# Arizona Association of Chiropractic

Volume 6 Issue 2 May / June 2022



AAC Annual Convention

June 11, 12

Gila River Resorts & Casinos Wildhorse Pass

Chandler, Arizona

# BREBNER LAW FIRM, P.C.

Proudly serving Arizonans for over 25 years.

BART BREBNER, ESQ.

LISTED IN THE BEST LAWYERS IN AMERICA®,
PERSONAL INJURY LITIGATION-PLAINTIFFS, 2022



4647 NORTH 32ND STREET, SUITE 285, PHOENIX, AZ 85018 • 602-230-9554

BREBNERLAW.COM

## **Arizona Association of Chiropractic**

## **Upcoming Events** Table of Contents

May 4	AAC Monthly Dinner Meeting La Famiglia Pizza and Pasta Mesa Dobson & Guadalupe	How To Write A Case Study William Gallagher, DC	4-5
June 11- 12	AAC Convention WildHorse Pass	Characteristics of Primary and Secondary Headache Disorders	6-9
August 13	ABCs of PI Bill Gallagher	Gregory Katsaros, DC, DAAPM	
	Flagstaff	Convention and Speaker Information	10-21
September Oct 29-30	Jeff Cronk  2he Webinar on CRMA  Tucson Convention	Case Study of Lumbar Disc Extrusion William Gallagher, DC	22-23
Oct	MRI Webinar Sean Mahan MD, 2 CE	The President's Corner  Andrew Altman, DC	24
Dec 11- 12	Lecture Phoenix Toys For Tots	Radiology Brief Case Study: Pulmonary Embolism <i>Gregory Katsaros, DC, DAAPM</i>	25
		Classifieds	26

#### **Arizona Association of Chiropractic**

President: Andrew Altman, DC Vice President: James Bogash, DC Treasurer: Renee Haberl, DC

Secretary: Gregory Katsaros, DC, DAAPM Executive Delegate: William Gallagher, DC

Executive Director: Denise Bautista Past President: Trever Penny, DC

To advertise, please contact Denise Bautista at admin@azchiropractic.org

For Journal Submissions of manuscripts and Radiology Brief reports, please email: azjournal@outlook.com

#### **How to Write a Case Study**

#### Bill Gallagher DC

As chiropractors we are all familiar with Wilk v. AMA. The argument the AMA used in its campaign to eliminate the profession of chiropractic was the lack of use of the scientific method and the risk to patients because of that. While the appeals court did find for the plaintiffs the burden of scientific proof still lingers over our profession.

When the case was originally filed the AMA ethics rules made it unethical for an MD to even associate with a chiropractor. In the years since those ethics' rules were changed, MDs ethically are able to refer to a chiropractor if they think it would help the patient. The rules also changed to allow MDs to teach in chiropractic colleges.

To this day a lack of scientific evidence still raises questions about chiropractic. Colleges now have research departments that have produced meaningful studies. Many techniques have been able to gather enough data from their practitioners to demonstrate the efficacy of those techniques.

The varying definitions offered by different colleges and groups about our profession boiled down to the art, science, and practice. Art and practice are demonstrated by each of us in our daily work. We have all seen miracles and over time most of us have learned to expect a miracle when a patient has been properly adjusted.

The weakness in our definition is that is still used against us is science. The cost of doing research is far beyond what the average chiropractor can afford. The thing to understand however, is that the basis for research studies is founded in case studies. When a case study demonstrates that it is possible to affect a change, that is an interesting fact. When several case studies come to the same conclusion that opens the door for further research.

Again, few of us are in a position to fund studies with enough test subjects that will have validity. On the other hand, every single chiropractor is in a position to write a case study. Every one of us has not only had that miracle case but on a regular basis we have seen how regardless of which technique we utilize, we can affect positive changes with our patients.

Writing a case study is a much simpler process than most doctors would believe. For the most part it takes little more than good notes in your patient's file that can be quickly translated into a good case study.

The first part of a case study that will take you beyond your SOAP notes would be the introduction. This section that generally runs a few paragraphs sets the stage by discussing the condition that you have found and what we already know about that condition. This would include the prevalence, how it is diagnosed and what the estimated cost in both healthcare and lost earnings may be. Beyond that you should include how this condition is treated in the medical community, how you addressed it, and what affects were seen by your treatment.

The actual report is basically a copy and paste from your records. This would include demographics about your unnamed patient, history, complaints, exam findings, and treatment. That last item is one of great value to our profession. When we can demonstrate that chiropractic adjustments have had a positive effect on whatever condition and has been done so at a fraction of the cost, the value of chiropractic will stand up to scrutiny.

One section that should be a part of your case study would involve the use of outcome assessment tools. Accepted questionnaires like the Neck Disability Index and the Pain Disability Questionnaire can be easily utilized to document your patient's progress on a numeric basis. This is pure science.

Once you have laid out all the information that would be gathered in the treatment of your patient the case study is summed up in a discussion and conclusion sections.

The discussion should consider previous studies and knowledge about this condition, what you did, and the reasons you saw the changes that you saw. The discussion should also cover possible questions about your case study. To address this, you should look at what limitations or faults could be derived from what you did or did not do.

Finally, there is your conclusions section where you list the significance of this case, what you have learned, and suggestions for where additional research might be directed.

As with any other scientific work a list of references should also be included. These include first the textbooks that you used as a student and practice. They can also include studies you learned about at seminars. If you lack supporting references a pub med search will provide more than you want to know.

You have used the scientific method every day in your practice. When you assess your patient's complaints, that directs you to a hypothesis of what the problem may be or what a cause from a chiropractic perspective may be. Given whatever technique you utilize, your testing verifies where best to administer the chiropractic adjustment. When change has been affected and patients will not hesitate to let you know that is the case, you now have a measurable change that will stand up to your previous testing.

If your testing includes outcome assessment tools that are administered pre-and post you will have a numerical measure of change.



Scottsdale chiropractor, Bill Gallagher has taught personal injury seminars through the American Academy of Motor Vehicle Injuries. He also offers support to doctors and attorneys with Phoenix Medical Legal Services He can be reached at <a href="mailto:drivingallagher@yahoo.com">drivingallagher@yahoo.com</a> or 480-664-6644.

Tired of not getting paid on PI cases?

Tired of attorneys asking for a 50% reduction?

Tired of patients still complaining months later?



Learn to properly diagnose, document, and manage a personal injury case

Certificate and Diplomate programs with testing by the National Board of Chiropractic Examiners

Course work is now available online
Over 100 hours of classes with more coming

http://AAMVI.org 480-664-6644

Become the Expert that attorneys want to work with

#### CHARACTERISTICS OF PRIMARY AND SECONDARY HEADACHE DISORDERS

#### Gregory Katsaros, DC, DAAPM

#### **ABSTRACT**

Headaches are a common condition that affect approximately 15% of the population. Correctly diagnosing and treating headaches can often be challenging. The International Classification of Headache Disorders classifies approximately 300 headache types within three distinct categories; Primary Headaches, Secondary Headaches, and Painful Cranial Neuropathies, other Facial Pain and other Headaches. The majority of all headache types fall within the categories of primary and secondary headache disorders. Understanding the characteristics of the individual headaches is essential for proper diagnosis and treatment.

