape provided an added stimulatory effect to the skin helping to compensate for the loss of information fed to the brain from the muscles and joints. For the pain and performance community, this study provides insight into an "auxiliary" system, such as the skin, to augment treatment and training outcomes.

A 2012 study[5] of 32 surgeons, showed a statistically significant reduction in neck and low back pain (using Oswestry Low Back Disability Index and Neck Disability Index) and functional performance (using neck and low back range of motion scores) with the use of kinesiology tape during surgery. This may have far-reaching implications for other jobs/activities where sustained positions result in musculoskeletal pain.

Recent research indicates that kinesiology tape has a greater stimulatory effect with compromised tissue (due to injury or fatigue due to poor posture).

Let's look at a common complaint where chiropractors can utilize elastic therapeutic tape to enhance postural control (awareness). Kinesiology tape is commonly used in chiropractic offices to enhance scapular retraction, alleviating upper extremity discomfort caused by internally rotating shoulders (especially when the scapula is in a protracted position). The tape, according to Dr. Capobianco's model, is applied in a functional manner to augment its therapeutic effect. Begin by addressing the neuro-myo-skeletal dysfunction associated with the protracted shoulder girdle (manipulation, myofascial release, movement re-patterning, etc.). Once the patient is able to appreciate an appropriate retracted/depressed scapula, apply the kinesiology tape (see inset) in a manner to, appropriately, stimulate the local receptors once the intended position is lost.

Step 1: Manually mobilize/manipulate the thoracic spine and shoulder girdle and associated myofascial chains

Step 2: Place patient/athlete into appropriate postural position that centrates the scapula-thoracic segment.

See Kinesiology Tape on page 25

Reverse Casuality–cont'd from page 3

present conflicting conclusions." **The contention that "compensation is 'bad for health', should be viewed with caution."**

In June 2012, Natalie Spearing and colleagues published another on-topic study in the journal ***Pain***, titled[2]: **Does injury compensation lead to worse health after whiplash?** In this article, Spearing and colleagues introduce the concept of ***Reverse Causality Bias*** in the evaluation of the relationship between compensation and health outcome. They note that ***Reverse Causality Bias*** occurs when the results of a study are interpreted to mean that whiplash-injured people who hire lawyers to obtain compensation have worse health recovery outcomes; when in fact it may actually mean that whiplash-injured people with greater injuries, more pain and more disability are the ones who seek lawyers to help them obtain the benefits they need.

The authors note that many believe that compensation after whiplash injury does more harm than good. There is a view that injury compensation leads to worse health, called the *"compensation hypothesis."* This view that compensation is harmful has been used as an argument for reductions to compensation benefits, to influence judicial decisions, and to advise people that compensation payments will impede their recovery. After their review of the literature, these authors state:

"There is no clear evidence to support the idea that compensation and its related processes lead to worse health." Claiming *"lawyer involvement leads to worse pain,"* could also be interpreted as *"worse pain increases the likelihood of lawyer involvement."*

"It is important to ascertain whether statistically significant negative associations between compensation-related factors and health do indeed indicate that exposure to these factors leads to worse health, or whether they simply reflect the likelihood that people in comparatively worse health (eg, pain) are more likely to pursue compensation. Unless the latter possibility is considered, decisions to reduce compensation benefits may inadvertently disadvantage those who are in most need of assistance, which would be an undesirable (and unintended) policy consequence."

Of the 503 subjects who agreed to participate in the study, 80% developed neck pain within 7 days of collision (early whiplash).

In November 2012, Natalie Spearing and colleagues extended their research on these topics with a study published in the Journal of Clinical Epidemiology, titled[3]: **Research on injury compensation and health outcomes: Ignoring the problem of reverse causality led to a biased conclusion**

This study highlights the serious consequences of ignoring ***Reverse Causality Bias*** in studies on compensation-related factors and health outcomes. These authors evaluated **Reverse Causality** using a sophisticated mathematical assessment of compensation claims associated with recovery from neck pain (whiplash) after rear-end collisions.

Of the 503 subjects who agreed to participate in the study, 80% developed neck pain within 7 days of collision (early whiplash). Sixty-five percent of those with early whiplash symptoms became claimants, while 35% of those with early whiplash symptoms were non-claimants. Neck pain at 24 months was selected as the primary health outcome. Neck pain severity was measured using the visual analogue scale (VAS) score (0–100).

