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Sagittal, Coronal, and Axial CT images demonstrating extensive ankylosing spondylitis

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Evaluating the Feet and the Importance of Gait Analysis in New Patients

Kevin Wong, DC

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The initial visit and assessing foot function and the importance of gait analysis can bring life-changing results. Each new patient who walks through the front door of your chiropractic clinic presents an opportunity for you to make a huge impression on their lives. Many of these individuals have already been bounced around to multiple health care practitioners for their ailment(s) with varying degrees of success. It is typical for new patients to exhibit disappointment, confusion and irritation with the type(s) of care they have had thus far. The patient may have received a diagnosis and treatment from a previous health care practitioner, but they are still in pain and are looking to you for different answers with assessing foot function and the importance of gait analysis.

Treatment Protocols and Foot Function

We have been taught since chiropractic college that during a first patient encounter, there are specific steps to take. We must successfully interact with the patient, gather pertinent facts, and then arrive at our specific diagnosis and treatment plan. Observation, history-taking, physical/orthopedic and chiropractic examinations are just some of these important areas to cover. Assessing the patient's foot function and the importance of gait analysis should also be part of the initial visit. Not only do these steps provide critical information to help fact-find, but they also convey to the patient that you are very skilled and thorough at your job.

The patients may have seen specialists (podiatrists, orthopedic surgeons, etc.) who treat pain with medication, injections or surgery and tend to focus on symptoms of an issue rather than addressing the root cause, which is often dysfunctional feet. When allopathic medicine focuses on pain points, many acute and chronic conditions are simply prolonged, causing additional stress to other areas of the body. Ultimately, this creates additional frustration and cost for the patient while increasing the risk for surgical complications and/or opioid abuse.

One the most important areas of the body to evaluate on every new patient is ironically glossed over regularly by health practitioners in general. The two feet are the body's foundation, and they offer powerful information toward understanding the stability and biomechanical state of the patient's whole body. Most patients do not realize that there are three arches rather than just one on the inside of the foot.

Introducing the concept of how the feet affect the rest of the body on the initial visit sets the framework for future care. This "foot-spine connection" is a powerful tool in helping a patient

understand stresses that affect the body from the feet all the way up to the head and jaw. As chiropractors, we are trained to evaluate the spine and extremities of the body, and we employ these skills depending on the patient's presenting complaints. When the feet are out of alignment, the entire body is affected and becomes unbalanced. Assessing and correcting foot function and the importance of gait analysis should be an integral part of chiropractic treatment and can help doctors achieve better care outcomes.

Examining the Feet

With the patient barefoot and standing in front of you in an anatomical position, look at their feet and observe what state the three arches are in. I have observed that 99% of patients coming to our clinics exhibit excessive foot pronation that is either mild, moderate or severe. It has been established that overpronation of the feet puts stress and strain on the ankles, knees, hips, pelvis, axial spine, shoulders and jaw. The remaining 1% of the population are excessive supinators or have healthy weight bearing. You will see far more overpronators than oversupinators.

Here is a menu of options on how to identify excessive foot pronation quickly and easily:

Visual changes of the feet: Have the patient stand in front of you and take a look:

Bunions on Metatarsals (MT) 1 and 5 — due to the flattened MT arch, the MTs rub against the edges of the shoes and calcium deposits in response to the stress.

Hallux valgus of the big toe — collapse of the MT/medial arches makes the big toe move laterally.

Hammer toes — collapse of the medial/lateral longitudinal arches makes the foot grow longer, pushing the toes into the edges of the patient's shoes. This combined with the flattening of the MT arch can lead to hammer toes.

Calluses — ones located on the tops of the toes and on the balls of the feet are due to collapse of the MT arch. The tops of the toes hit the roof of the shoe while the MT heads rub on the sole of the shoe or the ground.

The 5 Red Flags of Overpronation:

External foot flare

Internal knee rotation

Medially bowing Achilles tendons

Flat medial arches

Uneven lateral heel wear

The digital foot scanner

A weight bearing, 3-D, laser digital foot scanner offers accurate assessments of the state of the arches underneath the feet. The scan indicates the severity of the arch collapse.

Gait analysis — Patients take walking for granted as it is just something they do to get from place to place. Recall that in the importance of gait analysis the gait cycle has two phases: the Swing Phase (40%) and the Stance Phase (60%). Focusing on the more clinically relevant information, let's talk about the stance phase where the foot is in contact with the ground.

There are three parts of the Stance Phase:

Heel Strike — the calcaneus hits the ground and supinates while a force of 5 Gs goes from the heel into the ankle. That same force begins moving up the axial kinetic chain until it becomes .5Gs at the jaw after 10 milliseconds.

Foot Flat — the foot pronates at the subtalar joint and the tibia and femur bones internally rotate so the foot can grip the ground and make solid contact.

Toe Off — the MTP joints flex, the plantar fascia tightens, and the foot supinates as it gets ready to swing forward for the next step.

The key takeaway for the Stance Phase is realizing that during the foot flat portion, the tibia and femur bones are internally rotating under normal pronation circumstances. For people who are overpronating, their tibia and femur bones are excessively internally rotating with every step they take. This creates stress at the medial ankle, medial knee, hip, SI, lumbar spine and up the kinetic chain to the neck/head. Excessive pronators can wear down the cartilage and connective tissues in these joints, predisposing their bodies to arthritis, soft tissue injuries and pain.

What the evaluation of the feet reveals is that the feet have a critical role to play in overall body stability and stress. If the arches are flat, the feet cannot absorb shock and distribute forces in a safe manner for the body. Compensation results and problems arise in many areas of the body. To that end, recommending the proper arch support for the feet becomes paramount.

The digital scanner we discussed earlier or the traditional foam casting kits come into play. The scan or mold is analyzed by the lab correlating the patient's age, height, weight and gender. Sixteen different measurements are then used to create a custom molded, three-arch orthotic to be worn comfortably in the patient's shoes. So not only do these types of orthotics support the patient's feet, but they stabilize the whole body from the ground up.

Of interesting note, a conclusive study, "Shoe Orthotics for the Treatment of Chronic Low Back Pain: A Randomized Controlled Trial," published in the Archives of Physical Medicine and Rehabilitation, shows that three-arch, flexible, custom orthotics, particularly in combination with chiropractic care, significantly reduces low-back pain and improves function (1).

Patients do not often seek chiropractors out for foot-related issues because our current medical model would have them see a specialist instead. These doctors do not have the background and treatment methods that we do in regard to helping the entire body heal itself naturally. This is a point in the treatment path at which chiropractors can provide crucial guidance and information that the patient will not get elsewhere.

The importance of gait analysis and becoming the voice for foot stabilization

Chiropractors can position themselves to really understand the feet and the biomechanics. We can and should be the voice for foot stabilization in our communities as there few ways patients are going to learn this information. Because of the nature of their care, chiropractors can evaluate and converse with patients regarding the feet, walking and foot stabilization, and impacting the kinetic chain.

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Assessing and Managing Cervical Conditions

Paul Dickerson, DC

Managing cervical conditions conservatively has been a hall-mark of the chiropractic profession. A systemic review found that most all the health care disciplines showed favorable outcomes. (1) The heterogenous approach across the differing health fields let alone intra field differences in technique and protocols made it difficult to determine any one approach superior to another. The old 80%- 10%- 10% adage that I heard repeated while a young practitioner in the 80's might not be that far off, yet not thoroughly examined. For those unfamiliar with the adage, the old timers would say was 80% of your patients improved, 10% did not and 10% remained the same. The noninvasive approach that chiropractic tends to utilize certainly should be considered an advantage.