#### **OVERVIEW**

Headaches can be described as cranial pain located above the orbitomeatal line. Headaches are a common condition affecting approximately 15% of the population at any given time (1). The spectrum of headache pain, the distribution of the pain, and duration of the headache attack can greatly vary. Pain levels can range from minimal to debilitating, and duration of the attacks can last from a second to weeks or months. The International Classification of Headache Disorders classifies approximately 300 headaches (2). These headaches can be grouped within three distinct categories; Primary Headaches, Secondary Headaches, and Painful Cranial Neuropathies, other Facial Pain and other Headaches, with the majority of headache disorders classified as either primary or secondary headaches. Primary headache disorders are by definition not the result of any other underlying disease or process. In general, there are no available blood tests or biological markers identifying primary headaches. These headache types are diagnosed based upon history and defined criteria. Unlike primary headaches, secondary headaches are resultant of a secondary cause and can often have specific laboratory, radiologic, and other findings. A secondary headache may have the characteristics of a primary headache but still fulfil criteria for causation by another disorder. Cranial Neuropathies, other Facial Pain and other Headaches are distinct from primary and secondary headache disorders. The pain demonstrated in neuropathic facial pains can be classified on the basis of their distinct clinical characteristics and etiology with the differences reflecting variations in neural pathophysiology.

Headache disorders are described by a variety of characteristics including, among others, their frequency. It is important to have an understanding of the nomenclature when describing headache frequency, as this varies from the commonly understood pain terminology. In general, episodic headaches are classified as a frequency of less than 15 headache days per month, whereas chronic headaches are described as a frequency of 15 or more headache days per month for at least 3 months. There are some exceptions, and more specific criteria can be applied to certain headache types. For example in chronic migraine, the person will have 15 or more headache days per month with at least 8 of those headache days per month being migraine. Another exception is in a group or primary headache disorders known as trigeminal autonomic cephalalgias (TACs). The term chronic is not used until the disorder has been unremitting for more than one year. Other frequency descriptions include daily headaches which are headaches that occur daily, and chronic/transformed headaches which began as episodic and became more frequent until they became chronic.

#### **IMAGING**

Imaging patients with headaches is not always necessary such as in patients with a history of recurrent migraine headaches and a normal neurologic examination or in patients with stable headaches that meet criteria for migraine (3). While guidelines on imaging can give direction, the ultimate decision rests with the physician. There are also recommendations where neuroimaging should be performed in patients with headache. Some of these include (3):

First or worst severe headache

Change in the pattern of previous migraine

Abnormal neurologic examination

Onset of migraine after age 50 years

New onset of headache in an immunocompromised patient

Headache with fever

Migraine and epilepsy

New daily, persistent headache

Escalation of headache frequency/intensity in the absence of medication overuse headache

Posteriorly located headaches (especially in children, but also in adults)

(Occipital headache in children is rare and diagnostic caution is warranted.)

#### PRIMARY HEADACHES

Primary headache disorders are headaches not resultant of any other underlying disease or process (4). Some of the more recognizable primary headache disorders include those which can be grouped within the major categories of migraine headaches, tension type headaches, and trigeminal autonomic cephalgias (TACs).

The category of migraine has two major types, however, when including the various subtypes and subforms, there are approximately 30 different migraine headache disorders described. The major migraine types include migraine without aura and migraine with aura.

Migraine without aura, previously termed common migraine is a clinical syndrome characterized by headache with specific features and associated symptoms. Migraine without aura is a recurrent headache disorder with attacks lasting 4–72 hours in adults. The typical characteristics of the headache are unilateral location, pulsating quality, moderate or severe intensity, aggravation by routine physical activity and association with nausea and/or photophobia and phonophobia. In children and adolescents under 18 years, attacks may last 2–72 hours. Migraine headache in children and adolescents is more often bilateral than is the case in adults (5). The characteristics of unilateral pain in migraine typically emerges in late adolescence or early adult life. Migraine headache is usually demonstrated about the frontotemporal region along the distributions of the ophthalmic, maxillary or mandibular branches of the trigeminal nerve.

Migraine with aura, previously known as classical migraine is primarily characterized by transient focal neurological symptoms known as aura, that usually precede or sometimes accompany the headache. Migraine aura symptoms include temporary visual or other disturbances with the most common being a scintillating scotoma. Migraine aura usually occurs within an hour before head pain begins and generally lasts less than 60 minutes. Sometimes migraine aura occurs without headache, especially in people aged 50 and older. Some patients also experience a prodromal phase, occurring hours or days before the headache, and/or a postdromal phase following headache resolution. Prodromal and postdromal symptoms include hyperactivity, hypoactivity, depression, cravings for particular foods, repetitive yawning, fatigue and neck stiffness and/or pain (6).

**Tension-type headaches** are the most common headache disorder encountered. These headaches may be episodic or chronic and are commonly described as dull, achy, non- throbbing. The headache pain is frequently bilateral and wraps around the front of the head and often involvies the temporal regions in a band distribution. It is generally associated with neck tightness and can last from minutes to weeks Tension type headaches are not associated with nausea but photophobia or phonophobia may be evident (7).

Trigeminal Autonomic Cephalgias (TACs) are another group of primary headache disorders. TACs are characterized by ipsilateral cranial autonomic features and pain in the trigeminal distribution, and their frequency and duration of occurrence (8). Headaches within this category include cluster headaches, paroxysmal hemicrania, SUNCT (Short-lasting Unilateral Neuralgiform headache attacks with Conjunctival injection and Tearing), SUNA (Short-lasting Unilateral Neuralgiform headache Attacks with cranial autonomic symptoms), and hemicrania continua. While there are similarities in distribution, TACs are generally shorter in duration and the demonstration of cranial autonomic symptoms is not evident in migraine. There are also some unique features among the various TAC's. Cluster headaches tend to have a circadian and circannual rhythmicity and last from 30 minutes to 180 minutes and multiple attacks per day are common. Hemicrania continua and Paroxysmal hemicrania both demonstrate and absolute response to indomethacin. SUNCT and SUNA can have attacks lasting from 1 second to 10 minutes with an average attack frequency of about 20 per day, however there may be as many as 600 attacks per day (9).

#### **SECONDARY HEADACHES**

Secondary headaches are resultant of a secondary cause and can often have specific laboratory, radiologic, and other findings. A secondary headache may have the characteristics of a primary headache but still fulfil criteria for causation by another disorder. While there can be numerous causes, some of the more common secondary headache disorders can be attributed to head and neck trauma, cervical and cranial vascular disorders, non-vascular intracranial disorders, substance use or withdrawal, and infection.

#### **Headaches from Head and Neck Trauma**

**Cervicogenic Headaches** are a secondary type of headache generally resulting from pain and tightness of the neck and upper back. The headache pain is often noted at the base of the skull and there may also be pain at the front of the head similar to a tension-type headache (10).

**Posttraumatic Headaches** are headaches following a trauma. These headache may demonstrate immediately, or they may take up to seven days to manifest. They are often accompanied by dizziness, lightheadedness, vertigo, sleeplessness, and others. Post traumatic headaches may mimic a migraine or tension type headache in distribution and associated symptoms, and as such are oftentimes described by their phenotype (11). It is essential to evaluate for other CNS issues and appropriate follow-up evaluation and imaging may be warranted.

#### **Headaches from Cervical and Cranial Vascular Disorders**

Headaches associated with cervical artery dissections vary depending upon the artery involved. In *vertebral artery dissections*, the headache is typically severe, unilateral, and most often distributed about the posterior occipital region. When neurological symptoms are present, dizziness, ataxia, dysphagia, disequilibrium, unilateral hearing loss, dysarthria, diplopia, and vertigo can be demonstrated (12). Headaches associated with *carotid artery dissection* may present with a wide variety of headache phenotypes. The triad of headache, ipsilateral oculosympathetic paresis, and contralateral stroke symptoms warrants concern for a carotid artery dissection (13,14).