These authors state: *"Although it is commonly believed that claiming compensation leads to worse recovery, it is also possible that poor recovery may lead to compensation claims—a point that is seldom considered and never addressed empirically."* And *"When reverse causality is ignored, claimants appear to have a worse recovery than non-claimants; however, when reverse causality bias is addressed, claiming compensation appears to have a beneficial effect on recovery."*

Reverse Causality must be evaluated to *"avert biased policy and judicial decisions that might inadvertently disadvantage people with compensable injuries."* And *"Once reverse causality bias is addressed, people who claim compensation appear to experience a better recovery from neck pain at 24 months compared with non-claimants."*

"The results of this study suggest that compensation claiming may not be disadvantageous to injured parties after all and that it may even have a beneficial effect," because access to financial assistance and/or treatment may "indeed relieve pain and suffering. This is, after all, one of the motivations for compensating people who have sustained an insult to their health."

"This study serves as a reminder of the dangers of drawing causal interpretations from statistical associations when the causal framework is ambiguous. It establishes, empirically, that reverse causality must be addressed in studies on compensation-related factors and health outcomes."

SUMMARY

These authors reject the hypothesis that the decision to claim compensation negatively affects recovery. In contrast, they show that people with worse health tend to claim compensation. Policies that restrict access to compensation benefits or legal advice may inadvertently disadvantage people who need financial or legal assistance. In addition, many injured people feel compelled to seek legal counsel because it is their belief that their insurance company is treating them unfairly, hindering them from obtaining the treatment they need to recover.

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2.Spearing NM, Connelly LB, Gargett S, Sterling M; Does injury compensation lead to worse health after whiplash? A systematic review; Pain; June 2012; Vol.153; No. 6; pp.1274-82.
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AJCC

Kinesiology Tape–cont'd from page 22

Step 3: Tape the local area (see X pattern and H pattern) with "NO" stretch to stimulate local receptors
Step 4: Corrective exercises that will help with postural re-education.

Kinesiology tape breathes well and flexes like a second skin, unlike most braces that act more like abrasive exoskeletons.

SUMMARY

Clearly the use of kinesiology tape is popular (millions of users) and the applications are broad (from athletic injuries to edema). Specific evidence for efficacy is scant but growing, and plausible. There are currently no reported dangers associated with using this elastic cotton mesh bandage, and the only significant contraindication is on open wounds. Kinesiology tape breathes well and flexes like a second skin, unlike most braces that act more like abrasive exoskeletons. It withstands sweat and/or water and is by most comparisons a cost-effective treatment modality. While science is unlikely to discover that kinesiology tape is the panacea for all aches, injuries and postural distortions, medical practitioners should keep this tool in the chest due to its vast possibilities in treating patient complaints and as a tool for postural re-education.

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Why & How–cont'd from page 14

sustaining practice growth without investing consistently into both areas. The best scenario is to have a good mix of both. With a good amount of how and why, a practice can have steady, sustainable growth.

Questions for you to answer after reading this should include: Where do your tendencies fall? Where do you need to be courageous, and where do you need to step into fear? **AJCC**

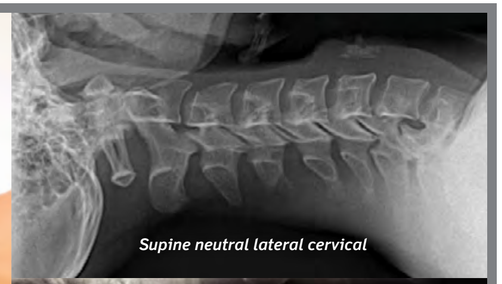
Learn to talk–cont'd from page 11

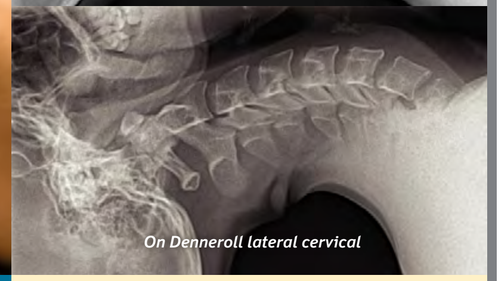
Over 80% of people DON'T write goals. Without a vision of what they want they will not have the emotional commitment or a clear destination to move toward. For this reason we have patients write 20-30 year health/life goals. We "coach" them to see the life they desire with GREAT emotional attachment and they also see they can't live that life if they allow their subuxated spine and posture to remain and progress. NOW your program becomes the vehicle to get what THEY want. This is one of the many reasons Elite Coaching clients receive greater value for spinal corrective care. We teach you how to TRULY "coach" your patients.