Chronic neck and back conditions affect more than 20% of the US population. (2) The shear number of those affected in the U.S. by the chronic conditions are enormous in many aspects as the study considered not only health costs but time off work and loss of production. In the advent of the recent opioid crisis, the country needs safe alternatives to what we witnessed in the recent past. Our profession is positioned well to fill the demands required and, therefore; we need to keep vigilant of our clinical skills to better manage the conditions that present to our clinics. A summary in clinical appraisal estimated that the one-year prevalence of neck pain between 30-50%. (3)

Cervical discs pathology is a subset to the chronic neck that may present with neck pain. The most common cervical disc involvement effects C5, C6 and C7. (4) Determining the nerve root involved may be more challenging some cases than others. The pain or numbness might not always follow a precise dermatome pattern in the patient's complaints and sensory findings. Imaging is vital as chronic discs may become acute for several reasons. Just remember that the C1 nerve root lies superior to Atlas. Therefore, the C5 -C6 disc will affect the C5 nerve root.

Dermatomes and myotomes are derived from somites of the alar and basal plates in the neuroectoderm respectively. These are related to grey cord matter. The DRG forms from the neural crest (5). This dictates what we are assessing in our examination. Dermatomes give us insight to the sensation of the skin and myotome carry the motor findings. The dorsal root ganglion (DRG), carrying sensory fibers, lies outside of the cord, just as the name suggests. (Think para vertebral sympathetic ganglia).

The term radiculopathy pertains to the nerve root. The nerve root will show signs of a nerve conduction block at 30 mm HG of pressure whereas the peripheral nerve will suffer a conduction block at 150 mm HG. This has to do with the loss shock absorbing benefits supplied by the cerebral spinal fluid (CSF) as the subarachnoid space ends around the region of the DRG. (6) Most of the nerve root is intradural and thus may respond to

epidural injections. Thus, herniated nucleus pulposus (HNP) encroachment without nerve root compression is common. (7) The nerve root is sensitive to chemical changes which can, in turn drive pain. This increased sensitively combined with the possibility of multi-level disc pathology could certainly cloud any dermatomal findings that do not fit the textbook presentations. A study found that more proximal injuries recover more slowly and less completely. (8) Knowing what peripheral nerves, we check in pinwheel findings distal to the elbow is vital. Consider a lateral lower arm that has reduced sensation but does not cross over the carpal region. We are in a proximal aspect of the C6 dermatome as we know as the "six shooter". The thumb and the "peace sign "fingers are spared in the complaint. The possibility of a carpal tunnel entrapment is a less a clinical consideration combined with a negative Tinnel's Sign. The peripheral nerve are we assessing is the Lateral Antecutanteous Nerve. The Lateral Antecutaneous Nerve is an extension of the Musculocutaneous Nerve. This Musculocutaneous Nerve lies deep in the upper arm and is rarely lesioned as a result. The C5 and C6 nerve roots would be a prime suspect in disc pathology due to the decreased possibility of peripheral neuropathy. This anatomical fact may also be helpful when requesting imaging such as an MRI. The dermatome in the rhomboid region may also provided some insight as the dorsal scapular nerve is innervated by C4 and C5 nerve roots.

If we have a medial lower arm findings/ complaints that present with S/S proximal to the elbow as well, this should warrant assessing any entrapment at the elbow for the ulnar nerve. In absence of ulnar entrapment, note that the Medial Antecutaneous Nerve peels of the medial cord. (C8, T1 NR) to provide cutaneous sensation. One may then turn the attention to a lesion guite proximal in the arm.

The gold standard for diagnosing a cervical disc is a complete Electromyogram Study (or EMG). This typically involves both a nerve conduction velocity study and EMG as well as a needle study. The NCV will involve sensory portion to the examination. The needle EMG involves motor neural fibers to determine what muscles are undergoing de-innervation secondary to disc and/or peripheral pathology.

Treating cervical disc pathology from a chiropractic standpoint has its advantages and disadvantages. A forum for the disadvantages in the current health care system could be lengthy and saved for another time. One advantage is the conservative nature of the care. Pain pathways will pass to the DRG and then terminate on either lamina I (lamina marginalis) for A delta fibers or Lamina II and III (substantia gelatinosa) for pain C fibers. (9). Before crossing the midline to travel rostrally, these pathways have been shown to travel up or down the cord 2 segments. (10) Think of what an adjustment a level or 2 below an active disc could do to influence the outcome. The point being that one can adjust around a known disc and thus maintain a positive outcome on the clinical picture. There are several nuances in our technique which make the treatment more likely to be tolerated well. A coupled movement, limiting rotation is an example. This advantage is almost purely unique to chiropractic due to our training.

Self-care and management are instrumental in attaining a successful outcome. These folks with cervical discs are usually inflamed. Attending to the inflamed state not only requires diligence in ice/ wet heat but what they are eating. The adage of "you are what you eat "certainly applies. A steady diet of inflammatory producing foods won't help much, and the patient should be counseled. We live in a nation with a less than envious acronym of SAD diet or Standard American Diet. Some attention to the rotator cuff usually finds a tender rotator cuff muscle or 2. Remember that C5 and C6 account for a large percentage of disc pathology and those 2 levels innervate all four of the rotator cuff muscles. The muscular spasm in the shoulder can complicate how the arm carries. Ribs can subluxate during the complaint. Rib adjustments can provide some added relief. Utilizing tape to give the shoulder some relief through taking some stress of the shoulder stabilizers. The wrist extensors can often get quite tender as well. Peripheral irritation can stimulate the DRG. The muscles of the lower arm can get into an ischemic state and compress a median nerve. A second entrapment site such as a displaced carpal bone can cause some swelling back into the lower arm. Cross fiber massage to the wrist extensors can offer some relief, especially in case with lower arm complaints.

Maintaining consistent examination and assessment protocols are vital to managing any conditions that present to an office. Utilizing pain management, when necessary, can allow to get beyond what has been referred as the "cytokine storm" that can accompany the initial wave of inflammation. Managing the condition through the remaining stages to attain a complete positive outcome requires ongoing counseling that suits our profession well.

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SECONDARY HEADACHES FROM INTRACRANIAL PRESSURE CHANGES

Gregory Katsaros, DC, DAAPM

ABSTRACT

Secondary headaches resulting from alterations of intracranial pressure changes can generally be described as a consequence of either increased or decreased intracranial pressure. High pressure intracranial disorders can be secondary to issues such as increased CSF production, intracranial bleed, or intracranial neoplasm. Low pressure changes can be secondary to issues such as low CSF production, post dural puncture, or spontaneous CSF leak. Neuroimaging is essential in patients who have secondary headaches attributed to intracranial pressure alterations.

Secondary Headaches

Secondary headaches are described as a new headache occurring in temporal association with another disorder recognized to be capable of causing a headache. This can be further described as a headache which has significantly worsened in parallel with worsening of the presumed causative disorder, or a headache which has significantly improved in parallel with improvement of the presumed causative disorder (1). Secondary headache disorders can arise from numerous issues such as head or neck trauma, intracranial hemorrhage, tumors, medication overuse, and others. Often overlooked within the classification of secondary headaches are headaches attributed to intracranial pressure changes. Headaches here can arise from alterations of either increased or decreased intracranial pressure and can be resultant of numerous causes. Understanding the history of the headache, along with the associated signs and symptoms is essential for proper diagnosis and treatment.