**Thunderclap Headaches (Aneurysm Rupture Headaches)** demonstrate as a sudden unbearable headache resulting in double vision, rigid neck, and lightheadedness (14). Depending upon the location of the rupture, a variety of neurologic deficiencies may be present. A congenital tendency is often noted, and there is an association with hypertension (14).

#### **Headaches from Non-Vascular Intracranial Disorders**

Low Pressure CSF Headaches are most frequently noted following lumbar puncture. These also may occur from spontaneous or other causes of CSF leaks. Symptoms typically demonstrate as an orthostatic headache, and may also include nausea, vomiting, horizontal diplopia, unsteadiness, vertigo, altered hearing, and neck pain and stiffness (15).

High Pressure CSF headaches typically demonstrate with visual field defects (16). These headaches are secondary to an increased volume of CSF from either overproduction or reduced absorption, however, they can also occur from Idiopathic Intracranial Hypertension (pseudotumor cerebri) where there is an increase in CSF pressure without a space-occupying intracranial lesion or hydrocephalus.

#### **Headaches from Substance Use**

**Medication Overuse Headache** (MOH) was previously called rebound headaches. The occurrence and onset depend upon length of treatment and on the type of medication used. Overuse is defined in terms of treatment days per month and depends upon the drug. As a general guideline:

Triptans can lead to MOH if taken 10 or more days per month for 3 months.

Opioids can lead to MOH if taken 10 or more days per month for 3 months.

Simple analgesics such as NSAIDS or Acetaminophen can lead to MOH if taken 15 or more days per month for 3 months (17).

#### **Headaches from Withdrawal**

Caffeine Withdrawal Headaches demonstrate as a bilateral pulsating headache, are generally seen within 12-24 hours of caffeine cessation, peaks at about 2 days, and may last up to 9 days. Caffeine withdrawal can occur after as little as three days of caffeine exposure, with a somewhat increased severity of withdrawal observed after seven or 14 days of exposure (18).

Fasting Headaches are associated with fasting. Generally localized to the frontal region with diffuse and non-pulsating pain, fasting headaches are of mild or moderate intensity. In most cases, the headache occurs after at least 16 hours of fasting and resolves within 72 h after resumption of food intake. The likelihood of developing fasting headache increases directly with the duration of the fast. Headache sufferers have a higher risk of developing headache during fasting than people who do not usually suffer from headache. Hypoglycemia and caffeine withdrawal have been especially implicated as causative factors, but much remains to be understood about this topic (19).

#### **Headaches from Infection**

**Infective Headache Due to Meningitis** can be displayed in both aseptic and bacterial meningitis. The headache is described as a severe headache that is throbbing, continues to worsen, is abrupt in onset, and often described by the patient as the worst headache of their life. Associated symptoms include nausea, vomiting, photophobia, stiff neck, and back pain. Patients often display prodromal symptoms including malaise, myalgia, gastrointestinal symptoms, and urinary tract infections (20).

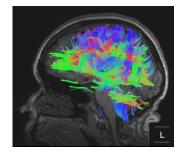
**Sinus Infection Headaches** demonstrate as diffuse pain, pressure, and or fullness about the sinus regions of the face. These headaches can occasionally get confused with migraine as both migraine and sinusitis headache pain often gets worse when you bend forward. Sinusitis, however, usually isn't associated with nausea or photophobia which are common in migraine.

#### Summary

Headaches are a common condition and correctly diagnosing and treating headaches can often be challenging. By classifying the various headaches in a hierarchical manner, the majority of all headaches can be described as either a primary or secondary headache disorder. Understanding the characteristics of the individual headaches is essential for proper diagnosis and treatment.

#### References

- **1.** Percentage of Adults Who Had a Severe Headache or Migraine in the Past 3 Months, by Sex and Age Group National Health Interview Survey, United States, 2018; *National Health Interview Survey*, 2018 data. https://www.cdc.gov/nchs/nhis.htm.
- 2. The International Classification of Headache Disorders ICHD-3; https://ichd-3.org/
- 3. Good C. Guidelines For Neuroimaging in Headache; British Society of Neuroradiologists Standards Subcommittee; April 2019.
- **4.** Onderwater GLJ, Van Dongen RM, Zielman R, Terwindt GM, Ferrari MD. Primary Headaches; *Handb Clin Neurol*. 2017;146:267-284. doi: 10.1016/B978-0-12-804279-3.00016-2
- **5.** Winner P. Pediatric and Adolescent Migraine; *American Headache Society*; Information For Healthcare Professionals; 2020; https://americanheadachesociety.org/wp-content/uploads/2020/09/AHS-Fact-Sheet\_Pediatric-and-Adolescent-Migraine.pdf **6.** Kikkeri NS, Nagallis. Migraine with Aura; *National Library of Medicine Stat Pearls*; Nov 25, 2021; https://www.ncbi.nlm.nih.gov/books/NBK554611/
- 7. Ahmed SMS. Muscle Contraction Tension Headache Clinical Presentation; May 21, 2019; https://emedicine.medscape.com/article/1142908-clinical
- **8.** Goadsby PJ, Lipton RB; A review of paroxysmal hemicranias, SUNCT syndrome and other short-lasting headaches with autonomic feature, including new cases; *Brain*.1997 Jan; Vol 120(1):193-209. doi: 10.1093/brain/120.1.193.
- **9.** Cohen AS, Matharu MS, Goadsby PJ. Short-lasting unilateral neuralgiform headache attacks with conjunctival injection and tearing (SUNCT) or cranial autonomic features (SUNA)--a prospective clinical study of SUNCT and SUNA. *Brain*. 2006;129(Pt 10):2746–60. doi.org/10.1093/brain/awl202.
- **10.** Page P. Cervicogenic Headaches: An Evidence-Led Approach to Clinical Management; *Int J Sports Phys Ther.* 2011 Sep; 6(3): 254–266.
- 11. Krusz J. Post-traumatic Headaches, Migraines, and Sleep Disorders. Pract Pain Manag. 2009;9(3).
- **12.** Britt TB, Agarwal S. Vertebral Artery Dissection; *National Library of Medicine Stat Pearls*; Aug 16, 2021. https://www.ncbi.nlm.nih.gov/books/NBK441827/
- **13.** Hoy DG, Protani M, De R, et al. The epidemiology of neck pain. *Best Pract Res Clin Rheumatol* 2010;24:783-92. 10.1016/j.berh.2011.01.019
- **14.** Kapoor S. Headache Attributed to Cranial or Cervical Vascular Disorders; *Curr Pain Headache Rep.* 2013; 17(5): 334. doi: 10.1007/s11916-013-0334-y
- **15.** Lay CM. Low Cerebrospinal Fluid Pressure Headache; *Curr Treat Options Neurol.* 2002 Sep;4(5):357-363. doi: 10.1007/s11940-002-0046-9.
- **16.** Graff-Radford, S.B. and Schievink, W.I. (2014), High-Pressure Headaches, Low-Pressure Syndromes, and CSF Leaks: Diagnosis and Management. *Headache: The Journal of Head and Face Pain*, 54: 394-401. https://doi.org/10.1111/head.12283
- **17.** Fischer MA, Jan A. Medication Overuse Headaches. National Library of Medicine Stat Pearls; July 19, 2021; https://www.ncbi.nlm.nih.gov/books/NBK538150/
- **18.** Nehlig A. Are we dependent upon coffee and caffeine? A review on human and animal data. Neurosci Biobehav Rev. 1999 Mar;23(4):563-76.
- 19. Torelli P, Manzoni GC; Fasting Headaches; Curr Pain Headache Rep. 2010 Aug;14(4):284-91. doi: 10.1007/s11916-010-0119-5
- **20.** M Lamonte 1, S D Silberstein, J F Marcelis; Headache associated with aseptic meningitis Headache. 1995 Oct;35(9):520-6. doi: 10.1111/j.1526-4610.1995.hed3509520.x





Gregory Katsaros, DC, DAAPM received his Diplomate in Pain Management from the American Academy of Pain Management, and is a member of the American College of Nuclear Medicine and the International Headache Society. He is a published author and national speaker on topics of headaches and nuclear medicine. He is the owner of Integrative Pain Management and Arizona Physical Medicine in Tempe, Arizona and the co-owner of Aristotle Continuing Education. The focus of his practice is on headaches and mild traumatic brain injuries.



