

Journal of the

Arizona Association of Chiropractic

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2023 Arizona Association of Chiropractic Annual Convention June 9-11, 2023

GILA RIVER RESORTS & CASINOS Wild Horse Pass

Chandler, Arizona

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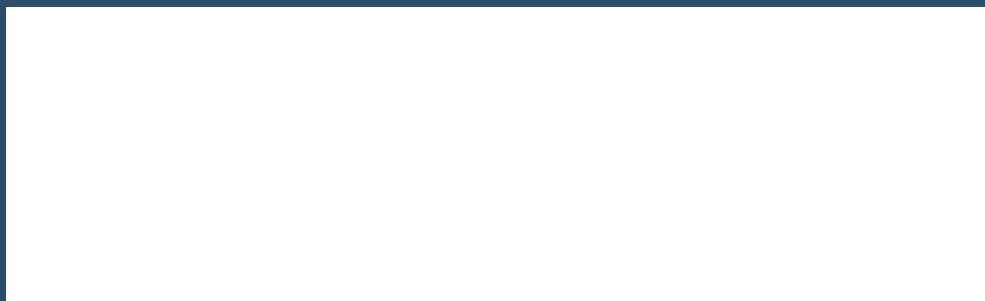
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President's Message

As President, I reflect on the incredible journey we've had over the last few years. First, I am truly grateful to our dedicated Executive Committee team, comprising VP Dr. James Bogash, Treasurer Dr. Rebecca Carlson, Secretary Dr. Scott Tauber, and Executive Delegate Dr. Bill Gallagher. Their unwavering commit-

ment and collaborative efforts have propelled us forward in remarkable ways.

Furthermore, I extend my heartfelt appreciation to Representatives John Kavanagh and Janae Shamp for their unwavering support in championing our cause. We must continue to stand by those who support us, and I have been in contact with other legislators to further our mission.

Together, we have an exceptional team and a shared purpose that has driven our success. Let us continue to press forward, leveraging our strengths and building upon our achievements.

Mark your calendars for an unforgettable experience at our upcoming convention on June 9-11, 2023, hosted at the Gila River Wild Horse Pass Resort. We have an exciting lineup of speakers across multiple tracks, all for the low price of \$59 for members. If you attended last year's convention, you know that the food was simply amazing as well. Special thanks to Dr. Greg Katsaros, Scott Tauber, and Bill Gallagher for their exceptional efforts in organizing this event. To register, simply click on the following link [Annual June Convention 2023 \(for attendees\)](#)

In 2021 legislation passed that relates to diagnostic services. The attorney general said that we were not able to do a part of a basic exam that we learned in our schools. We took on that issue and passed language that enables chiropractors to test patients for things such as COVID virus, strep throat, and other diseases utilizing diagnostic methodology that are included as they should be.

I am delighted to announce that after years of hard work, Dr. Wayne Bennett played a pivotal role in securing chiropractic coverage under Arizona's Medicaid system or AHCCCS during the 2022 legislature. I want to express my deep gratitude to Drs. Wayne Bennett and James Bogash for their dedicated efforts in bringing about this change. Funding for this coverage was included in the general appropriations legislation, and the law officially took effect on October 1st, 2022, the first day of the Federal fiscal year. We have already received interest from insurance plans that underwrite the AHCCCS program to collaborate on the implementation process. However, we must remain vigilant in ensuring that this coverage is not administratively impeded in any way.

In the upcoming 2023 legislative session, we must address several insurance disparities and evaluate the feasibility of allowing chiropractors to administer and prescribe water-soluble nutritional supplements. This practice is taught in chiropractic schools and should be permitted for those chiropractors who wish to provide it. As an association, our job is to represent all chiropractors, regardless of their specialization, to promote diversity within our community. Together, we can continue to make meaningful strides forward, enhancing the reach and impact of chiropractic care for all.

There are other professions that have expanded their scope of practice with less education than we have as Chiropractors. While I may not personally utilize these expanded practices, I fear that if we do not evolve as others have already, we will be left behind. Despite the fact that we may be better at adjusting than other professions, the public perception does not necessarily reflect that.

For instance, in 2022, the acupuncture profession was able to pass SB1080, granting them the ability to perform injections, order diagnostic imaging, clinical laboratory procedures, and prescribe medications. Physical therapists can now order x-rays, MRIs and perform manipulation. This should give us pause.

Let that sink in...

It is truly up to you, **"Together we move forward"**. Membership in our association is crucial to effect change, and without it, none of the above accomplishments would have been possible. It takes financial investment to make progress, and relying on others to do the work for us is not a viable solution. The old adage of let someone else do it is not working.

We need business-minded chiropractors who are willing to take action and make things happen. We have had those that just want to try to control or have ulterior motives. Make excuses for people that don't do the job. Well it's time to stand up and make things happen. Have a say of what is going on and get involved.

With just under 2,000 chiropractors in Arizona, we have the potential to become one of the most powerful associations in the state. It only takes a few seconds to join on our website and be part of something special that has your back.

To our members, I want to extend my heartfelt thanks. You are the reason we have been able to accomplish so much. Let's continue to work together and strive for even greater success.

All the best,
Andrew Altman, BS, DC

Mythology of Personal Injury: MIST

BILL GALLAGHER, DC, CMVI

One of the ushers at my nephew's wedding told me that he was a law professor. I knew enough to ask, "What subject." His reply was, "Constitutional law." To that I said, "Then your students have actually read that document." "Well I do assign it, but judging by the answers on the tests. . ." Recently while teaching a class on ethics I found a few veterans in the audience and reminded them of when they took that oath to "protect and defend", "from all enemies foreign and domestic." Then I asked if they actually read the Constitution they had taken that oath about. Not a single one could say yes. In the personal injury arena, much like it is in life, there is a tendency to base our opinions on our opinions rather than fact. When an insurance adjuster tells you, your client could not have been injured at such low speed their use of the minor impact soft tissue, MIST defense is not aimed at you. Unless you are a real estate or divorce attorney who happens to have landed a personal injury case you already know that argument is bogus. Insurance companies use of that is not based in science it is based in the understanding that a jury that has not been properly trained in the physics and mechanism of injuries will believe their "expert." They are relying on that tendency to base opinions on opinions rather than facts. The expert's opinion which goes beyond the typical juror's knowledge base, may be based in fact but in a court of law it is still presented as their expert opinion. Depending upon their presentation both in their personal appearance and how they present the information that they have to offer, jurors are likely to accept their opinion as hard fact. When it comes to *Minor Impact Soft Tissue*, MIST defense is not a question of a lack of research, it is more an absence of research to support that position. When Arthur Croft retired from teaching, he left open the possibility of doing additional crash studies. I offered Lois Laynee and my services to perform cranial nerve exams on each subject before and after the simulated crashes. My hope was to establish scientifically, the changes that occur with concussions in low impact collisions. His response was the same I have gotten from him previously when offering research possibilities, "We can't do that." He went on to explain that from the previous studies done at the Spine Research Institute of San Diego and others, they had proven that you can be injured at low speed. As such, knowing injury is possible if not probable, it is now unethical to use live subjects on low speed crash tests. The Florida Department of Transportation over a six-year period tracked over 330,000 low speed collisions in which over 1,900 people died. They defined low speed as being less than 10 mph at impact where airbags did not deploy, the vehicle was drivable, and the doors could be