Headaches Attributed to Increased Intracranial Pressure

Increased intracranial pressure can be resultant of a variety of causes including, but not limited to increased cerebrospinal fluid (CSF) pressure, subdural hemorrhage, and intracranial neoplasm (2).

Cerebrospinal fluid (CSF) is produced from arterial blood by the choroid plexuses of the lateral and fourth ventricles. The total volume of CSF in the adult ranges from about 140 to 270 ml with the volume within the ventricles being about 25 ml. CSF is produced at a rate of 0.2 - 0.7 ml per minute or 600-700 ml per day. The normal adult CSF pressure measured in the lumbar spine in the lateral decubitus position ranges from 90–180 millimeters (mm) water (8-15mm HG). (3). The normal intracranial pressure (ICP) measured in the supine position ranges from 7 to 15 mm Hg (4). CSF Lumbar opening pressure > 250mm H2O

in lumbar lateral decubitus or Subarachnoid pressure measured supine >20 mm Hg is suggestive of raised ICP (3). CSF functions to protect the brain by acting as a hydromechanical barrier between the brain and skull. It also allows the brain and spinal cord to become buoyant, reducing the effective weight of the brain from approximately 1500 grams to 50 grams. This helps to further protect the brain parenchyma and cerebral vessels during mechanical injury. In addition, CSF acts to provide nourishment and removal of brain metabolism waste products. (5).

Headaches attributed to increased cerebrospinal fluid (CSF) pressure are described as those where intracranial hypertension has been diagnosed, the CSF pressure exceeds 250 mm CSF (or 280 mm CSF in obese children), and the composition of CSF elements is normal. In addition, there also needs to be evidence of causation developed by 2 of the 3 (1):

- 1. Headache developed in temporal relation to the intracranial hypertension
- 2. Headache is relieved by reducing the intracranial hypertension
- 3. Papilledema

Headaches attributed to idiopathic intracranial hypertension (IIH) are similar to those of increased CSF pressure. In these headaches, IIH has already been diagnosed and the headache developed or worsened in temporal relation to the IIH. The CSF pressure exceeds 250 mm CSF (or 280 mm CSF in obese children) and the headache is accompanied by either (1):

- 1. Pulsatile tinnitus
- 2. Papilledema

Some of the signs and symptoms associated with these types of headaches include, but are not limited to gait disturbance, pulsatile tinnitus, blurred vision, and papilledema. MRI findings with these types of headaches include tortuous optic nerves, transverse sinus stenosis, and flattened globes (6).

While the increased pressure can be due to an increase in CSF fluid it can also be related to other issues such as space occupying lesions.

Increased Intracranial Pressure Headache Secondary to Subdural Hemorrhage

The development of an intracranial space occupying lesion will cause an increase in intracranial pressure. These space occupying lesions can be resultant of many causes including trauma, neoplasia, and others. Subdural hematomas (SDH) may be spontaneous, secondary to head trauma, or caused by procedures such as epidural injections. The subdural hematoma is the most common type of traumatic intracranial mass lesion (7). Clinical signs of SDH are most often non-localizing and may vary depending upon the location and the status of being acute, subacute, or chronic. Acute SDH demonstrate within 72 hours of insult. Subacute hematomas demonstrate between 4 and 21 days, and chronic hematomas present 21 days or more after insult. Some SDH are clinically silent while other present

with various symptoms. The general signs and symptoms include headache, dizziness, confusion, speech impairment, and altered mental status. Focal signs are not always present but may include contralateral hemiparesis, a dilated or nonreactive pupil ipsilateral to the hematoma, and others (8). Depending upon the size and location of the hematoma, a SDH headache may demonstrate as an orthostatic type of headache. The intracranial lesion may cause reduced buoyancy of the brain shifting the contents of the skull inferiorly and stretching the dura. Also, if the intracranial lesion is large enough, a sudden shift in head position may lead to a shift in brain contents, potentially stretching the dura (9).

Increased Intracranial Pressure Headaches Secondary to Intracranial Neoplasia.

These are headaches described where a space-occupying intracranial neoplasm has been diagnosed and evidence of causation of the headache can be demonstrated by at least 2 of the following (1):

- 1. Headache has developed in temporal relation to development of the neoplasm.
- 2. Headache which has significantly worsened in parallel with worsening of the neoplasm or improved in temporal relation to successful treatment of the neoplasm.
- 3. Headache with the following characteristics:
 - a. progressive
 - b. worse in the morning and/or when lying down
 - c. aggravated by Valsalva-like maneuvers
 - d. accompanied by nausea and/or vomiting

These headaches typically demonstrate pain that changes with head position. They also do not respond to standard analgesics, last for days or weeks, and worsen over time (10). Other associated signs and symptoms may include unexplained weight loss, visual changes, double vision, blurred vision, dizziness, auditory, balance changes, seizures, and weakness or numbness that gradually worsens unilaterally.

Headaches can also result from decreased intracranial pressure.

Low CSF Pressure Headaches

Low pressure CSF headaches are those headaches which develop in temporal relation to low CSF pressure, typically when the lumbar pressure of CSF measured in the lateral decubitus position is <60 mm H2O. These can occur either spontaneously, following procedures such as an epidural injection, or post traumatically. Headaches attributed to low CSF pressure are typically orthostatic: they worsen soon after sitting upright or standing and improve after lying horizontally. The headaches are typically absent first thing in the morning and start or worsen shortly after getting out of bed. Some of the associated symptoms of headaches attributed to low CSF pressure include occipital region headaches with neck pain, tinnitus, changes in hearing, photophobia, nausea, vertigo, horizontal diplopia (11).

Headaches Attributed to Spontaneous Intracranial Hypotension

Spontaneous intracranial hypotension (SIH) headaches are those which have developed in temporal relation to occurrence of low CSF pressure or a CSF leak. The frequency of SIH has been shown to be 4 to 5 cases per 100,000 population (12). As these are spontaneous, they also are developed in the absence of a trauma or procedure. SIH headaches are described as new headaches which are refractory to "everything". These can mimic migraine and are also more common in patients with joint hypermobility. The characteristic signs of SIH on contrastenhanced MRI is diffuse pachymeningeal enhancement. Other imaging findings may include subdural effusion or hematoma, downward displacement of the brainstem and tonsils, enlargement of the pituitary gland, and engorgement of cerebral venous sinuses. The straight sinus distention sign has also been considered helpful in the diagnosis of SIH (13).

Post-Dural Puncture Headaches

Post-dural puncture headaches (PDPH) are a frequent complication of dural puncture. These are headaches described as developing within five days of a dural puncture and demonstrate with low CSF pressure. The incidence of PDPH has been estimated to be quite variable in the literature, ranging from approximately 10% to 40% of lumbar puncture procedures, but can be as low as 2% when small gauge (less than or equal to 24 gauge) non-cutting needles are used (14). In addition to headaches attributed to dural punctures resulting in decreased CSF pressure, dural punctures can also be associated with intrathecal air causing headaches secondary to the development of a pneumocephalus. In discriminating between an acute low pressure CSF headache vs headache from a pneumocephalus, the general guideline is:

- A. If the headache is relieved by lying supine, it is identified as from low CSF pressure.
- B. If the headache was unchanged by position, it is diagnosed as resulting from intrathecal air.