5. Prove your correction:

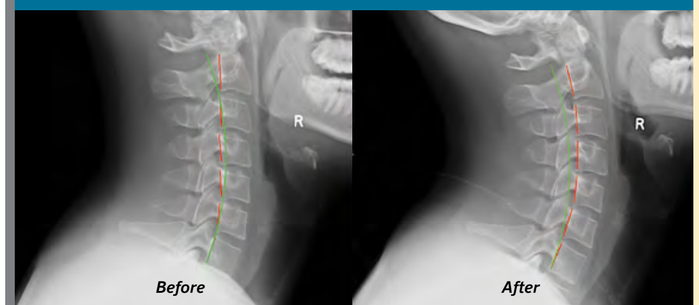
Show them a post rehab, corrected x-ray of their spine. This is physical proof that builds trust, faith and confidence that proves your result without words. Their check for your program relates to trust. When you follow ALL these steps and finish with a post rehab x-ray they lose the ability to object.

These steps are in a very specific order with intention based on how people act emotionally and make decisions. Follow these steps and you will have the opportunity to help and serve MORE patients in 2013 than EVER BEFORE! Attend the Elite Coaching ROF Boot Camps and create the MOST FULFILLING practice of your life! Call Dr. Fred DiDomenico for more information, 253-851-8353. **AJCC**


Supine neutral lateral cervical


On Denneroll lateral cervical

Stay ahead of the curve with the Denneroll Cervical Orthotic Device



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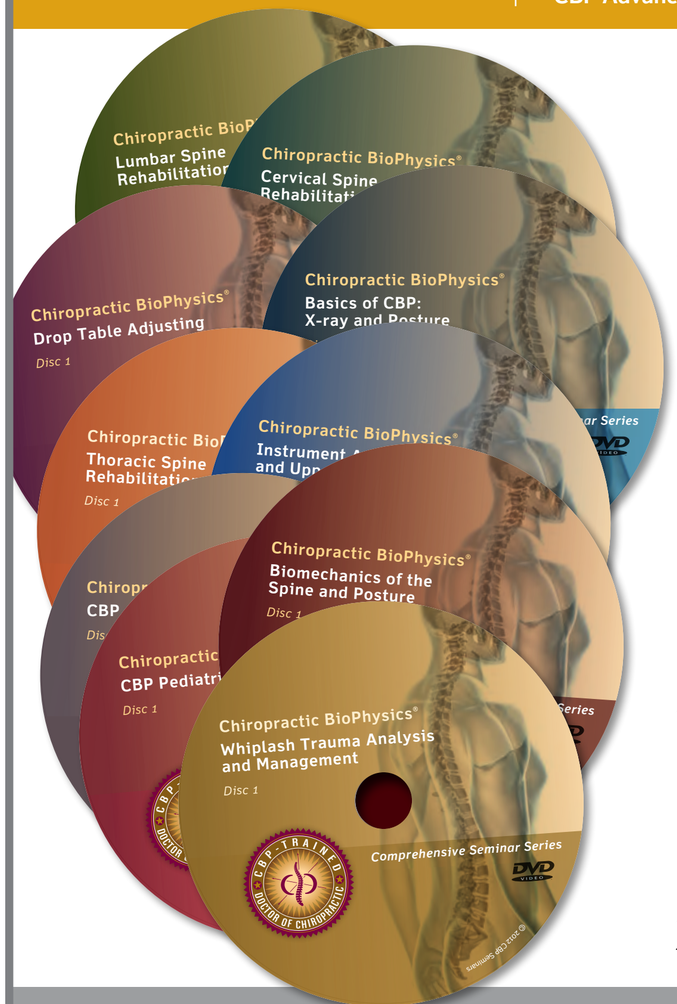