opened. If a government agency has demonstrated that people can die in low speed collisions with relatively minor damage to the vehicle any argument that your client could not have been injured in a low speed collision is pure mythology. The other argument they will use is that studies have shown that the amount of force involved is no greater than falling onto a sofa. Their expert will even explain the physics of how the change in velocity could not have produced enough force to cause the injuries and that this is supported by the laws of physics. The problem is that they consider only the change in velocity and "force" in physics is measured as; $F=ma$ where force equals mass times acceleration. Acceleration is defined as the change in velocity divided by the change in time. The expert who argues that the change in velocity was insufficient to produce enough force to cause injury, ignores the effects of the time involved and is violating the laws of physics. In doing so their opinion supposedly based in fact becomes pseudoscience based in mythology. The other problem with this argument is their evaluation considers the force introduced into the vehicle and ignore that the forces to the occupant are very different. My work with attorneys has taught me to ask the next question. I have learned to do this until I am satisfied that I have facts rather than opinions. I will stand up with facts against their mythology any day of the week.



Scottsdale chiropractor, Bill Gallagher has taught personal injury seminars across the US and in Europe through the American Academy of Motor Vehicle Injuries. He also offers support to attorneys with Phoenix Medical Legal Services. He can be reached at drbillgallagher@yahoo.com or 480-664-6644.

Addressing Soft Tissue Imbalances to Improve Alignment

Laura Brayton, DC, CSP, CSCP, CACCP

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As chiropractors, we are well aware of how a weak core can impact a patient's ability to hold a chiropractic adjustment. The strength of the abdominal and pelvic floor muscles, especially the transverse abdominis (TA), plays a crucial role in maintaining spinal and pelvic alignment. However, for most of the population, inactivity, poor posture, or incorrect exercises have caused these muscles to be deconditioned, and the rectus abdominis muscles are separated at the midline, called a diastasis recti. Although diastasis recti is very common because of pregnancy, nonpregnant adults and even children can also suffer from diastasis recti with symptoms including back pain, incontinence, digestive issues like constipation or bloating, and umbilical hernia. It is important to check every patient for diastasis recti if they are complaining of any of the previously mentioned symptoms.

Checking for Diastasis Recti

Professionals should look for two things when they check for a diastasis recti — the distance between the separated muscles and the condition of the connective tissue. Most professionals check the distance of the diastasis at its smallest instead of at its largest because when they look for a diastasis, they ask the client to lift their head and shoulders. When the head and shoulders come off the floor, the muscles come closer together, and it is then examined at its smallest. Before assessing the distance of the diastasis, it is important to see if the person has a doming of their abdominal muscles when they lift their head or if they have an umbilical hernia. The presence of either or both conditions indicates that they need to be checked in a different manner. If they do have doming or a hernia, then the distance is evaluated on each side of the umbilicus. If they do not have it, then the distance is checked in the middle of the belly. Either way, the diastasis is examined in three places. It is checked at the umbilicus, above the umbilicus (halfway between the sternum and the umbilicus), and below the umbilicus (halfway between the umbilicus and the pubic bone). Looking for a diastasis is done in a back-lying position with the knees bent. If checking on each side of the belly for a large diastasis, you use eight closed fingers with the fingers pointing toward the toes. The distance is evaluated after having them then relax

their abdominal muscles and engage them by bringing their umbilicus to the spine. When they bring the umbilicus to the spine, the muscles will come closer together, and you will feel the ridges of the muscles. When they are relaxed again, you follow the muscles to where they go in a relaxed position. In this relaxed position, you are measuring the separation at its largest. The muscles are engaged and relaxed several times so you can feel the movement of the muscles.

You do each side and then add the number of fingers together to get the total distance. If there is not a doming of the muscles or umbilical hernia, then you put 10 closed fingers in the middle of the belly and measure it the same way in the same three places previously mentioned. You start with 10 fingers, and can always take fingers out if it is smaller. When checking the condition of the connective tissue, the deeper the finger goes down into the tissue, the weaker that tissue is. Put the finger in the umbilicus with the abdominal muscles relaxed, and then see where the skin goes against the finger. This can be marked with a pen on the finger; shallow is up to 2 cm, moderate is around 4 cm, and deep is 6 cm or greater. The condition of connective tissue is checked in the same places above and below the umbilicus, like when checking the distance. You will know that the connective tissue is healing when it gets shallower, and the finger does not go down as far.

Treating Diastasis Recti Without Surgery

The good news is that there is a nonsurgical approach to treating diastasis recti called the Tupler Technique®. It is four simple steps that empower a patient to restore core strength, and therefore, effectively hold their alignment while weight bearing. Not only does this lead to less back pain and improved digestion, but the patient will also notice improved posture and theoretically decrease the degenerative joint disease progression that occurs when joints are receiving repetitive stress while misaligned. The outcome of the Tupler Technique® is to make the linea alba strong enough to hold the recti muscles in a close together position. It utilizes three key components in healing diastasis recti.

1. Repositioning both the separated muscles and the weak connective tissue. It is important to align the separated muscles close together so that both the muscles and connective tissue move in the sagittal plane when engaging the transverse muscle during activities of daily living and when doing the Tupler Technique® exercises. When the muscles are four fingers apart or more without being approximated, they move in a side-to-side direction instead of front-to-back direction. The connective tissue needs to be continuously put in a narrow position to take the stretch off it and allow it to heal.