## Van Merkel, DC, DABCI, DCBCN, CCN

**Topic: Science Based Nutrition** 



Van David Merkle grew up on a rather large farm which motivated him to do something else, other than farming. During a science honor's event in high school he heard a chiropractor talk. That led him to switch his plans for dental school to going to as guidance the Logan Chiropractic College. After graduation from Logan in 1981, I was a typical DC- PI, WC, Insurance etc, good, successful and quite profitable after just a couple of years.

#### What led you to nutrition?

A patient asked if I could help his 12 year old daughter who had Lupus and was failing fast, lot of drugs, doing kidney and liver biopsies. Nothing was working. I had dabbled in labs and nutrition, so I did what I knew and amazingly, I knew enough that her Lupus went into complete remission and has been in remission for 35 years, married with 3 children. Yes, that got me going. Then a couple years after that, my nephew was diagnosed with an adenoma in the brain. It is a long story but the best outcome with any medical treatment for the tumor was that he would be totally disabled, confined to a wheel chair the rest of his life, assuming he survived the medical treatment. I asked my brother to give me 3 months to see what I could do to help my nephew. I studied and developed a program and my nephew's brain tumor shrank on PET scan by 50% in 3 months. The tumor is now gone, he is 42 yr/s old, no impairment, he is marred with 4 children. Yes, that got me highly motivated and many other similar cases, even today have given me great confidence and I am not intimated by any other doctor.

#### What is the objective with your class?

I hope to show that any DC can do what I do. You do have to have a system, know what and how to test, analyzing the test results properly with the right tools and provide a specific comprehensive report. What I really want doctors to realize is that most or many conditions, even serious diseases often have simple, safe, natural and inexpensive solutions and that the improvements will usually be seen in 2 weeks but maybe 2 months if it is going to work. I will train you on what to test first, I call it foundational testing and I'll show how easy it will be to determine what additional testing needs to be done. You will also get my best consultation tips for better compliance and how to read and analyze lab tests and make recommendations. I'll also provide guidelines for retesting and patient management. BTW, my practice is 100% cash and are on track to do nearly \$1,900,000 this year with 2 DC associates. People will pay for what they see is of value.

#### Some will question if this is chiropractic, how do you answer that?

BJ Palmer did blood work and had a lab in his clinic. He was a true pioneer and I believe he would be doing the work that I teach if he were alive today. DC's need to expand their vision of who they are and one of my favorite quotes from Palmer: "There is nothing I wouldn't do to ease human suffering". We live in a much different world from 100 years ago and all patients today need far more than just an adjustment. DC's can fill that void and become the health authorities in their communities and right now I believe DC's are the best answer if they are willing to do a little work and not be afraid to help their patients more.

#### Any final comments?

If you have not heard me lecture, I know that you will be intrigued by my many stories of patients with objective results that show we have truly helped our patients with many serious and life threatening conditions. I encourage you to come to this lecture and at least see what is possible. Maybe you too, will catch the vision and be the doctor your community needs now.



## Amy Cannatta, DC

## **Topic: Chiropractic Assistant Training**

This course is NOT eligible for Arizona Chiropractic Physician CE Credits

## To let our readers know you a little better tell us about your background, where are you from, and something about your family.

I grew up on a farm in a rural town in Connecticut. Growing up, I spent a lot of time with my paternal grandparents on the family farm. My grandmother was a nurse for 35 years and my grandfather was a Sicilian immigrant who was in law enforcement. My grandmother suffered with back pain from long hours at the hospital and relied solely on chiropractic care as I was growing up.

## Most chiropractors have life experience prior to going back to school. Can you tell us about what you did before you went to chiropractic College?

Before attending chiropractic college, I started out pursuing a business and accounting degree but dropped out after one year and moved to Western New York. I became a mom, and I worked several different jobs, including legal administrative assistant (shortest job ever) to managing a Kate Spade Store.

#### Can you give us some information about your education?

I attended the University of Bridgeport, School of Chiropractic where I met the most amazing professors and lifelong friends. I got to learn from some of best doctors who also taught at Yale and Harvard. Among those teachers were Dr. Stephen Perle, Dr. David Brady, Dr. Anthony Lisi, Dr. Frank Zolli, and Dr. James Lehman. I believe that great teachers influence us in dynamic ways both inside and outside the classroom. I have also been fortunate to have the opportunity to be mentored and taught by one of the top neurosurgeons in Arizona, Dr. Daniel Lieberman.

#### There may not be an ah-ha moment, but can you give us an idea of what led you to do the work you do?

Honestly, my "ah-ha" moment came when my paternal grandmother, the nurse, passed away. Her death led me to a memory I had forgotten about. I recalled a time when I was a child that my grandfather and I took her to the chiropractor. She was so bad that she couldn't walk, and I remember thinking, "What is THIS GUY going to do with just his hands? Shouldn't we be going to the hospital?" Long story short, my grandmother walked out of his office with a smile on her face. It was in that memory that I decided to become a chiropractic even though I had never been adjusted before.

#### How is what you teach important to doctors who will be attending the convention?

At convention, I will be teaching the Chiropractic Assistants what their legal scope of practice is in the state of Arizona along with a practical approach to helping them become the doctor's greatest asset. My goal is to help shape the CA into someone who can anticipate the doctor's needs and the why behind what we do, to help with a smoother office process and a better, more efficient experience for the doctor and the patient. This teaching will help my colleagues hopefully have less staff training issues and a greater ability for them to focus on what they do best!

#### What do you see for the future of our profession?

Integration into the larger healthcare system. I think there is a fear about integrated practice that it will somehow cost us who we are as chiropractors and what we value. From experience, I can tell you that I have not felt that in the surgical and pain management practices I have worked with. On the contrary, the medical profession sees the research and is looking for great chiropractors to work with.

There is a growing body of research demonstrating the advantages of DC's integrating with other specialties. There is significant evidence in patient outcome improvements and patient satisfaction scores when chiropractic care is combined with medical clinical practice guidelines. The VA system is a perfect example of this in practice on the federal level. Integrated practices also typically can command higher revenues which, in turn, means higher salaries for the practic-



## Mike Winberry, DC

**Topic: Digital Motion X-Ray** 

**Dr. Mike Winberry** is a former school teacher and wrestling coach who graduated magna cum laude from Cleveland Chiropractic College-Kansas City in 1987, a wrestling coach, with a career in competitive wrestling spanning 20 years. Originally from the Denver, CO, area, and was raised to believe that chiropractors were quacks. But fortunately for him, the wrestling injuries built up to the point of incapacitation, and by the time he was 26, he finally broke down and went to a chiropractor for relief, and to his surprise and delight, he realized that for years he'd been going to the wrong doctors.