Discussion

With normal amounts and pressure, CSF helps protects the brain by acting as a hydromechanical barrier between the brain and skull and allowing the brain and spinal cord to become buoyant. Alterations of this normal pressure are associated with various headache disorders. Increased intracranial pressure can occur from increased amounts of CSF or intracranial space occupying lesions. Low amounts of CSF can result from spontaneous leaks, through trauma, or post procedure. It is important to have an understanding of the history of the onset of the headache along with the associated signs and symptoms in order to best be able to diagnose and treat the correct headache disorder. It is also essential to obtain neuroimaging is patients who have secondary headaches attributed to intracranial pressure alterations.

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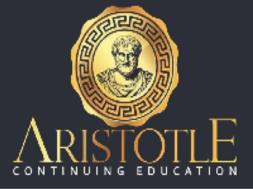
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Personalized Patient Experience: When Last Impressions Matter

Daniel A. Shaye, DC

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When it comes to personalized patient experience, you may never get a second chance to make a last impression. The business side of health care requires that we do far more than deliver a service or product. Modern consumers expect and deserve a positive experience (1). That impression begins with the first impression — whether that means contact with your website, phone or in-person first contact; but might a focus on the first impression miss key elements of the personalized patient experience?

The Last Impression

Successful doctors intentionally engineer not only the first experience, but also the central in-office experience and key deliverable (typically an adjustment, in the chiropractic setting). But what about last impressions, the impression patients take away as we end the day's interaction? How can we ensure we have all three legs of the experience stool (first impression, central experience, last impression) solidly supporting our practice and (more importantly) the patients we serve? Experiences require people, not just systems living in a manual. In our office, we have a system to identify and hire people who are "Welcomers" (2). These people are wired for connection, service and empathy — aspects of the patient experience that are all-too-often overlooked. Once we've vetted and hired these applicants we onboard them, immersing them in a culture that we've clearly defined and that we all buy into. We all know our vision, mission, values, code of honor, "We Believe" statements, and live under an accountability system ("Accountability Ladder") (3). And we make them a part of how we behave so that the principles are observable by the patient, even if those same patients don't fully understand why they love their experience here. The systems are executed by a team of exceptional people who bring operational theories to flourishing life.

When the Last Impression Goes Wrong

Our team has systems for creating positive and memorable first impressions, as well as for the core patient experience. Those systems are beyond the scope of this article. Instead, let's focus on an oft-overlooked element of patient (customer) experiences: the last impression.

Imagine you're on a first date. Your date's clothing and appearance are appealing, showing attention to detail and good taste. They make eye contact, smile and instantly forge a connection. The first impression has been made — but discussing the second date is premature. The main experience is why you are both here ... and it goes well. Your date is polite, engaging, funny, smart, and just seems to get you. The interactions are stimulating and authentic, never forced. The meal is over way too

soon, and it's time to go. But wait! How do we part ways? If the parting is a fond and mutual, "Hey, this was really special, we should do this again sometime, Sara!" followed by a warm and appropriate embrace, that might be the perfect end to the evening. But what if after that perfect evening you exit the restaurant and part with an awkward handshake and you're both lost in your phone before you're even out of sight with each other? Or your date drops a pack of cigarettes (and you don't smoke)? That leave-behind, that last impression, is as indelible as the first. Just like that, despite that amazing first impression and date ... there's a sense that something's not right, not safe and welcoming, and just not you. That last impression matters.

Personalized Patient Experience and Setting an Intentional Last Impression

How can we set the "last impression" for our patients? Of course, if the first impression gets botched and the experience is subpar, it won't matter how amazing your last impression is. But let's say you've got your team and your systems dialed in, and the patient and you are about to part ways for the day. Now what?

For the doctor, the last impression needs to be intentional. Douglas Sea, DC, teaches that ending the patient encounter needs to be by the patient's permission. "Anything else I can check for you?" is one way to get that permission and personalized patient experience. It's a little thing that respects the patient and differentiates the encounter from so many others. Once the patient has given permission to end the encounter — and only then — the doctor moves on, with the patient feeling valued and their time respected.

"Names are the sweetest and most important sound in any language," said Dale Carnegie (4), and that's good practice in greetings, during the "meat" of interactions ... as well as in parting. "Daniel, we look forward to seeing you on Wednesday!" is a great way to part with a patient — but avoid the trap of using the words only! The words we speak are only roughly 7% of the message we convey. The vast majority of communication is non-verbal, human behaviors like tone and pace and eye contact and body language.

Our brain sounds an alarm when it receives conflicting information, a state called "cognitive dissonance." An example of cognitive dissonance is that feeling we get in our gut when someone says "Have a nice day" but their tone and body language declare, "I don't care; my boss makes me say that." Aligning the words we speak with our observable behavior, and even with our hearts, creates an authentic, connective and positive experience and "leave-behind" (almost like a delightful aftertaste or bouquet in wine) for the patient ... and for the person doing the parting. I once had an acupuncture instructor counsel, "Doctor, you are treating the patient. The patient is also treating you!" Every human interaction is more than an exchange of words; it's an exchange of energy. Be sure that exchange is a win for both parties.

Behavioral Styles that Benefit Business

Many organizations and businesses benefit from studying behavioral styles such as DISC (based on the writings of a Harvard psychologist) (5). "Behavioral styles" is a fancy way of saying that people are not all the same. Some people intensely desire harmony and human connection, while others place higher value on efficiency or outcomes. Some value a faster pace, while others will feel rushed at that same pace. Some love change, others prefer stability. Learn to identify others' needs, then execute on the Platinum Rule: doing unto others as they want to be "done to." To quote Dale Carnegie (4): "Personally I REFERENCES am very fond of strawberries and cream, but I have found that for some strange reason, fish prefer worms. So, when I went fishing, I didn't think about what I wanted. I thought about what they wanted. I didn't bait the hook with strawberries and cream. Rather, I dangled a worm or grasshopper in front of the fish and said: 'Wouldn't you like to have that?' Why not use the same common sense when fishing for people?" This is wise, timeless advice for fishermen — as well as doctors and their teams.

Find Your Authentic Last Impression

How else can you create positive last impressions and a personalized patient experience? Handing you a script or playbook to answer that question would be cheating at best, counterproductive at worst. The best robot isn't as good as a caring, attentive human listener.

Giving you "the answers" risks training you to deliver words or actions tainted by hints of cognitive dissonance for you (or your team member) and the patient, both. I'd advise being intentional, authentic, and leading with your heart. A footrace isn't over until it's over, and coaches counsel runners to run through the finish line to avoid letting up too soon and spoiling an otherwise solid performance.

In the same way, when a patient is in the office, don't let up on your "performance" until the "race" is over. Last impressions matter and can never be undone. Design and close each encounter properly, and the end results for the practice and the people you serve will be magical.

- 1. See The Experience Economy by B. Joseph Pine II and James H. Gilmore
- 2. A term coined by Richard R. Shapiro in his book The Welcomer Edge
- 3. The Accountability Ladder is a key concept in The Oz Principle – Getting Results Through Individual and Organizational Accountability by Conners, Smith and Hickman. It is a key concept in SideCar (www.sidecaredge.com) training and business development systems.
- 4. How to Win Friends and Influence People
- DISC is based on writings of Harvard Psychologist Dr. William Moulton Marston, and has been developed, tested, and refined over the past 90+ years.

About the Author

DANIEL A. SHAYE, DC, is the clinical director of Performance Chiropractic LLC, in Williamsburg, Va. A 1996 salutatorian and magna cum laude graduate of Logan College of Chiropractic (now Logan University), he is the third chiropractor in his family. He has been training and growing as a doctor and person using SideCar systems since 2016 and can be contacted at pchiro@performancechiropractic.com.