2. Protecting the connective tissue from getting stretched in either a forward or sideways direction. To protect the connective tissue from getting stretched in a forward direction, the transverse muscle needs to be engaged during activities of daily living, exercise routines, and sporting activities. Also, exercises done in a downward-facing abdominal position should be avoided. To prevent the connective tissue from getting stretched in a sideways direction, avoid activities where the back is arched. This flares the ribs, and besides stretching the connective tissue, makes it impossible to engage the transverse muscle. The forward crossover movement should also be avoided.

3. Strengthening the abdominal muscles and connective tissue with the Tupler Technique® exercises. Research on connective tissue by Dr. Helene M. Langevin, a neurologist at the University of Vermont, formulated a medical hypothesis suggesting that connective tissue might comprise an elaborate communication system within the body, which influences the function of all the other physiological systems. In her article, "Connective Tissue: A Body-Wide Signaling Network?" she explores the possibility that there might be a series of remote effects in seemingly unrelated parts of the body stemming from activity in the connective tissue. She also talks about the connective tissue generating electric currents through mechanical activity, including compression, which could change the cellular activity in any given interconnected parts of the body. Hypothetically, the compression in the specific Tupler Technique® exercises creates a microcurrent in the connective tissue, and that remodels and heals the connective tissue.

Proper Alignment While Weight Bearing

We all have seen those patients who are challenged when it comes to holding their chiropractic adjustments. They feel amazing when they get off the table, and after a couple of days, they slowly return to their old subluxated self. When joints are unable to "stay in place" after being aligned, we need to investigate the root cause(s).

In addition to addressing a weak core by knitting together a diastasis recti, patients also need to be checked for collapse of one or more arches of the feet. Like splinting the abdominal muscles to support the correct position of the soft tissue in a patient with diastasis recti, custom-made orthotics that provide three-arch support remind the fascia and connective tissue of where they are optimal. Since soft tissue attaches to the skeletal system, it is imperative for this support when addressing imbalances and subluxation patterns throughout the entire body. After all, it is all connected.

About The Author

Laura Brayton, DC, CSP, CSCP, CACCP, is a graduate of New York Chiropractic College and the University of North Carolina at Chapel Hill. As a holistic chiropractor and speaker, she holds certifications in Chiropractic Pediatrics, Webster Technique for breech presentation, Sacro-Occipital Technique (S.O.T.), Craniopathy, is an advanced level practitioner of Nambudripad's Allergy Elimination Technique (NAET) and a Tupler Technique® trainer. She is the owner and founder of Hoboken Family Chiropractic + Wellness, in Hoboken, NJ. Follow her on FB and IG @drlaurabrayton and at www.drlaurabrayton.com



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THE ROLE OF CALCITONIN GENE RELATED PEPTIDE IN MIGRAINE AND MIGRAINE PHENOTYPE HEADACHES

Gregory Katsaros, DC, DAAPM

ABSTRACT

Headaches can range from a brief minor nuisance to a debilitating event. When diagnosing and treating headaches an understanding of the distribution, timing, and other associated symptoms of headaches are essential. It is also important to have a basic understanding of the neurophysiology that occurs during these headache attacks. Calcitonin gene related peptide (CGRP) is a neurotransmitter which is a potent vasodilator and well understood to be associated with migraine headaches. While some of the basic mechanisms of action of CGRP are understood in relation to headache disorders, further investigation into its involvement is essential for a more thorough understanding of headache pathophysiology.

Headaches

Headaches are classified as either primary, secondary, and cranial neuropathies & facial pains and other headaches. Primary headaches are disorders in and of themselves, and not caused by other disorders. Primary headache types include migraine, tension type headache, and trigeminal autonomic cephalgias. Secondary headaches are those headaches resultant of another disorder which is capable of causing the headache. Secondary headache types include those resultant of such issues as trauma, infection, tumors, or medications. Cranial neuropathies & facial pains and other headaches include those such as trigeminal neuralgias and occipital neuralgias. The pathophysiology of certain headache disorders became better understood with the discovery by Goadsby, et al, of the role Calcitonin Gene Related Peptide (CGRP) plays in migraine headaches (1,2,3). Since that time the actions and effects of CGRP have been studied in relation to various headache disorders such as migraine and migraine phenotype headaches.

Migraine

Migraine headaches are a common primary cephalgia affecting approximately 10% of the population. There are approximately 30 types of migraine classified, but with 2 major types: Migraine without aura and Migraine with aura. Migraine without aura is a clinical syndrome characterized by headache with specific features and associated symptoms. Some of these specific features and symptoms in adult migraine include a headache which last 4-72 hours, are unilateral hemifacial, demonstrated about the ophthalmic (V1), maxillary (V2), and or mandibular (V3) branch distributions of the trigeminal nerve (CNV), are of a pulsating quality, and have two of the following 3 PIN criteria: Photophobia (or phonophobia), Inability to function, and Nausea. Migraine with aura is a migraine type headache with the specific features and symptoms previously noted, but which is also preceded by transient focal neurological symptoms known

as aura. Migraine aura typically begins within an hour prior to the onset of the head pain and generally lasts less than 60 minutes. The aura demonstrated in migraine with aura are most often either visual, sensory, or aphasic, with the most common being a scintillating scotoma (visual).

Migraine Phenotype Headaches

While migraine headaches are a primary neuralgiaform cephalgia, migraine phenotype headaches are secondary headaches such as cervicogenic or tension type headaches which demonstrates symptoms similar to that of migraine, but are not true migraine. These secondary types of headaches are often related to the cervical spine. The cervical trigeminal complex provides an avenue whereby cervicogenic issues can lead to headaches with migraine type symptoms. The trigeminal ganglion neurons provide the connection between the primary afferent fibers of the trigeminal ganglion and meningeal vasculature, and the central terminals in the trigeminal nucleus caudalis. Calcitonin Gene Related Peptide (CGRP) is a neurotransmitter which is abundant within trigeminal ganglion neurons and is released from the peripheral nerve and central nerve terminals as well as being secreted within the trigeminal ganglion (4). The peripheral afferent spinal nerves C1, C2, and C3 are related to the trigeminal nerve branches V1, V2, and V3 through the trigemino-cervical complex. Stimulation of these peripheral afferent spinal nerves and their convergent inputs to the central projection of the trigeminal vascular system can lead to CGRP and Substance P release within the trigeminal system and provide for the cascade of events leading to migraine type symptoms.

Whether through central stimulation of the trigeminal nerve in primary migraine, or peripheral afferent stimulation through the trigeminal cervical nucleus, the actions of CGRP have been shown to be an important factor in migraine type symptoms.