His introduction to DMX happened accidently, as he attended a seminar in Chandler thinking he was going to learn about his newly purchased Impulse Adjusting Device, but it turned out to be a symposium which featured a number of speakers, including John Postelthwaite DC, who did a presentation on DMX. The impact of the videos he saw, with vertebra dislocating and relocating during motion, was something he hadn't seen previously, and he wanted to know more, which eventually led to the purchase of a DMX machine.

He is currently doing research on DMX for personal injury cases with Dr. Erling Pedersen-Bach, a prominent Danish chiropractor. They have co-written and published several papers on motion x-ray and on March 18, 2022, Motion X-Ray USA opened in Scottsdale, Arizona which features high-resolution DMX studies done with a Philips Veradius Unity fluoroscope.

Dr. Winberry is passionate about the inclusion of DMX studies in the evaluation of the posttraumatic cervical spine. He spent 12 years during his career doing Chiropractic Internal Medicine, in which the chemical cause of subluxation is evaluated via an exhaustive review of systems consisting of extensive chem screen paneling, food allergy testing, and tumor marker testing, and diagnostic modalities such as doppler/plethysmography, EKG, spirometry, and echocardiogram, for the purpose of delivering precise nutritional therapy to promote optimal tissue health which is complementary to the power of the chiropractic adjustment. His mentors taught him that if you know there's a test you should do, and you don't do it, you're guessing- and no one should guess about a patient's health. The same principle applies to the evaluation of an injured cervical spine- calling whiplash-associated pain "nonorganic" in any chronic whiplash patient without first ruling out pathology with a DMX examination has no basis in fact.

While many doctors have had experience in personal injury and are familiar with the concept of AOMSI, the AMA Guides are not the last word on spinal instability. The Guides only address injury to the two longitudinal spinal ligaments, and while they are very important, so are the other twenty spinal ligaments, any of which can be part of the chronic pain syndrome as well, so Dr. Winberry covers all aspects- the facet capsules, the interspinous ligaments and the rest of the posterior discoligamentous tissues, and the craniocervical ligaments. He answers frequently asked questions such as the radiation exposure issue, expectations for spinal ligament healing, the role of chiropractic adjustment in the treatment of ligamentous subfailure, and range of motion measurement in the evaluation of spinal status. It's important for PI doctors to know what they can do and what they can't do, and a cervical spine DMX reveals the relevant information.

Chiropractic already leads in the treatment of the injured cervical spine, whether or not it has been whiplashed. While we have been taught to trust our hands and what they tell us, sometimes that doesn't translate too well to the uneducated public. The only way to maintain our prominence is to keep advancing in the field of research with new information and by scouring the established literature for facts which validate our procedures. The future of chiropractic depends on younger chiropractors getting the "knowledge bug" and developing the habit of continuous study, something our medical counterparts have practiced for years. While we have had our Dan Murphy's and Malik Slosberg's, we need more of the same.

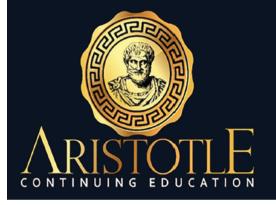


## Gregory Katsaros, DC, DAAPM



### **Topic: Primary and Secondary Headache Disorders**

Gregory Katsaros, DC, DAAPM received his Bachelor of Science in Physiology from Michigan State University, his Doctorate of Chiropractic from Cleveland Chiropractic College in Los Angeles, and his training in Nuclear Medicine from Charles R. Drew Postgraduate Medical School in Los Angeles. He received his Diplomate in Pain Management from the American Academy of Pain Management, and is a full physician member of the American College of Nuclear Medicine and the International Headache Society. He is a published author and national speaker on topics of headaches and nuclear medicine. He is the owner of Integrative Pain Management and Arizona Physical Medicine in Tempe, Arizona, and the co-owner of Aristotle Continuing Education. The focus of his practice is on headaches and mild traumatic brain injuries. He can be reached at (480) 858-1868 or via email at <a href="mailto:azheadaches@hotmail.com">azheadaches@hotmail.com</a>



## ONLINE CONTINUING EDUCATION

Video Format for: Phone • Tablet • Laptop • Desktop

1 Credit ONLY \$7

Block of 12 Credits ONLY \$49

## Clinically Relevant Online Continuing Education

All courses are Approved by the Arizona Board of Chiropractic Examiners

## www.AristotleCE.com

## ARIZONA ASSOCIATION OF CHIROPRACTIC 2022 ANNUAL CONVENTION

**JUNE 11, 12** 

### GILA RIVER RESORTS & CASINOS WILD HORSE PASS

5040 Wild Horse Pass Blvd, Chandler, AZ 85226



Attend any lecture. You may change plenaries throughout the convention All courses in Plenaries 1, 2, 3 are approved for Continuing Education for Arizona Chiropractors

All attendees, spouses, exhibitors, and staff are invited to the Hors-d'oeuvre Reception

Sponsored by West Valley Pain Solutions

Register NOW at: azchiropractic.org

### **Registration includes:**

# Conference and Continuing Education Credits Breakfast and Lunch Hors d' Oeuvres Reception Over 25 vendors and Exhibits

Thursday (June 9) 18 holes of Golf For Doctors: Sponsored by New Life Medical

**Early Registration by May 20 Late Registration (after May 20)** 

Members \$59.00 Members \$99

Non-Members \$99.00 Non-Members \$149

Staff Free with Doctor Staff Free with Doctor

Special Hotel rates of \$109 per Room or \$209 per Suite.

Room Reservations need to be made by May 15, 2022 to receive the special room rate.

Mention the Arizona Association of Chiropractic to receive the discounted rate.

For Room Reservations please call: (520) 796-4900

## Register NOW at: azchiropractic.org

Or contact Denise at: admin@azchiropractic.org or by phone at 602-246-0664









<sup>\*</sup>Doctors must be registered by May 30 to attend the Golf outing

## ARIZONA ASSOCIATION OF CHIROPRACTIC ANNUAL CONVENTION June 11 -12, 2022

## Saturday June 11, 2022

Time	Plenary 1	Plenary 2	Plenary 3	<b>CA Training</b>
7:00 – 8:00	Registration & Exhibitors	Registration & Exhibitors	Registration & Exhibitors	Registration & Exhibitors
8:00-9:40	Science Based	Mastering	Psych of Pt Mgmt	CA Training
2 Credits	Nutrition Van Merkle	Extremities & Spine Kevin Wong	Jim Naccarato	Dr. Amy Cannatta
9:40 -10:00	Exhibits	Exhibits	Exhibits	Exhibits
10:00-11:40	Science Based Nutrition	Headaches	Digital Motion X-ray	CA Training
2 Credits	Van Merkle	Greg Katsaros	Mike Winberry	Dr. Amy Cannatta
11:40-12:00	Exhibits	Exhibits	Exhibits	Exhibits
12:00 – 1:00	Lunch & Exhibits	Lunch & Exhibits	Lunch & Exhibits	Lunch & Exhibits
1:00 - 2:40	Science Based	ABC's of PI	9 Top Clinical	CA Training
2 Credits	Nutrition Van Merkle	Bill Gallagher	Secrets for a Successful Extremity Practice Mitch Mally	Dr. Amy Cannatta
2:40 - 3:00	Exhibits	Exhibits	Exhibits	Exhibits
3:00-4:40 2 Credits	Science Based Nutrition Van Merkle	ABC's of PI Bill Gallagher	9 Top Clinical Secrets for a Successful Extremity Practice Mitch Mally	CA Training  Dr. Amy Cannatta
4:40-5:00	Exhibits	Exhibits	Exhibits	Exhibits
6:00 – 8:00	Hors-d'oeuvre Reception	Hors-d'oeuvre Reception	Hors-d'oeuvre Reception	Hors-d'oeuvre Reception