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FRIDAY June 10, 2023

TIME	Plenary 1	Plenary 2	Plenary 3
12:00 – 2:00	Registration	Registration	Registration
2:00p - 3:40	Deed Harrison, DC		Steve Kraus, DC
	Sagittal Subluxation		Digital Motion X-ray
4:00p – 5:40p	Deed Harrison, DC		Mike Carberry, DC
	Sagittal Subluxation		Documentation
	Hors D Oeuvres reception	Hors D Oeuvres reception	Hors D Oeuvres reception
7:00p-9:00p			

SATURDAY June 10, 2023

7:00a-8:00a	Registration	Registration	Registration		
8:00a – 9:40a	Steve Gould, DC, DACBR Radiology – MRI / CT	Dan Murphy, DC, DACBO Laser	Kevin Wong, DC Extremity Adjusting		
9:40a-10:00a	Exhibits	Exhibits	Exhibits		
10:00a-11:40a	Steve Gould, DC, DACBR Radiology – MRI / CT	Dan Murphy, DC, DACBO Laser	Kevin Wong, DC Extremity Adjusting		
11:40a-12:00p	Exhibits	Exhibits	Exhibits		
12:00p-1:00p	Lunch – Awards Ceremony	Lunch – Awards Ceremony	Lunch Awards Ceremony		
1:00p-2:40p	Cliff Tao, DC, DACBR Radiology – X-Ray	Scott Tauber, DC Case Management	Matthew Antonucci, DC, DACNB Concussion - Carrick		
2:40p-3:00p	Exhibits	Exhibits	Exhibits		
3:00p-4:40p	Sumit Dewanjee, MD Orthopedics	Scott Tauber, DC Case Management	Matthew Antonucci, DC, DACNB Concussion - Carrick		
4:40p-6:00p	Break and Exhibits	Break and Exhibits	Break and Exhibits		
6:00p – 8:00p	Hors D Oeuvres reception	Hors D Oeuvres reception	Hors D Oeuvres reception		

SUNDAY June 10, 2023

8:00a – 9:40a	William Gallagher, DC	Aaron Wiegand, DC	Thomas Redner, MD - Nutrition		
	Impairment Ratings	Dry Needling	Michael Coates - Ethics		
9:40a-10:00a	Exhibits	Exhibits	Exhibits		
10:00a-11:40a	William Gallagher, DC	Gregory Katsaros, DC, DAAPM	David Morrison, JD		
	Impairment Ratings	Headaches	Arizona Jurisprudence		
11:40a-12:00p	Convention Concludes	Convention Concludes	Convention Concludes		

^{*} Some times of speakers subject to change

Practice Exit Strategies: What You Should Know Now...Not Later!

Tomas McFie DC, Ph.D.

All good business plans have a clear and workable exit strategy. Exit strategies will determine how a business operates and grows as well as how it will be transferred or terminated. Running a chiropractic practice is a business and having an established exit practice strategy can make the difference between a successful practice and a mediocre practice.

According to the National Board of Chiropractic Examiners, 64.5% of licensed and active chiropractors are sole proprietors, 12.7% are partners, another 17% are associate doctors and the remaining 5.8% are hired employees. Each of these groupings of chiropractors should have an exit strategy in place for when they sell their practice, dissolve their partnership, move on from their associateship or change employment. Without such a plan in place there will be financial ramifications, oversights, misunderstandings or even lawsuits when an exit from the practice is forthcoming or transpires.

For the sole proprietor without any associate doctors, a simple exit strategy might be "Work until you can no longer perform the duties of a chiropractor." Though simple enough, this exit strategy isn't necessarily the best strategy for you, your patients, or your family. Practicing chiropractic is physically demanding. There will come a time when a chiropractor's body is not capable of performing the physical demands required to perform the duties of a chiropractor. With a "Work until you can no longer perform the duties of a chiropractor" exit strategy, the practice will slow down, and patient visits will have to be limited. The results of this exit strategy will affect patient volume as well as patient satisfaction, which will financially affect the value of the practice significantly.

A better exit strategy is the 10% strategy. This strategy involves keeping 10% of everything generated in the practice as the sole proprietor, partner, associate or as an employee. Keeping this 10% will provide the financial flexibility required when an exit is contemplated or transpires.

Having financial flexibility is vital because timing in any exit strategy can create many unexpected and unintended economic consequences. It may take several years to find and train the right doctor to buy a practice, recover from a departed partner, locate another associate/associateship, or find another employee or employment. The financial resilience established by keeping 10% will provide the financial resilience necessary to thrive during an exit transition period.

Timing can greatly reduce value.

Waiting until the established chiropractor has slowed down or has limited their patient visits, and/or office hours will reduce the value of a practice quickly.

The longer the transition between a doctor leaving a practice and the new doctor taking over a practice can also reduce the value of a practice. The longer the transition from the established doctor to the incoming doctor lasts, the higher the risk becomes for the established patients to cling to the established doctor instead of transitioning to the incoming doctor. Having accessible capital on hand, the established doctor can complete this doctor/patient transition without creating any financial hardship for themselves, the patients, or the incoming doctor.

Having accessible capital allows the established doctor to self-finance a practice sale instead of being dependent on the incoming doctor obtaining outside financing. Any exit strategy dependent on obtaining outside financing increases the risk of the exit strategy failing.

Not every chiropractor utilizes the same technique, patient flow, patient payment plan, or equipment. Having capital available gives both the established and incoming doctor more flexibility throughout the screening, evaluating, and training process regarding the intricacies of the practice.

Additional details are necessary in an exit strategy involving partner(s). Partners must plan for when one or more of the partners exits the practice. Such an exit can occur when a partner retires, wants out of the partnership or upon the death of a partner. An exit strategy commonly used by many partnerships is a Buy/Sell agreement. Buy/Sell agreements, to be effective and successful, must be adequately funded or the exit plan will fail and could end up having to be litigated.

A well-designed Buy/Sell agreement will provide the capital necessary for a partner who retires, or who merely wants to leave the partnership, as well as the money necessary to buy out a partner's surviving spouse or family should a partner die. A good Buy/Sell agreement will accomplish all of these without creating a financial burden, or bankrupting the practice, and will prevent litigation.

Associate doctors and doctors who are employees should also have an exit strategy. Associates and employed doctors must be prepared for a change in their employment status. Changes may come about via their own volition or the volition of their employer. Either way, having no place to practice, an associate or employee who has set aside 10% of their earnings will be in a better financial place than the doctor who never sets anything aside for the future.

Obviously, keeping 10% of what is generated is a minimum. If this minimum can't be met, starting with whatever is possible should not be delayed. The time value of money will work against those who don't begin to keep something of everything they generate. Time, once it has passed, can never or made-up or replaced.

One of the most tax friendly and favorable places to keep this 10%, is in dividend paying whole life insurance. Here are some of the reasons why:

The guaranteed growth of the cash values in whole life insurance grow tax free.

The cash value can be leveraged to finance expenses (planned or unplanned) without diminishing the tax-free growth.

Money leveraged against the cash value of dividend paying whole life insurance can be used for any purpose without tax ramifications or required repayment schedules.

Cash values of dividend paying whole insurance develop faster and with guaranteed certainty, unlike other places where money can be kept.

The profits of the insurance company are guaranteed to be shared with the policyholders, without taxation.