Calcitonin Gene Related Peptide (CGRP)

CGRP is widely distributed throughout the central and peripheral nervous system. It is blood-brain barrier impermeant and expressed in high concentrations within the striatum, amygdala, thalamus, pineal gland, colliculi, trigeminal ganglion, trigeminal nucleus caudalis, cerebellum and cerebral cortex as well as peripherally in nociceptors and the enteric nervous system (5). It binds to special receptors which activate many of the symptoms of migraine including vasodilation, inflammation, and pain. Within the trigeminovascular nociceptive system, CGRP has demonstrated to play an essential role in headache pathophysiology (6,7,8). It is expressed in and released from a subset of polymodal primary sensory neurons of the trigeminal ganglion, wherein activation of primary sensory neurons in the trigeminal vascular system can cause the release of CGRP. Release of CGRP in the dorsal spinal cord has been associated with nociceptive transmission. Release of CGRP from perivascular nerve endings can cause neurogenic vasodilatation and has demonstrated to be increased in the cranial circulation during migraine attacks (8,9). CGRP binds to and activates CGRP receptors located around meningeal vessels, and it is commonly colocalized with Substance P and inhibits substance P degradation (10, 11).

CGRP Action on Meningeal Vessels

Migraine headaches were once considered a vascular type of headache. Further research has updated this and has now described migraine as a primary neuralgiform cephalgia with a vascular component. With the discovery of the role CGRP plays in migraine headaches, investigations into its action in relation to migraine symptoms have been ongoing. Well understood is the fact that CGRP is a potent vasodilator, and meningeal vessels have long been thought to be dilated during a migraine attack. Of question was whether the meningeal vessel dilatation was the sole or major cause of the headache, and if so, how much dilatation occurs during a migraine attack.

Amin et al, studied high resolution magnetic resonance (MR) angiography of the major cerebral arteries during a headache attack and showed that these vessels are dilated approximately 10% during the headache attack in comparison to the interictal period, and also when comparing the painful side to the non-painful side (12). While arterial dilatation has thus been shown to exist during migraine headache attacks, this amount of arterial dilatation is likely not sufficient to cause pain solely by mechanical dilatation. However, adopting the actions of the inflammatory cascade, it is possible to surmise that upon CGRP release and receptor activation on meningeal vessels, leakage of pro inflammatory components could sensitize the highly pain sensitive dura mater. It is therefore possible that dilatation of the meningeal vessels can cause release of pro inflammatory components leading to degranulation of dura mater mast cells which lie near the meningeal vessels. This could further lead to the release of several substances which are both pro-inflammatory and nociceptive, and thus demonstrate the pain associated with migraine and migraine phenotype headaches.

CGRP Action on the Hypothalamus

In addition to pain, migraine headaches demonstrate other certain specific findings. Among these are the PIN criteria; Photophobia (or phonophobia); Inability to function; Nausea. While meningeal vessel dilatation and subsequent pro inflammatory cascade actions may account for the pain, this would not account for the PIN findings found in migraine and migraine phenotype headaches.

In addition to the actions of CGRP on meningeal vessels, there are also CGRP receptors within the hypothalamus. Maniyar et al, investigated brain activation during migraine attacks utilizing Positron Emission Tomography (PET) scans with $H_2^{15}O$. They described that the hypothalamus did not demonstrate to be actively involved during a migraine headache, however the imaging studies demonstrated hypothalamic activity on the ipsilateral side prior to the onset of a migraine headache. This suggested that while the hypothalamus may not be contributory during an active migraine headache attack, it may be involved in migraine headache generation (13). Schulte et al investigated hypothalamic activity utilizing functional MRI. They found that hypothalamic activity was well differentiated in two different general areas of the hypothalamus in relation to migraine. The investigators hypothesized that the anterior hypothalamus mediates the activity which precipitates and initiates

migraine attacks while the posterior aspect of the hypothalamus was associated with the pain component of acute attacks (14).

The hypothalamus has direct ascending and descending connections with the dorsal horn and contains several areas associated with the descending modulation of pain and nociceptive processing. The medial preoptic nucleus (MPO) plays an important role in the autonomic response to pain and has projections to the periaqueductal grey (PAG), nucleus raphe magnus (NRM), and the rostroventromedial medulla (RVM), all of which are areas involved in nociceptive processing (15,16). There are areas within the medial and lateral hypothalamus which inhibit the responses of spinal cord neurons to noxious peripheral stimuli (17,18). The paraventricular nucleus (PVN) has antinociceptive effects (19), and the anterior hypothalamus is known to suppress the response of wide dynamic range neurons in the dorsal horn to noxious stimuli (17,20).

CGRP receptors have also been found to exist within different areas of the hypothalamus (21). It is possible that CGRP is involved in actions which both precipitate and propagate the various symptoms associated with migraine. Photophobia and headache have been associated with the interactions between visual and pain pathway at the retina, midbrain, thalamus, hypothalamus and visual cortex, and may be dependent on CGRP transmission (22). Nausea associated with migraine has been related to the activation of various hypothalamic and hypothalamic related structures including the nucleus tractus solitarius, dorsal motor nucleus of the vagus, nucleus ambiguus, and the periaqueductal grey, and has been shown to be independent of pain (12). With CGRP receptors located within these structures (23,24, 25), it is likely that enhancement by trigeminal nociceptive activation can potentially worsen and prolong the nausea symptoms.

Discussion

Migraine headaches are a primary neuralgiform cephalgia, and migraine phenotype headaches are a secondary type of headache which display signs and symptoms similar to migraine. Elevated CGRP levels have been well understood to be associated with migraine and migraine phenotype headaches. The CGRP levels can be elevated due to central stimulation as in migraine, or through peripheral afferent stimulation as in migraine phenotype headaches. While the association of CGRP and the headaches exist, the exact pathophysiology is not completely understood. CGRP is a potent vasodilator, however in migraine headaches, the cerebral vessels have been shown to dilate only about 10%. This is most likely not sufficient to cause headache pain based solely upon the mechanical distension of the vessel. It is possible that this dilatation can cause secondary release of pro inflammatory and nociceptive agents sensitizing the meningeal vessel or the adjacent dural tissue. While this may account for the pain, other symptoms associated with migraines such as photophobia and nausea are likely resultant of a different mechanism.