## **Sunday June 12, 2022**

Time	Plenary 1	Plenary 2	Plenary 3	Plenary 4
7:00 – 8:00	Exhibits	Exhibits	Exhibits	Exhibits
8:00-9:40	Science Based Nutrition	Documentation	Documentation for PI	Eliminating Debt
2 Credits	Van Merkle	Greg Katsaros	Bill Gallagher	lan Hoffman
9:40 -10:00	Exhibits	Exhibits	Exhibits	Exhibits
10:00-11:40	Science Based Nutrition	Digital Motion X-ray	Headaches	Finance
2 Credits	Van Merkle	Mike Winberry	Greg Katsaros	Jonathan Miller

You may attend any course you wish. You may also change courses at any time. Courses subject to change



## Bill Gallagher, DC

Topic: ABC's of PI



## To let our readers know you a little better tell us about your background, where are you from and something about your family,

I am a child of the 50s and a product of the 60s. I started out in the Bronx in a third floor walkup at a time when five-year-olds could play safely on the street. Twenty years later I went back to the old hood, pushed the button down on the door, rolled up the windows, went home, and thanked my parents for moving

#### Can you tell us about what you did before you went to chiropractic College?

I remember being told that the average age of a chiropractic student was 30. I turned 33 when I started at Sherman. Conversations with classmates often came around to what did you do before school. When the question was posed to me my response was usually "what would you like to talk about?" A few years ago, a friend found me on Facebook. He had just retired and wanted to know if I was retired too. I told him that I took an early retirement in my 20s. I bicycled up into the Alps, I hiked down into the Grand Canyon and I did everything in between that I wanted to do. Now that my knees were shot sitting at a desk was not a problem.

#### Can you give us some information about your education?

My sister who was four years ahead of me in school would run home every day to show me what she had learned that day. By the time it was my turn to go to school I could not control my excitement. That is until I got there and was totally disappointed. Thanks to my sister when other kids are learning how to hold a pencil I was writing long hand with a fountain pen. Both my parents graduated from high school which for that generation was educated. I was the first in the family to graduate college having gone to school under the McNamara Incentive Program. My first chiropractor went to school after he retired from the phone company which led me to believe that I could too. Donald Epstein was the extra push that got me take that leap.

#### There may not be an ah-ha moment but can you give us an idea of what led you to do the work you do?

A week before school started, I went to a DNFT seminar with Dr. Richard Van Rumpt. He used me as a demonstration model for low back adjustment. At the time I had sciatica to both great toes so I was probably a good subject. After he adjusted my low back, I had no pain. That same weekend he adjusted my neck and shoulders and I went through my first quarter of chiropractic College without even thinking about getting adjusted. As soon as I got off his table, I knew that I was going to school to get that piece of paper that would qualify me to get a license. What I really needed to know was what this little man had in his head.

#### How is what you teach important to doctors who will be attending the convention?

Everything being taught at the convention is important to every Doctor of Chiropractic. Even if it is something that we don't intend to use in our practice, the understanding of different systems makes us each a better doctor.

#### Can you give us a quick synopsis of what you will be covering in your talk in June?

I will be teaching the ABCs of Personal Injury. It is not a course from which one should expect to be able to build a PI practice. It is the basics and hopefully it will provide attendees with enough information for them to see how much more they need to learn in order to excel.

#### What do you see for the future of our profession?

When I started teaching personal injury seminars the standard in the industry was that when a chiropractor would present a case to an attorney the attorney would want to know who is your MD on this case? When I am finished, I want those attorneys when they get a case from an MD to ask who is your DC on this case?



## Jim Naccarato, DC Topic: Psychology of Patient Management

To let our readers know you a little better tell us about your background, where are you from, something about your family. Dr. Naccarato puts his family first. He has been married to Kim Heath Naccarato since 1981. They have six children, 3 daughters-in-law, and 8 grandchildren. He enjoys golfing, snow, skiing, weightlifting, football, and baseball. Besides family, church, and work, he greatly loves his family cabin located in Lake Tahoe, California.

## Most chiropractors have life experience prior to going back to school. Can you tell us about what you did before you went to chiropractic College?

Before becoming a chiropractor and personal success coach, Dr. Naccarato was a marketing representative for Weidner Communications, a small business owner who sold and installed security devices, a member of Success Technologies, and a contributing author of "Achieving the Balance," by Leo Weidner. Throughout his life Dr. Naccarato has been involved with many aspects of psychology. He has done research in schizophrenia and multiple-personality disorders at the Palo Alto Veterans Hospital, been a psych aide in the behavioral modification department at Utah State Mental Hospital, and a counselor at Bird's Eye Boys Ranch. He has studied psychology since 1974 to better understand people. His studies focused on how to identify and resolve the root issues that hold people back to capitalize on their talents and abilities.

#### Can you give us some information about your education?

In 1981, Dr. Naccarato received his B.S. in Psychology from Brigham Young University. In 1985, he received his Doctor of Chiropractic from Life Chiropractic College West. In 2007, Dr. Naccarato received a PhD in Psychology from Almeda University. Dr. Naccarato continues his education as a Continuing Studies Student at Stanford University.

#### How is what you teach important to doctors who will be attending the convention?

Many doctors have the knowledge and skills necessary to be excellent chiropractors yet struggle to build successful practices. Dr. Naccarato's teachings help analyze your practice from the outside in. He provides the highly specialized information and guidance you need to provide excellent care and build a successful practice.

#### Can you give us a quick synopsis of what you will be covering in your talk in June?

Dr Naccarato will be covering The Psychological and Clinical Aspects of Patient Care including:

The psychological and clinical aspects of becoming the Right Doctor

Personal responsibility to patients

Meeting the needs of patients and maximizing effectiveness for patient well-being

Staying up to date and focused on patient education, treatment & communication

Importance of staying connected with resources to enhance patient care

#### Can you give us an idea of what led you to do the work you do?

I offer no hype, no gimmicks, and no quick fixes. I give real solutions to real problems. If there is one thing that all successful people have in common, it is the ability to face and overcome challenges. Obstacles arise whether we are equipped to deal with them. The magnitude of these issues tends to scale with our potential for success. With this understanding we know that adversity is not something to simply endure, it is something to be accepted and embraced as a part of our road towards success.

#### What do you see for the future of our profession?

There is so much good to focus on. Chiropractic is a wonderful approach to healthcare and provides a never-ending opportunity to serve. Our fees are reasonable, our overhead is controllable, our profit is laudable, our stress is minimal, and our working environment is outstanding. This is a great business to be a part of and at the end of the day, as a Doctor of Chiropractic, you have little to complain about and a lot to be grateful for!



## Kevin Wong, DC

**Topic: Mastering Extremities and Spine** 

Get a great review of the different manual and light-force techniques for adjusting the axial spine and extremities. Dr. Wong's seminar includes lots of hands-on exercises so you can duplicate these techniques on Monday morning. Discover how to evaluate and treat the most commonly presenting conditions related to the lower extremity foundation.



Mitch Mally, DC

Topic: 9 Top Clinical Secrets For A Successful

Extremity Practice

Mitch Mally is a 1981 graduate of Palmer who has 40 years of experience teaching worldwide. Mitch created Hands-On-Technique, H.O.T and will be presentation Saturday afternoon on secrets to help you build a successful extremity practice. He has developed multiple extremity techniques that you will be able to incorporate into your practice. Mitch has also been an adjunct professor at several chiropractic colleges.