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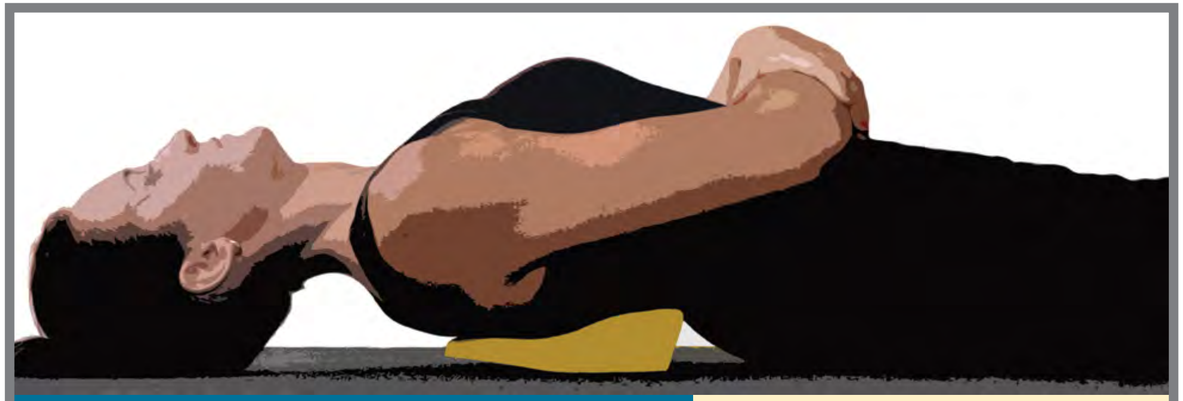

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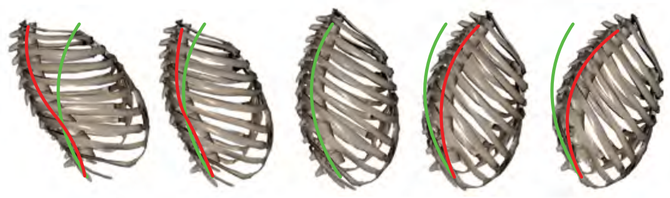

THORACIC KYPHOSIS

ABNORMAL (RED LINE) ← NORMAL (GREEN LINE) → INCREASED (RED LINE)

Increased Thoracic Kyphosis

Stress X-ray On Denneroll

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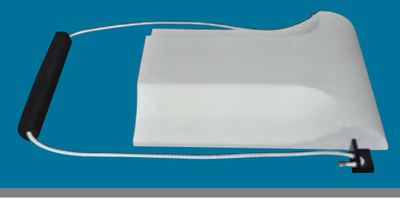
Patent Pending –Thoracic Denneroll: Canadian Application No. 137759, US Application No. 29/377,954

To reduce thoracic kyphosis and anterior head posture while increasing cervical lordosis and anterior thoracic cage translation, some must push and some must pull.



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Patent Pending –Thoracic Denneroll Component:
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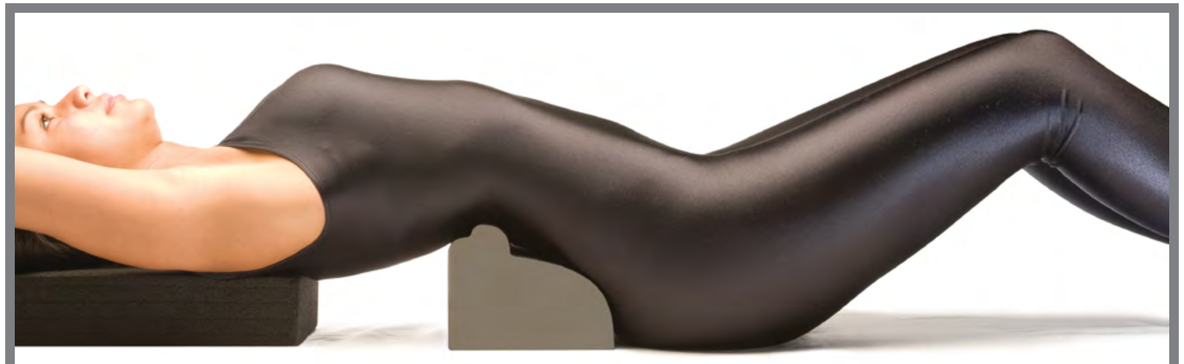
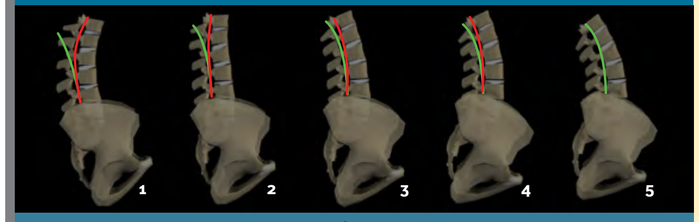
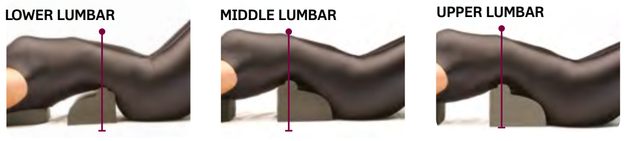
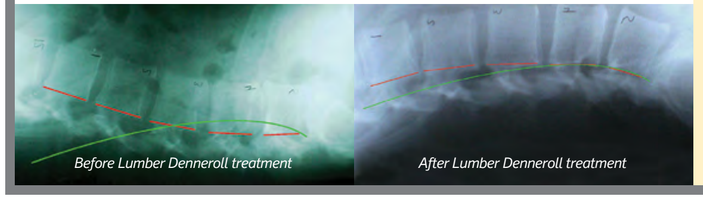