The hypothalamus has also been well associated with migraine headaches and their symptoms, and CGRP receptors have been demonstrated in various nuclei of the hypothalamus and directly associated hypothalamic structures such as the nucleus tractus solitarius, dorsal motor nucleus of the vagus, nucleus ambiguus, and the periaqueductal grey. It is possible that CGRP activation of the meningeal vessels, hypothalamus, and other associated structures can account for the pain and symptoms displayed in migraine and migraine phenotype headaches.

Acknowledgments

Special thank you to Christopher Katsaros, Steven J. Yazbeck, and Timothy Burgess

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Arizona Association of Chiropractic Convention Speakers



Matthew Antonucci , DC, DACNB, FACFN

Topic....Concussion

Dr. Antonucci is an experienced chiropractic neurologist, functional neurology practitioner, researcher, and international lecturer with nearly 15 years of clinical experience. Although specializing in concussion, he has proudly participated in the health transformation of thousands of patients with complex neurological conditions and performance challenges, through the prescription and administration of client-specific neurological rehabilitation programs. His work has been featured in ESPN, Sports Illustrated, FOX News, and many other media outlets. He is a highly sought-after speaker who has delivered thousands of hours of education, to tens of thousands of healthcare providers both domestically and internationally. He has also authored a number of peer-reviewed publications. He is a loving husband and the father of five amazing boys, whom he hopes to inspire to follow in his footsteps.



Mike Carberry, DC

Topic...Documentation

Dr. Mike Carberry is an entrepreneur, author and public speaker. He was born in Pennsylvania but raised in New Jersey with seven other siblings. There, he attended Stockton University and earned a Bachelor of Applied Sciences with a major in marketing. After an accident changed the course of his life, Dr. Carberry decided to pursue a profession in chiropractic, completing his Doctor of Chiropractic at Life University in 1991. Dr. Carberry speaks nationally on topics ranging from business to health care and economics, to the opioid and mental health crisis. In his recently published book, the Death of American Healthcare he provides a fearless description of how we are part of a pill-based healthcare system that created the opioid crisis, but there is a cure to all this. As co-founder of Advanced Medical Integration, Dr. Carberry's mission is to help end the Opioid Crisis in the US through healthcare reform.



Sumit Dewanjee, MD Orthopedic Surgeon ***Topic....Knee and Shoulder Orthopedic Cases***

Sumit Dewanjee, MD, specializes in orthopedic surgery at FXRX Inc. in Tempe and Chandler, Arizona. He completed his medical degree at the University of Miami Miller School of Medicine after majoring in anatomy and physiology at Cornell University. Dr. Dewanjee received his sports fellowship, focusing on athletic injuries of the knee and shoulder, in San Diego, California, where he gained experience caring for high school, collegiate (the University of San Diego and Point Loma Nazarene University), and professional athletes (San Diego Chargers, San Diego Riptide, and WWE). Dr. Dewanjee has built on that experience by continuing to incorporate the top options available for patients who suffer from ACL tears, rotator cuff tears, knee pain, shoulder pain, dislocated shoulders, and other orthopedic conditions. He is also experienced in orthopedic trauma and provides Level I services in Phoenix, Arizona, at Maricopa Medical Center. Dr. Dewanjee is board certified by the American Board of Orthopaedic Surgery and is an active Mensa member. Recently, Dr. Dewanjee received his 7th straight Patients Choice Award, cementing his status as one of the best orthopedic surgeons in Phoenix, Arizona. The award is voted on by patients and received by less than 5% of orthopedic doctors nationwide.

Arizona Association of Chiropractic Convention Speakers



Bill Gallagher, DC

Topic.....Impairment Ratings

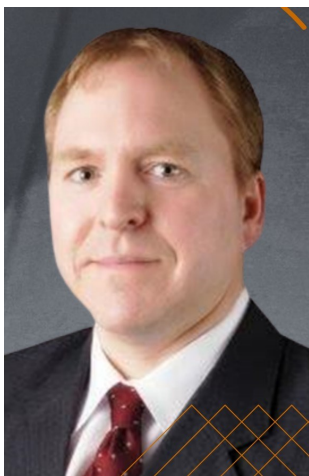
Bill Gallagher is a 1988 graduate of Life Chiropractic College West and the founder of the American Academy of Motor Vehicle Injuries (AAMVI). This 150 hour program has testing by the NBCE and is now available online. He currently serves as the Executive Delegate for the AAC and sits on the Education Committee which is responsible for our convention. He has taught personal injury seminars around the country and will be teaching a class on Impairment Rating at our 2023 AAC convention.



Steve Gould, DC, DACBR

Topic.....Radiology—MRI / CT

Dr. Steven Gould is a Board Certified Chiropractic Radiologist who became a Diplomate of the American Chiropractic Board of Radiology (DACBR) in 1993. He has a full-time radiology and clinical/patient practice where he performs interpretations on plain film radiographs and MRIs for referring chiropractors. In his clinical practice, he has provided chiropractic care to the Wichita Wranglers professional baseball team and the Wichita Thunder hockey team. Dr. Gould is a member of the Kansas Chiropractic Association who named him young doctor of the year in 1995. In 2012, the Kansas Chiropractic Association awarded him Doctor of the Year. In 2014, Dr. Gould became a board member of the Kansas State Board of Healing. He was elected to serve as President for the 2019 - 2020 term. He has served as president of the Sedgwick District of the KCA. In addition, Dr. Gould holds memberships in the American Chiropractic College of Radiology and the American Chiropractic Association (ACA). He was president of the ACA's Council of Diagnostic Imaging



Deed Harrison, DC CBP PRESIDENT/CEO

Topic...Sagittal Subluxations

Dr. Harrison will be speaking on Sagittal Subluxations

Deed E. Harrison, D.C., graduated from Life-West Chiropractic College in 1996. Dr. Harrison has developed and researched original spinal rehabilitation procedures and has lectured to thousands of Chiropractors at nearly 1000 educational conferences around the world. He has authored / co-authored approximately 200 peer-reviewed spine related publications, 7 spine textbooks, 39 Letters to the Editors in peer-reviewed journals, and numerous conference proceedings. Dr. Harrison is a manuscript reviewer for several peer-reviewed Spine journals including: Spine, Clinical Biomechanics, Clinical Anatomy, Archives of Physical Medicine & Rehabilitation, the European Spine Journal, BMC Complimentary Alternative Medicine, and BMC Musculo-Skeletal Disorders. Additionally, Dr. Harrison is a past member to the International Society for the Study of the Lumbar Spine (ISSLS), is a former International Chiropractors Association's (ICA) Nevada State Assembly Representative member, and is the acting Chair of the PCCRP Chiropractic Radiography Guidelines. He formerly held a position on the Chiropractic Physicians Board of Nevada. Currently, Dr. Harrison is the President / CEO of Chiropractic BioPhysics® (CBP®) Technique and Seminars and is the President of CBP NonProfit, Inc. — a spinal research foundation based in Eagle, ID, USA.