Mitch can be reached at mrmally@live.com or 563-823-5555



## Ian Hoffman





## **Topic: Eliminating Debt**

This course is NOT eligible for Arizona Chiropractic Physician CE Credits



To allow our readers to know you a little better tell us about your background, where are you from, something about your family.

Hi, I'm Dr. Ian Hoffman. I'm a 2nd generation Chiropractor, in fact my Dad Steve and both of his brothers Stuart and Bob are Chiropractors, so I consider myself extraordinarily lucky enough to have been adjusted by some of the greats and born into the profession. Like many of you, I feel that Chiropractic is a calling, not just a career. But more than that, it's actually saved my life...

## Most chiropractors have life experience prior to going back to school. Can you tell us about what you did before you went to chiropractic College?

When I was about 10 years old I was competing at a high level in gymnastics, training at the Michigan State University campus. I experienced a severe neck injury that led to a serious health issue for the next 17 years. I didn't even get my driver's license until just before my 30th birthday! Thanks to my parent's steadfast commitment to living the principles of vitalism and the Chiropractic lifestyle, I have never taken an Aspirin, Advil, Tylenol, antibiotic, or other prescription drug in my entire life and the same is now true for my 8 year old son.

#### Can you give us some information about your education?

I went into my undergraduate education knowing I wanted to be a Chiropractor so I got my Batchelor's Degree in Kinesiology and Philosophy. After that, I went to Life Chiropractic College West and graduated in 2010. In 2013 I received the Alumnus of the Year Award which is one of the greatest honor's I've achieved to date.

#### There may not be an ah-ha moment but can you give us an idea of what led you to do the work you do?

In 2013 a pregnant mom came in to my office as a new patient and brought her 4 year old daughter Caroline to the appointment. This little girl had stage 4 cancer. It had always been my policy to take care of people regardless of their financial situation, but this brave and beautiful girl sparked something powerful within me on a personal level. I was inspired to create a nonprofit organization to expand access to care for more people in need. As of December 2021 Caroline is 7 years cancer free, off all of her medications, and her hair is back!

When I tried to buy my first home the broker told me my income was good but my debt to income ratio was completely messed up because of the student loans. The real, hidden cost of my college debt hit me big time! I learned about the two forgiveness program and I was able to qualify for the fastest, and only tax-free form of student loan forgiveness and the Student Loan Eraser program was born!

#### How is what you teach important to doctors who will be attending the convention?

The average Chiropractor has about a quarter of a million dollars of student loan debt! I have helped hundreds of docs meet the requirements to qualify for over \$100 million in student loan forgiveness and I'm so excited to share this information with the Arizona State Association!

#### Can you give us a quick synopsis of what you will be covering in your talk in June?

I will reveal my exact system that can help any Chiropractor meet the 3 requirements to qualify for the fastest, tax-free form of student loan forgiveness.

For more information before the convention, you can visit www.erasemystudentloans.com/chiropractic

#### What do you see for the future of our profession?

I see great things for our profession! More and more people are getting disillusioned by the mechanistic medical paradigm and looking for natural options for proactive and vitalistic forms of healthcare. I am hoping this next decade will bring abundance and prosperity to all of my Chiropractic colleagues regardless of technique or practice style.



## Jonathan Miller Topic: Finance



This course is NOT eligible for Arizona Chiropractic Physician CE Credits

Managing Member, Miller Wolman CPAs PLLC

Jonathan Miller graduated from the University of California, Santa Barbara with a Bachelor of Arts degree in Business Economics; Accounting emphasis, with Honors, June 1986 and passed all four parts of the uniform CPA Examination in the top 5% of the nation in May 1986. From there he proceeded to work for Arthur Young and Co. in their audit department and then spent the next 10 years as a business manager in the world of Sports and Entertainment Management.

Jonathan is a native of Los Angeles, CA, and currently resides in Paradise Valley, AZ. He has more than 30 years of experience as a Certified Public Accountant in business and tax services. His specialization includes providing key tax and financial strategies to businesses and entrepreneurs with extensive knowledge in healthcare.

Growing up in a family of 3 Physicians and a Surgical Nurse, his first job was in the chart room of Kaiser Hospital. As a CPA for over 30 years, Jonathan has a strong professional commitment to healthcare which has grown stronger as the economic changes have forced physicians to look past their primary objective, that of providing care, to that of earning a living. Jonathan's choice has led him to believe that he and his team of professionals can make a difference in the new healthcare economy as many clients move forward.

Jonathan is committed to teaching his clients to understand their finances, learn the processes, and see the detailed information needed to make decisions about their personal and professional lives.

His experience also includes other aspects of Public Accounting including

**Business and Financial planning** 

Physician compensation

**Healthcare Practices and Analysis** 

Business Plans and Start-Up Business Forecasting

With the biggest challenge facing healthcare today that of uncertainty in declining reimbursements and every changing insurance environment, it is more critical than ever that all Healthcare Professionals see their practice as a retail business in order to manage profitability and economic sustainability

Miller Wolman CPAs PLLC - 5010 E Shea Blvd - Suite 140 - Scottsdale Arizona 85254

602-535-1197 - www.millerwolmancpas.com - Jmiller@millerwolmancpas.com

#### Case Study of Lumbar Disc Extrusion Bill Gallagher, DC

Chronic low back pain occurs with 25.4% of the senior population experiencing chronic low back pain. The AHCPR study found 50% of working adults experience low back pain and for those under age 45 is the most common cause of disability. The 2004 estimate of the direct expenditures for healthcare costs and indirect expenditures for lost wages was \$814 billion or seven and 7% of the national gross domestic product.

In this case a 71-year-old male suffered an acute disc extrusion at L5 – S1. The MRI showed the extrusion superimposed over a previous extrusion. This measures 24 mm diagonally and 6.5 mm deep. It displaces the left nerve root. There is bilateral pars defects with a grade I spondylolisthesis of L5 on S1.

On arriving at the Emergency Department the patient reported a pain level of 10/10. He was unable to support his weight on his left side. An IV injection of 5cc of morphine had no effect on the pain. A subsequent 5cc of fentanyl also had no effect on the pain.

Chiropractic adjustments in the three days prior to the ER visit offered minimal relief. He was confined to a recliner for two months prior to surgery.

The patient opted for trans foraminal injections. The first offered about 50% relief and the patient was able to ambulate without crutches for three days. The second offered no relief so surgery was scheduled. After the surgery, the patient was able to stand and walk without pain.

#### **PRIOR HISTORY:**

At age 8 patient fell out of a tree and was treated for a fracture at the epiphyseal plate of the left wrist. By age 13 he experienced sharp shooting pain on the left in grade IV sciatic distribution. At age 33 and was introduced to DNFT-, Directional Non-Force Technique chiropractic adjustments. He was used as a demonstration model at a seminar when he complained of grade 4 sciatica to both great totes. He experienced immediate and total relief. Since then, he has had DNFT adjustments 3 to 4 times a year to manage pain and recalls one episode where he did require a series of four adjustments before getting relief. Previous adjustments with Network Chiropractic offered temporary relief but required frequent adjustments once or twice a week.

A plain film study at age 37 found pars defect with anterolisthesis of L5 on S1. There are no other prior radiographic studies.

#### **EXAM FINDINGS:**

The neurosurgeon found a loss of light touch sensation on the left lateral ankle and calf with muscle strength on extension of the great toe at 0/5. These are all indications of L5 root involvement.

After the first injection muscle strength on the toe increased to 3/5. Post-surgery muscle strength improved 4/5 with constant numbness.