No matter what makes lumbar lordosis abnormal, Denneroll can help get it back to normal.



ABNORMAL LUMBAR LORDOSIS CURVES (RED LINE) → NORMAL LUMBAR LORDOSIS CURVES (GREEN LINE)





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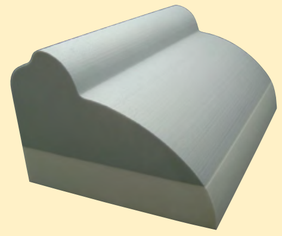
Patent Pending –Lumbar Denneroll: Canadian Application No. 137758, US Application No. 29/377,956



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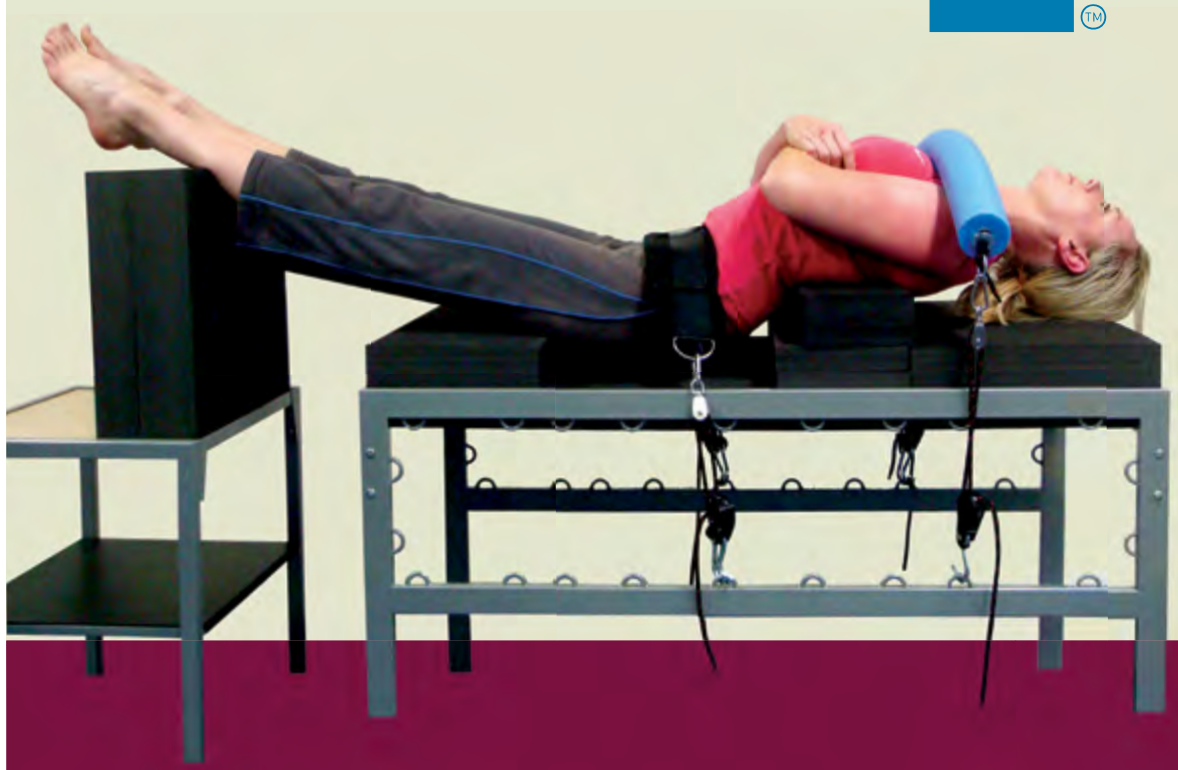

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