Leveraging the cash values in dividend paying whole life insurance requires a mere signature, no underwriting or application process.

The money lent to a policyholder when they leverage their dividend paying whole life insurance is an interest only loan for the lifetime of the insured.

Leveraging the cash values of a dividend paying whole life insurance policy allows the policyholder to manage cash flow more efficiently and profitably.

Any interest paid to the insurance company when a policyholder leverages their dividend paying whole life insurance policy, will be added to the profits of the insurance company and can significantly increase the dividends paid to policyholders by the insurance company.

Many states have legal protection against the cash value and death benefit owned in dividend paying whole life insurance making these assets judgement proof.

The cost of the premium required to keep a dividend paying whole life insurance policy is guaranteed to remain constant, it cannot be increased.

The face value (death benefit) of a dividend paying whole life insurance policy will continue to grow each time dividends are credited to the policy. This makes the need for term insurance obsolete in later years.

Small business owners, solo practitioners or partnerships can implement Defined Benefit Plans (DBP) into their exit strategies. Unlike Defined Contribution Plans (DCP), DBPs allow the owners, or partners, in a business to deduct large sums of business income and deposit these funds into a qualified tax free retirement account. DBPs work best for family-owned businesses, with few employees, which are in the higher tax brackets and are paying substantial income taxes each year to the IRS. DBPs allow taxes to be deferred on large amounts of income earned today and allow that money to grow tax-free until distributions are required in the future.

Unlike DCPs, DBPs provide a guaranteed income for life once they are activated in retirement. Being allowed to fund these DBPs with before tax dollars can save owners, or partners, in a small business like a chiropractic practice, hundreds of thousands of dollars today and provide a guaranteed comfortable income once an exit strategy for the practice has been implemented.

DCPs are another possible way to augment an exit strategy. DCPs are more risk prone than DBPs or dividend paying whole life insurance policies because they provide no guarantees. Furthermore, DCPs are more restricted than DBPs, making it harder to depend on them financially for the future.

One of the biggest mistakes chiropractors make is not having an exit strategy in place early in the practice. As time passes more and more equity is built into the practice. But equity in a chiropractic practice doesn't translate into the value of what a practice is worth when an exit from the practice is initiated. Planning and funding an exit strategy early on will guarantee the cash flow is available to make the exit efficiently and successfully. Failing to plan, or to adequately fund, an exit strategy will make any exit more difficult and, in many cases, impossible without mitigation, financial loss and/or destroying relationships.

Be watching for the next issue on "How Key Person Life Insurance Financially Guarantees Funding for An Exit Strategy."

About the Author

Tomas McFie DC, Ph.D. graduated from Palmer-West in 1985. He has successfully started and sold 4 chiropractic practices in three different states. In 2007 Tom and Michele McFie founded Life Benefits, LLC, to demonstrate to chiropractors, families and other business owners, how to keep more of the money they make by using the power of leverage, minimizing risk and avoiding unnecessary taxes. Life Benefits, LLC has hundreds of clients around the country and is frequently requested to speak to, present and provide CE for professionals around the country. Dr. McFie continues to utilize chiropractic to support his own lifestyle and provides chiropractic care for his family. You can contact Life Benefits, LLC at Life-Benefits.com or text/call 702-660-7000.

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What the Successful Old Timers and Young Timers have in Common

Frederick Schofield, DC

This is just the way I see it after 42 years in practice. Read this with an open mind and leave your critical analytical mind at rest.

Chiropractic was founded by a magnetic healer in 1895, DD Palmer, DC. He spoke of the real, primary cause of disease, tension. "The cause of tension is pressure.... Disease is a lack of coordination... the determining cause of Disease are the [4] Ts. Trauma, Toxicity, [Tension on Autonomics], and Autosuggestion (internal dialogue) or Thots" (1). The third T, I added, Tension on the Autonomics, because this is a Major issue today.

"In-Alignment, the Power that Created the Physiology heals the Physiology, thru the Divine Design Physiology." For example, you cut yourself, you clean the cut, you patch it up, you go home, six weeks later, the cut is healed. Then you go to the butcher to get a steak, you cut the steak, you clean it, you patch it up, six weeks later nothing is healed. You say "don't be a fool DF this steak is dead," but that's why you go to a chiropractor, The Life Force, the Divine Design Physiology, does the healing! This Concussion of Forces creates a wave of healing, which triggers the Divine Design Frequency input, like software in a computer.

The Autonomic Nervous System used to be viewed as two systems, but now it's three: Fight Noradrenaline (Sympathetic), Flight Adrenaline (Parasympathetic), and Freeze Relaxation (Acetylcholine). This input into the Neurophysiological Endocrine System adds a central component of relaxation (2). From clinical practice, we know that when a patient lays down with calm, baroque music playing, taking 12 deep breaths and then gets their adjustment, most will say "I don't know what you did, but I feel Fantastic!"

In Curse of Louis Pasteur by Nancy Appleton, PhD, she discusses the differences between Louis Pasteur's and Claud Bernard's belief on disease. While Louis Pasteur said that the germs cause disease, Bernard's concept differed in that he believed that the body has its own wisdom and that the gut was the center of our health (3). Walter Cannon added to this belief by saying that "Only by understanding the wisdom of the body shall we attain the mastery of dis-ease." At Harvard in the 1920s, Cannon coined the term homeostasis and shared in one of his teachings that the wisdom of the body coordinated a physiological process that maintains most of the steady states in the body (11).

Today, this System of healing is called, Autopoiesis (Self-Restoring, Self-Organizing, Self-Regenerating, Self-Healing System). The human body is constantly adapting to our internal and external environments through an altered frequency known as Subluxation. When broken down, Subluxation means: SUB = Below and Lux = Light (frequency) (4). There are multiple factors relating to the SubLuxation because the altered and distorted frequencies within the biological continuum are super complicated. Fortunately, the old timers had a Major Premise;

The Major Premise: A Universal Intelligence is in all matter and continually gives to it, all its properties and actions, thus maintaining its existence. If the Major Premise is right on, all else will follow (5). The Function is directly proportional to the Structure, therefore making Structure and Function, one (3 in 1) (6). This bond between them had gone unrecognized until it was discovered by Chiropractic. Chiropractic is defined as a Philosophy, a Science, and Art of things natural. It's a system of adjusting the segments of the spinal column (by hand only) for the correction of the cause of the altered frequency, dis-ease. This Divine Pattern of Evolution is the altered frequency, which comes in forms of Energy and Vibration. This is not abstract philosophy this is Chiropractic Physiology, as in 3 in 1. The Divine Design Physiology, the blueprint of who you are, links the Structure to the Function. Without this blueprint, we wouldn't be able to heal ourselves. You are not a Cardiologist, an Orthopedic, a Urologist, or a Pediatrician, you are a ChiropractOR, practicing the 3 in 1 without even knowing it. That's why, as Chiropractors, we take care of everyone, babies to geriatric (5).

The old timers all practiced and studied anatomy (Structural Physiology & Functional Physiology) and related it to Functional Physiology, what we call Restorative Physiology today. This philosophy had nothing to do with theology, but had to do with the working principles of 3 in 1; Structural Physiology, Functional Physiology, and Divine Design Physiology. We supplant the Cartesian Mechanism of the 16th and 17th century with this Organic Living Frequency Universe that we live in. Chiropractors use this Divine Design Physiology on a daily!