Arizona Association of Chiropractic Convention Speakers



Gregory Katsaros, DC, DAAPM

Topic...Headaches

Gregory Katsaros, DC is a Diplomate in Pain Management from the American Academy of Pain Management. He received a Bachelor of Science in Physiology from Michigan State University and his Doctorate in Chiropractic from Cleveland Chiropractic College in Los Angeles. He received his training in Nuclear Medicine at Charles R. Drew Post Graduate Medical School and King Drew Medical Center in Los Angeles. He is a member of the American College of Nuclear Medicine and the International Headache Society. He is a published author on subjects such as headaches, nuclear medicine and pain management, and has spoken on these topics statewide and nationally. He is the owner of Integrative Pain Management in Tempe, AZ (www.azheadaches.com) and co-owner of Aristotle Continuing Education (www.AristotleCE.com). The focus of his practice is on headaches and nonsurgical musculoskeletal pain.



Steve Kraus, DC, FIACN, DIBCN, FASA, FICC

Topic...Digital Motion X-Ray

Dr. Steven Kraus, DC, FIACN, DIBCN, FASA, FICC is a past Chairman of the Iowa Board of Chiropractic Examiners, a past President of the Iowa Chiropractic Society, and has served on numerous national association committees and boards to advance chiropractic. Since graduating from Palmer College of Chiropractic in 1988, Dr. Kraus has owned 18 chiropractic practices including an interdisciplinary practice; launched a consultancy firm that coordinated the sale of over 400 different chiropractic clinics nationwide; and is now the President and Founder of Biokinometrics, a chiropractic-centric technology company focusing on digital x-ray solutions and impairment ratable software using AOMSI.



David Morrison JD

Topic...Jurisprudence

For over 25 years Mr. Morrison has been THE ONE you want by your side should you go in front of our licensing board: Attorney David Morrison But did you also know: He offers a free consultation should you need help with a board complaint. He has been practicing PERSONAL INJURY for over THREE DECADES! He is a practitioner; that values patient contact he works hard to make sure we are paid fairly He offers your PI patients Free Consultations. He has tried over 25 cases to a jury. He has represented 300-400 claimants in arbitrations. He has represented over 1000 client's cases without going into litigation. His staff has been with him for 25 years cumulatively. He is the Arizona Association of Chiropractic's GO TO Resource for all things legal and has been assisting and guiding us for over 30 years!

Arizona Association of Chiropractic Convention Speakers



Daniel J. Murphy, DC, DABCO

Topic....Laser

Dan Murphy graduated magna cum laude from Western States Chiropractic College in 1978, and has more than 40 years of practice experience. He received his Diplomate in Chiropractic Orthopedics in 1986. Since 1982, Dan Murphy has served as part-time undergraduate faculty at Life Chiropractic College West, where he is currently teaching classes to seniors in the Management of Spinal Disorders and Spinal Pathology/Neurology. Dan Murphy has been the coordinator of a year-long certification program (through the International Chiropractic Association) in “Chiropractic Spinal Trauma”, a program that has graduated about 2,000 chiropractors. He has taught more than 1,700 post-graduate continuing education seminars. In 1987, 1991 and 1995 Dan Murphy received the “Post-Graduate Educator of the Year” award, given by the International Chiropractic Association. In 1997 he received “The Carl S. Cleveland, Jr., Educator of the Year” award, given by the International Chiropractic Association of California. In 2003, Dan Murphy was awarded “Chiropractor of the Year” by Chiropractic Biophysics. This award is most prestigious because Chiropractic Biophysics has more chiropractic research studies published in the scientific literature than any other chiropractic group. From 2003-2009 Dan Murphy was the Vice President of the International Chiropractic Association. He was honored to be chosen as “Chiropractor of the Year” for the International Chiropractic Association, May 2009-2010. In 2014, Dan Murphy was given the Lifetime Achievement Award from the International Association of Functional Neurology and Rehabilitation (IAFNR). Dan Murphy reviews articles regarding alternative health issues, which can be accessed through his website at www.danmurphydc.com



Cliff Tao, DC, DACBR

Topic....Radiology X-Ray

Dr. Cliff Tao was born in Ottawa, Canada now lives in Irvine, California. He has owned and operated a nationwide private chiropractic radiology practice since 2004. Following graduation from National University of Health Sciences in Chicago, Dr. Tao completed his 3 year full-time chiropractic radiology residency at Los Angeles College of Chiropractic (LACC) and then a full-time musculoskeletal radiology research fellowship at University of California, Irvine (UCI) Medical Center in Orange, California. He is an internationally sought after speaker, and is published both in chiropractic and medical literature, on the topic of chiropractic, spine, and musculoskeletal imaging. Dr. Tao was former voluntary radiology faculty at LACC and former voluntary instructor of radiology at UCI Medical Center. He is married with a 7 year old boy, and enjoys the outdoors, especially downhill skiing.

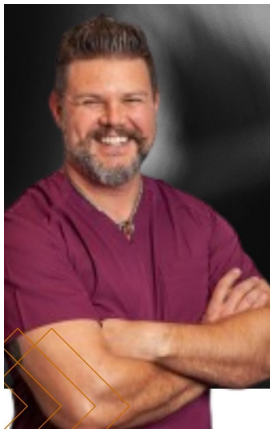
Arizona Association of Chiropractic Convention Speakers



Scott Tauber, DC, DABCO

Topic...Practical Personal Injury Case Management

Dr. Scott Tauber is the COO and Director of Education for the American Institute of Personal Injury Physicians. He has over 25 years of active clinical and healthcare consulting experience and has served as an expert witness for both plaintiff and defense med-legal cases, been an independent consultant for several major automobile insurance carriers, healthcare companies and state regulatory agencies. Dr. Tauber is the developer of the “Personal Injury Success Blueprint” system, which helps providers quickly improve the Personal Injury portion of their practice and work more effectively with med-legal professionals while maximizing their performance and growth. He is a national speaker on the topic of Personal Injury and has been a guest instructor at med-legal conferences, state association events and professional schools. Dr. Tauber is also a Diplomat of the American Board of Chiropractic Orthopedists and a Certified Professional Coder.