There is a growing recognition of the importance of systems thinking and organismic biology in understanding complex phenomena, including living organisms. This Mechanistic, analytical thinking at the Systems Level does not cut it any longer, it is often not sufficient for capturing the full complexity and interconnectedness of biological systems.

Systems thinking emphasizes the interdependence and interconnectedness of various components of a system and recognizes that the behavior of a system cannot be fully understood by looking at its individual parts in isolation. This approach is particularly relevant for understanding living organisms, which are highly complex systems with many interdependent parts.

Cybernetics is another field that emphasizes the interconnectedness of systems and focuses on feedback loops and the ways in which systems can self-regulate. This is particularly relevant for understanding living organisms, which have complex feedback mechanisms that help maintain homeostasis and respond to changes in their environment. The concept of "Difference that Makes a Difference" is a key concept in the field of cybernetics, proposed by the anthropologist Gregory Bateson. It refers to a particular type of feedback loop in which a change in a system's input can cause a significant change in its output, leading to a Difference that Makes a Difference in the overall behavior of the system (7).

Epigenetics, as described by Bruce Lipton in "The Biology of Belief," is another example of the importance of systems thinking in biology. Epigenetics emphasizes the ways in which environmental factors can affect gene expression and how these changes can be passed down through generations (8). This highlights the importance of understanding the broader context in which genes operate and the complex interactions between genes, the environment, and other factors.

Systems thinking and organismic biology provide important frameworks for understanding the complexity and interconnectedness of living organisms. These approaches recognize that the whole is greater than the sum of its parts and emphasize the need to consider the broader context in which biological systems operate. (9)

The successful old time Chiropractors that I met had a principled centered approach to their practice. They were self taught, independent, and interdependent; they were trail blazers. They had the worst of the worst patients, but these doctors had courage, an incredible skill of analysis, values, and were proactive. Their practices had a distinct Manifestation of Commitment. They were great observers of this principled centered approach to life. They had a vision of service, they had a mission, a contribution to society, and they had values that they practiced daily thru their practice. Ask any patient of these great chiropractors and their patients will tell you how great they were, how confident they were, how clinically certain they were, and how they conveyed the message of hope (super important in healing today). Their practices were never about how big they were, but instead, a Focus Principled Centered Mindset on Win Win. Patients Win = Results, Doctor Win = Referrals (10)

In my Anatomy class in March 1978, Dr. Strang told us that the scientific world believed that cranial bones didn't move; through his confidence and principled centered practice, he said "the cranial bones DO move." Today, through Cat Scans and MRIs, we know they move, Dr. Strang was right. The founder of these subtle micro movements (bones, membranes, and fluids in the cranial system) was Dr. Major Dejarnette, DODC, in the 1920s. He said, "to Learn, to Feel, to Think, and to Know within anatomical physiology is not an easy Art and the Skill for a physician to develop." To Learn, to Feel, to Think, and to Know, and then to APPLY the Art of the Adjustment thru the amazing techniques we have in Chiropractic today. The old timers lived by the Major Premise of Chiropractic, and if the Major Premise is right on, all else will follow. The theories and hypothesis of chiropractic are based on these deductions and as we move into this new millennium with the advanced equipment tracking universal frequency, as in 5G, we will prove Chiropractic is based on solid science of Neuro Restorative Physiology as in "Molecules of Emotion." (9)

The Application of Chiropractic in practice: Just last week, a baby was referred to our office with colic, they had been to the doctors with no response. The desperate mother brought the baby to us and by the end of the visit the baby was happy, smiling, giggling, and in no distress. At the end of the visit, baby, mom and dad are all under care with us, why? Because we apply real life experiences to the situation, called Situational Management.

There are 4 A's to the Science and Art of Chiropractic:

Alignment: 3 as 1. Alignment of our cortex, limbic, and reptilian brain is massively important for achieving the Big Idea. This altered frequency and brainwave patterns can become distorted and disrupt the overall coherence or gestalt. Structural Physiology, specifically cranial upper cervical physiology and lumbar sacral physiology, can be used to access these frequencies and restore coherence. As above so below, as within so without (8). Remember 3 in 1 – Structure Physiology, integrates to the missing link Divine Design Physiology, integrates to Functional Physiology.

Analysis: Using a variety of techniques, an analysis of the anatomy (the Structural Physiology) to identify physiological distortions or altered frequencies is what Chiropractors do on a daily basis. There are three broad approaches to chiropractic analysis: tonal, segmental, and postural. These approaches focus on different aspects of anatomy and physiology, such as muscle tension, joint mobility, or postural alignment. The experience of the chiropractor is important in analyzing these patterns of analysis and identifying the underlying physiological distortion or altered frequency.

Adjustment: The Art of the Adjustment involves Situational Management, which requires the skills of Listening, Observing, and Critical Thinking (LOC). This is where the importance of the philosophy of Organizational Physiology, which is observed through Structural Physiology as it relates to Functional Physiology comes in. Our understanding of the Structural and Functional systems is important in developing effective care plans. Numbness in the thumb – is C6 versus numbness in the pinky – is C8. They are totally different structural spinal biomechanics - "rack 'em and crack 'em" techniques are no longer appropriate. You want Results (Results Produce Referrals) you must be Specific. Pop and Pray, No Way! The young Chiropractors should be grounded in the Science of Specificity. Our training is based on Space, Time, Repetition. You Learn, you Feel, you Think, you Know, and Apply over time Results produce Referrals. As Von Goethe once said, "Knowing is not enough; We must Apply. Willing is not enough, we must DO."

Adaptation: A key factor in Functional Physiology is the ability to adapt to sensory input, known as Sensory Afferent Concussion of Forces. The input to the body, such as Afferent Sensory fibers, is directly related to the output, such as Efferent Motor fibers. A lack of input, such as a lack of Energy or Frequency, can hinder the body's ability to adapt and produce the desired output. Focusing solely on one chiropractic technique may not be effective, as different techniques may be more appropriate for different patients and situations. Structurally and functionally, there is more than one way to set an Atlas. Young Chiropractors must be grounded in different approaches and techniques (like the Old-time Chiropractors were) which can only improve a Chiropractor's ability to Listen, Observe, and think Critically (LOC) in situational approaches to patient care.

Through the Power of this series of Adjustments to the Structural Physiology, the altered frequency or interference through these different techniques is reduced. "In-Alignment, the Power that Created the Physiology (Structure, Function) heals the Physiology, thru the Divine Design physiology." When the Afferent Sensory input equals Efferent Sensory Output we have Alpha Coherence; as Above, so Below as Within as Without. This Concussion of Forces creates a wave of healing which triggers the Divine Design Frequency input, like software in a computer. Chiropractic Works, we get Results. Tell your friends, Chiropractic is Essential. Why? Because you cannot give a zoom adjustment. Spread the Word.

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Employee Tax Credit....a Word of Caution

Jonathan Miller, CPA

Nothing frustrates a CPA more than hearing on the radio advertisements for "IRS Tax Relief", "do you owe the IRS 10,000 or more", call us NOW. I won't mention names but I have been the recipient of some clients who tried those companies and spent thousands on help when it really only may take a few hours of work our end. Bottom line is they are preying on the helpless tax-payer with Scare Tactics. While the IRS is nothing to ignore, they will work with you if you have a tax issue.