Aaron Wiegand, DC, CCST, FIAMA, SFDN

Topic...Dry Needling

Dr. Wiegand is a second generation chiropractor who practices in a multidisciplinary pain clinic serving the underserved, post-surgical, chronically ill and neuropathological cases with his over 15 years of experience. A Palmer West Graduate, he is an accredited lecturer who trains chiropractors in Dry Needling throughout Arizona and Texas. A company conceived during the pandemic, his company, ChiroNeedle, takes Dr. Wiegand’s years of experience utilizing Dry Needling in extreme cases, and tailoring the technique to address the most common conditions which present in a Chiropractic setting. In doing so, he hopes the profession will adopt a more patient-centered and evidence-based approach to patient management as a means to gain public credibility through addressing individual patient values. He believes that safe, accessible and convenient pain relief via a focused multimodal treatment strategy that meets the patient where they are at on each visit, is the means by which chiropractic can become and remain competitive within the physical medicine marketplace.



Kevin Wong, DC

Topic...Extremity Adjusting

Dr. Kevin M. Wong is a 1996 Summa Cum Laude graduate of Palmer College of Chiropractic West. He graduated as Class Valedictorian with Clinical Excellence and Student Fellow Awards. He spent his first 4 years practicing as an Associate DC while teaching part-time at PCCW. He then established his own private practice with his wife, Dr. Isabel, which he continues to operate today. He has been a practicing Chiropractor and Continuing Education Instructor for over 26 years. He has developed his emphasis in the feet, shoulders/ribs, and the TMJ. Dr. Kevin’s private practice utilizes a variety of adjustive techniques treating all age levels. His continued practice experiences influence and evolve the course material he teaches Chiropractors, CAs, and students. He frequently writes articles for Chiropractic Economics, The American Chiropractor, and Dynamic Chiropractic. He also blogs for Foot Levelers. Dr. Kevin practices full-time in the city of Orinda, located in the East San Francisco Bay Area. He lives in Walnut Creek, CA with his wife and kids

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ARIZONA ASSOCIATION OF CHIROPRACTIC

2023 ANNUAL CONVENTION SCHEDULE*

FRIDAY June 9, 2023

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

SATURDAY June 10, 2023

7:00a-8:00a	Registration	Registration	Registration
8:00a – 9:40a	<i>Steve Gould, DC, DACBR Radiology – MRI / CT</i>	<i>Dan Murphy, DC, DACBO Laser</i>	<i>Kevin Wong, DC Extremity Adjusting</i>
9:40a-10:00a	Exhibits	Exhibits	Exhibits
10:00a-11:40a	<i>Steve Gould, DC, DACBR Radiology – MRI / CT</i>	<i>Dan Murphy, DC, DACBO Laser</i>	<i>Kevin Wong, DC Extremity Adjusting</i>
11:40a-12:00p	Exhibits	Exhibits	Exhibits
12:00p-1:00p	Lunch – Awards Ceremony	Lunch – Awards Ceremony	Lunch Awards Ceremony
1:00p-2:40p	<i>Cliff Tao, DC, DACBR Radiology – X-Ray</i>	<i>Scott Tauber, DC Case Management</i>	<i>Matthew Antonucci, DC, DACNB Concussion</i>
2:40p-3:00p	Exhibits	Exhibits	Exhibits
3:00p-4:40p	<i>Sumit Dewanjee, MD Orthopedics</i>	<i>Scott Tauber, DC Case Management</i>	<i>Matthew Antonucci, DC, DACNB Concussion</i>
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 11, 2023

8:00a – 9:40a	<i>William Gallagher, DC Impairment Ratings</i>	<i>Aaron Wiegand, DC Dry Needling</i>	<i>Michael Coates - Ethics (1 Hour)</i>
9:40a-10:00a	Exhibits	Exhibits	Exhibits
10:00a-11:40a	<i>William Gallagher, DC Impairment Ratings</i>	<i>Gregory Katsaros, DC, DAAPM Headaches</i>	<i>David Morrison, JD Arizona Jurisprudence</i>
11:40a-12:00p	Convention Concludes	Convention Concludes	Convention Concludes

* Some times of speakers subject to change

ICA Pays Tribute to the Legal Lion – George McAndrews

Beth Clay

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Falls Church, VA (April 11, 2023). The International Chiropractors Association (ICA) pays tribute to George Pellegrin McAndrews as we mourn his passing. According to the obituary available on line at [Legacy](#), Mr. McAndrews passed away peacefully on Good Friday. Married to his wife Katharine for 59 years, “Papa George” as his family called him had five children, 21 grandchildren and five great grandchildren.

The son of a chiropractor (Dr. Patrick McAndrews), he was an All-State basketball player in high school and state champion on track and field. He went on to study mechanical engineering at the University of Notre Dame and earned a BSME with honors and winning the award of Engineer of the Year.

George would delay his education to serve two years in the Navy with his brother Tom, and as part of his deployment participated in Operation Redwing, a series of 17 nuclear detonations conducted in the South Pacific. With thousands of other military personnel, George and Tom were later officially designated “Atomic Veterans” for the unique nature of their service. George later enrolled at Notre Dame Law School, where he served as editor-in-chief of the Law Review and Chairman of the National Council of Law Review Editors. Upon graduation, he served for two years as a law clerk to the U.S. Court of Appeals for the Seventh Circuit.

Over the course of his 55 year career as a trial attorney, Mr. McAndrews built a strong and successful record. Were it not for his legal prowess, the attempt to completely destroy the chiropractic profession might have been successful. Mr. McAndrews served as lead counsel almost two decades long landmark antitrust case, *Wilk, et al. v. AMA, et al.* The case which had many twists and turns, ended in the favor of chiropractic in large part because of George McAndrews. As lead attorney, he is credited with saving the chiropractic profession.

At the conclusion of the protracted legal battle, District Judge Getzendanner summarized her findings with the following, “The AMA and its officials, including Dr. Sammons, instituted a boycott of chiropractors in the mid-1960s by informing AMA members that chiropractors were unscientific practitioners and that it was unethical for a medical physician to associate with chiropractors. The purpose of the boycott was to contain and eliminate the chiropractic profession. This conduct constituted a conspiracy among the AMA and its members and an unreasonable restraint of trade in violation of Section 1 of the Sherman Act.

The AMA sought to spread the boycott to other medical societies... The plaintiffs are entitled to injunctive relief against the AMA...” <https://law.justia.com/cases/federal/district-courts/FSupp/671/1465/2595129/>

As we pay tribute to this legal lion, let us also remember that the work is not done. We are still, decades later weeding out the institutionalized bias discrimination against chiropractors and their patients in federal programs, policies and laws as a result of the AMA doctors who used their influence to restrain chiropractic over 50 years ago. The ICA with your help will continue this good fight.



How Key Person (Employee) Life Insurance Financially Guarantees Funding for An Exit Strategy

Tomas McFie DC, Ph.D.

There are only three places where money can be stored with contractual guarantees.

Banks and Credit Unions

U.S. Treasuries, and

Certain Contracts with Life Insurance Companies

Each of these contractually guaranteed savings vehicles are unique. In this article we will focus primarily on whole life insurance contracts.

Employers are legally allowed to own life insurance on key employees. If cash flow is limited, an employer may initially start with term life insurance which can later be converted to whole life insurance. Term insurance only provides financial security for an employer if the key employee dies during the time the term life insurance is in force. As the cost to keep term coverage increases over time, term life insurance is not a good option to consider for older key employees or for long term planning. Whole life insurance is the best option because it develops cash value which can be accessed without disturbing the growth the contract provides and is guaranteed to last for the lifetime of the insured.

For business partners, policies should be purchased on each partner, by each partner. The cash value in these policies should be designated in the company's Buy-Sell Agreement to buy out a retiring partner's shares in the company, to pay to a deceased partner's estate, or to fund a retirement plan for a retiring partner. Thus, the remaining partner(s), are not financially strapped or forced into bankruptcy due to a departing partner. In a company with more than two partners, a sub-LLC to the main corporation can own the life insurance policies for the Buy-Sell Agreement, preventing each partner from having to purchase multiple life insurance policies.

Unfortunately, many partners or employers have never heard about key person life insurance. But those who understand the value of owning such policies have an advantage over those who don't.

Business Owner A and B need \$XXK for their business. Business Owner A gets the money by simply calling their life insurance agent. Within days the \$XXK needed is in their bank account ready to use.

Business Owner B, not having access to cash in life insurance, must find a lender who will lend them \$XXK, unless they have already established a line of credit.

If both Owners repay their loan back in an identical manner over the next few years, Owner A, will make their payments to the life insurance company, while Owner B would repay whoever lent them the money.

But Owner A will have benefited from the policy growth over repayment period. As a result of this continued policy growth, along with any dividends earned on their policy, Business Owner A will have quick access to more money than what was repaid on the loan. Owner B may or may not have quick access to the \$XXK, depending on the terms and conditions of the loan. And all the interest paid will be lost to the lender.

Don't miss the next issue when **"The Importance of Guarantees in Life Insurance Contracts"** will be explored.

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 co- founded Life Benefits, LLC, to help chiropractors, families and other business owners, keep more of the money. Contact Life Benefits, LLC at Life-Benefits.com or text/call 702-660-7000.

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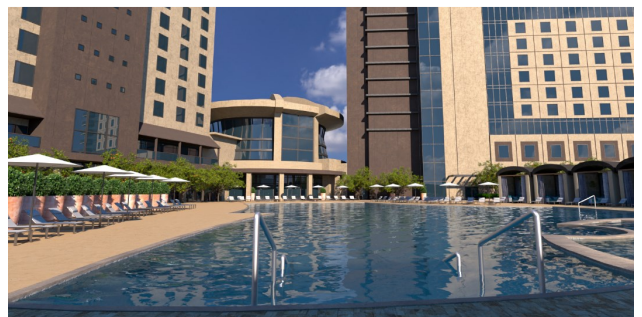


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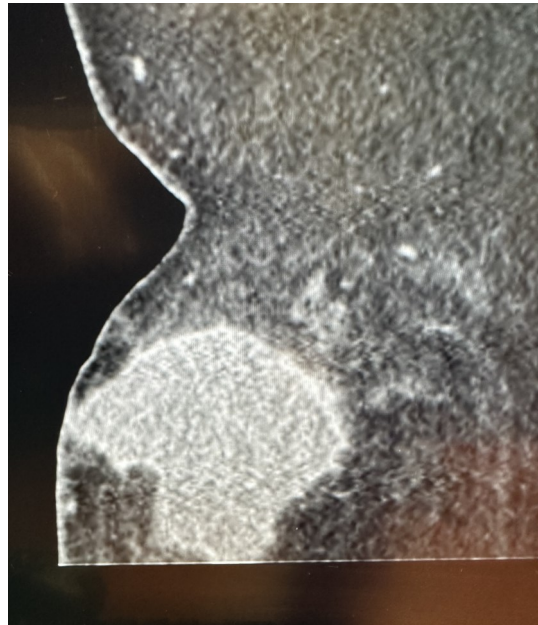
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Radiology Case—Brief Report

Morel-Lavallee Lesion of the Right Hip

Gregory Katsaros, DC, DAAPM



CT scan demonstrating a large encapsulated simple fluid collection in the subcutaneous tissues of the right hip / proximal thigh and overlying the greater trochanter adherent to the underlying fascia, representing a post traumatic pseudocyst (Morel-Lavallee lesion).

A 47 year old male presented with complaints of right leg pain following a motor vehicle accident. A CT scan of the region was performed with and without contrast demonstrating a post traumatic pseudocyst (Morel-Lavallee lesion).

Morel-Lavallee lesions are soft tissue injuries resultant of abrupt separation of the skin and subcutaneous tissue from the underlying fascia. The injury was first described by Maurice Morel-Lavallee, a French surgeon in 1853 as a closed degloving injury where the skin and superficial fascia are traumatically separated, creating a dead space. These lesions are often the result of high-velocity trauma injuries where a shearing force causes a separation of the skin and subcutaneous tissue from the underlying muscle fascia. This separation creates a dead space which is then filled with blood, lymph, and necrotic debris. The most common area for a Morel-Lavallee lesions to occur is the greater trochanter and proximal thigh (as seen in the images above). MRI is the modality of choice in diagnosis however, CT is often initially performed due to the high incidence of fractures resultant of the traumatic injury. These lesions are not demonstrated on plain film x-rays, however an underlying fracture may be evident. Early diagnosis is essential for proper management. Treatment is based upon several factors, including but not limited to the size of the lesion, any underlying fracture, or any required regional surgical intervention, among others.

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