Now, with the Pandemic, you are hearing ads to "get you up to \$26,000 per employee in refunds from the IRS. Call today! Don't delay!" Now, don't get me wrong, we have filed many claims and have gotten significant refunds for our clients. But we are both conservative and cautious

The Employee Retention Tax Credit, or ERC was meant as a helper to those companies that were shut down completely or had a significant drop in revenue. As with the PPP and other pandemic relief programs, there's a slew of misinformation about the ERC program, much of which has been pushed by pop-up ERC companies looking to profit from the opportunity and confusion surrounding the program.

Despite what the advertisements say, you have plenty of time to amend your returns. Contrary to what you might have heard, ERC money is not going to expire soon. The IRS has current tax court cases to test the validity and calculation of some of the ERC, so there are some issues regarding who is "eligible."

There are two qualifying areas

First, you must have a "significant" decrease in gross revenue comparing Quarters from 2019 to the SAME quarter in 2020 and 2021. Significant would be more than 50% drop in revenue from 19 to 20 qtr./qtr., or a more than 20% Drop comparing 2019 to the same quarter in 2021. This is for the most part a simple mathematical calculation that takes 10 minutes to figure out

The Second qualification option would be that you had a significant interruption in your business as a result of a government shutdown or limitation of your business. Most medical facilities will not qualify as you were part of an Essential Business, so there was not shutdown. However, this is where the companies claiming "free money" and lots of taxpayers will get audited, pay some fines and in rare cases go to Jail for fraud.

As each company's situation is different, many of these 'ERC CREDIT" carpetbaggers are using generic arguments for each of their clients such as "supply chain disruption."

However, using a one-size-fits all solution is less work on their part and puts all the risk on YOU. Shipping and manufacturing clients that the supply chain argument can be misleading. Supply chain disruption was a worldwide bottleneck, but the ERC program was specifically designed to address shutdowns at the state and local level.

Since most manufacturers were deemed essential during the pandemic, they weren't shut down and didn't suffer significant revenue falloff.

Cautionary tales

Both the IRS and AICPA have been <u>calling for a crackdown</u> on bogus ERC claims. As the old saying goes, if it sounds too good to be true, it probably is.

In October the IRS warned employers to be wary of third parties who are advising them to claim the ERC (also known as the ERTC for Employee Retention Tax Credit) when they may not qualify, noting that some of them are taking improper positions related to taxpayer eligibility for and computation of the credit. Fraudsters can charge hefty upfront fees or a fee that's contingent on the amount of the refund and may not tell taxpayers that wage deductions claimed on the business's federal income tax return need to be reduced by the amount of the credit. CPAs have been getting pitches from such purveyors and are warning about the fraud as well. (Accounting Today Article)

However, if you think your business was deemed was significantly impacted by mandatory shutdowns or other pandemic-related factors, then it's worth looking into the ERC. Just know that the rules are complex and enforcement over fraudulent claims is not a joke with the IRS.



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Radiology Case—Brief Report

Ankylosing Spondylitis

Gregory Katsaros, DC, DAAPM







Sagittal, Coronal, and Axial CT images demonstrating extensive ankylosing spondylitis

A 77 year old male presented with complaints of recent increase of pain about his neck, mid back, and low back. He had a known history of ankylosing spondylitis (AS). He was referred for a CT scan which demonstrated extensive AS throughout his spine.

Ankylosing spondylitis (AS) is a form of inflammatory arthritis that affects the spine and other joints. It often begins in the sacroiliac joints and over time it typically extends superiorly throughout the spine. The rate of progression can vary greatly among individuals and either part or the entirety of the spine can be affected. In approximately 30% of the patients the hips are involved and in some, the joints of the shoulder girdle may be affected.

Chronic back pain and progressive spinal stiffness are the most common symptoms. AS also demonstrates with a variety of comorbidities, with inflammatory bowel disease (IBD) being the most prevalent. Clinically relevant IBD is seen in about 5-10% of people with AS, however histopathological studies show evidence of IBD in approximately 50-60% of people with ankylosing spondylitis.

Clinical laboratory findings in (AS) are typically nonspecific. About 50% to 70% of patients with active AS demonstrate elevated erythrocyte sedimentation rate (ESR) and elevated Creactive protein (CRP). However, a normal ESR and CRP does not exclude AS. HLA-B27 gene is also evaluated, but is also non specific. Many people who have that gene don't have ankylosing spondylitis and people can have the disease without having the gene.

Early signs of AS can be seen on x-rays and best seen in the lateral view. Squaring of the vertebral bodies secondary to inflammation and bony deposition, and Romanus lesions which are small erosions and reactive sclerosis at the corners of the vertebral bodies are two such early findings. The classic radiographic finding in late-stage AS is the "bamboo sign" which is vertebral body fusion by syndesmophytes. Calcification of the regional ligaments is also seen.

Treatment is based around decreasing the pain and inflammatory process, and increasing the strength and flexibility.

In Memoriam

We can see further and dream bigger because of the wisdom of those who came before us



Willie Kindred, DC

Willie Kindred, DC passed away peacefully in his sleep on January 9, 2023.

With Arizona license #807 chances are that even if you did not get to know him, you did notice him at a seminar or two. His infectious, perpetual smile would convince you that he had never know a bad day in his life.

A 1972 graduate of Palmer he was married to his high school sweetheart Sandra for 58 years. Together they brought a son Adrian and daughter Cheryl into the world. They added four grandchildren all of whom learned how to smile from him.

He also leaves behind thousands of patients and colleagues he worked with over his 48 year career as a chiropractor. While short in stature his greatness lies in the lives he changed.



Thomas Tinlin, DC

Many of us in the Chiropractic profession knew Dr. Thomas Tinlin for over 30 years as a true professional and a friend. His passing on October 4,2022 is certainly a loss to our profession.

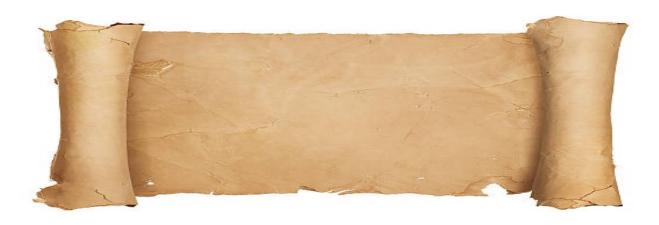
He came from the old school. Treat patients professionally but as friends. Many of his patients literally became part of his family. You were never a number. His patients were special. Tom was just as excited as his patients when their health problems improved.

Another thing that set Dr. Tinlin off from many of his Chiropractic colleagues was his keen knowledge and intelligence in his diagnostic abilities. His quick evaluation of the patient's problems allowed for a success-

ful outcome of treatment.

The morning after his death we were inundated with many calls, texts, and people coming into the clinic with so many loving comments, and emotional stories along with patients in emotional and physical shock. We were all emotionally spent by the end of the day. However, his patients' love for Dr. Tinlin was a healing for many of us so close to him.

Dr. Tinlin is and will be missed by many even today. Our Chiropractic profession has lost a truly special individual and friend to so many.— Dr. Ken Muhich



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Membership Information, Bio and Notes							
Member Type:							
☐ Student	Membership Levels	Monthly	Yearly (30% Discount)	Voting Rights	Requirements		
College Attending:	Student Member	\$0	Free	No	Must Be Enrolled in School		
☐ Honorary (first year graduate) Member	Honorary Member	\$0	Free	Yes	Free for 1st year post-graduation		
☐ Retired Member	Retired Member	\$80	\$672	Yes			
☐ Full Member	Full Member	\$80	\$672	Yes			
☐ Elite Member	Elite Member	N/A	\$1500	Yes	All Conventions will be Free		
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