#### **CURRENT CONDITION:**

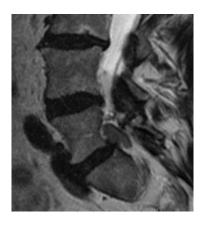
NO pain related to the extrusion. Numbness of the great toe on the left. MM test of great toe 4/5

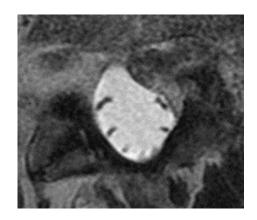
#### **DISCUSSION:**

The recent extrusion was superimposed over a previous extrusion. Unfortunately, there is no prior study to compare the extent of the prior extrusion. The trauma at age 8 is consistent with the pars defects. The extent of the prior extrusion cannot be determined by the patient's history and the one more serious episode reported occurred at about age 46. The pars defects and associated grade one anterolisthesis would account for bilateral L5 nerve root compression and grade 4 sciatica. With the more recent extrusion chiropractic adjustments relief, morphine and fentanyl proved to be ineffective the acute pain and injections offered only temporary relief.

#### **CONCLUSIONS:**

Symptoms associated with the previous extrusion or managed with chiropractic care for about 40 years. The symptomology related to the recent extrusion is demonstrated in the views above was so extensive that medical interventions with morphine, fentanyl, and injections failed. Microsurgery moved the extruded disc material proved to be successful in relieving the pain. In the grade one spondylolisthesis however still exist in the need for chiropractic management persists.





- 1. MEUCCI RD, FASSA AG, FARIA NM. PREVALENCE OF CHRONIC LOW BACK PAIN: SYSTEMATIC REVIEW. REV SAUDE PUBLICA. 2015;49:1. DOI: 10.1590/s0034-8910.2015049005874. EPUB 2015 OCT 20. PMID: 26487293; PMCID: PMC4603263.
- 2. Bigos s, bowyer 0, braen g, et al. Arnie /,ow back l'rohle111s in adults. Clinical practice guideline, quick reference guide number. 14. Rockville, md: u.s. Department of health and human services, public health service, agency for health care policy and research. Ahcpr pub. No. 95-0643. December 1994.
- 3. Burden of musculoskeletal diseases in the united states: prevalence, societal and economic cost, american association of orthopedic surg. 2008



Interventional Pain Management 9140 W. Thomas Road, Suite B-106 Phoenix, AZ 85037 T: (623) 939-1375 F: (623) 388-6880

info@WestValleyPainSolutions.com WestValleyPainSolutions.com



## THE PRESIDENT'S CORNER

Every year, legislative issues arise that can impact the practice of Chiropractic in Arizona. The Arizona Association of Chiropractic leads the way in meeting with our State Officials and discussing these issues and concerns.



Arizona Governor Doug Ducey with AAC President Andrew Altman, DC



Senator David Gowan (LD-14), Chairman of the Senate Appropriations Committee with AAC President Andrew Altman, DC



## Radiology Case—Brief Report

## Pulmonary Embolism Resultant of a Motor Vehicle Accident

Gregory Katsaros, DC, DAAPM



CT with contrast. Axial view demonstrating a filling defect within the right pulmonary artery



CT with contrast. Coronal view demonstrating a filling defect within the right pulmonary artery

**History:** A male in his mid 50's presented 2 days status post motor vehicle accident. Among the findings were chest pain and mild shortness of breath. There was also a large hematoma noted about the right calf. He had a 15 pack year history of smoking. He was referred to the emergency room where a doppler exam demonstrated a deep vein thrombosis. A subsequent CT chest with contrast revealed a pulmonary embolism.

**Discussion:** A pulmonary embolism (PE) is a potentially life threating condition. Most pulmonary emboli arise from a deep vein thrombosis (DVT), being causative in approximately 85% of cases. The symptoms of a PE can range from mild to severe. Common symptoms include shortness of breath, chest pain, hyperventilation, and tachycardia, although any or none may be present. There are a number of risk factors which increase the chances of developing a DVT and subsequent PE. Among the more common causes are: past history of a blood clot or a deep vein thrombosis; family history of a DVT or PE; smoking; oral contraceptives; immobility (long plane flights, long car rides); lower extremity trauma to the posterior compartment; genetics (blood clotting disorders); post-surgical; polycythemia vera; and hospitalization

The diagnosis of a PE can often be challenging. There are no definitive findings on physical exam, and ECG, clinical labs, and chest x-rays are of limited benefit. Typical diagnostic modalities include nuclear medicine Lung V/Q imaging and CT angiography of the chest. Both modalities have their advantages and disadvantages. The Lung V/Q provides better imaging of peripheral emboli and is performed without the issues of iodine contrast. CT angiography of the chest demonstrates better anatomic visualization and is performed faster, however is contraindicated in patients with iodine allergies, renal impairment, and those patients with recent iodine contrast enhanced exams.

**Conclusion:** A Pulmonary Embolism is a potentially like threating condition most often resultant of a fragmented deep vein thrombosis of the leg. People with signs and symptoms of a PE and with associated risk factors should be appropriately evaluated immediately.

## **CLASSIFIEDS**

#### **PRACTICES FOR SALE**

#### Practice for sale or Associate to learn/takeover

Associate wanted/ Clinic for sale. Tucson, AZ. 33yr established practice. \$486K last year with a total of 8 weeks of vacations and work 3.5 day/week. AK, SOT, Diversified, activator, Neurology, LLLT, EMS, US, IST, traction and more. Just inherited two 30+ year practices due to Covid and I am swamped. NEED HELP! Please send CV to CAREFREE662@gmail.com

#### **Tempe Practice For Sale**

3D Integrated Medical, LLC Well established practice. Contracted w/ most insurances, 25-35 np/mo, comfortable pace of 20-30 pv/d, 300+K Gross, No advertising, low overhead. Good location for access at Southern and Price in east Tempe. Medical office space for sale as well. Good referral sources with local businesses and ASU. Draws from all East valley cities. Contact Name: Drs. Edward and Pamela Traum Contact Email: eatraum@gmail.com

#### **EQUIPMENT FOR SALE**

I have closed my patient practice and need to find a home for my M6 Cutting Edge cold laser. The lease is assumable and it has just been recalibrated so it is as good as new. Call Dr. Bill Gallagher at 480-664-6644 or email at drbillgallagher@yahoo.com

#### **CONTINUING EDUCATION**

#### **Aristotle Continuing Education**

www.AristotleCE.com

#### **American Academy of Motor Vehicle Injuries**

The 150 hour Certificate in Motor Vehicle Injuries, CMVI program is now online http://AAMVI.org (480) 664-6644

#### INTERVENTIONAL PAIN MANAGEMENT

#### **West Valley Pain Solutions**

Westvalleypainsolutions.com (623) 939-1375

#### **PERSONAL INJURY ATTORNEYS**

The Brebner Law Firm BREBNERLAW.COM (602) 230-9554

#### **MEDICAL IMAGING**

#### **MRI of Arizona**

Medical Imaging on a Lien 701 W. Glendale Ave. Phoenix, AZ 85021

#### **Call for Manuscripts and Radiology Brief Case Reports**

We are accepting manuscripts on all topics related to Chiropractic. Submission can be in the form of opinions, general information, case reports, or referenced manuscripts. Referenced manuscripts will be per reviewed. If you have an interesting Radiology case you wish to publish for the "Radiology Case-Brief Report" section of the Journal, please send the image in jpeg format along with a brief report about the case. Please limit the article to 350 words or less. When submitting a Case Report, privacy needs to be maintained. If the author removes all HIPAA identifiers, including unique patient characteristics from the data prior to submission and publication of the article there is no need to obtain a signed privacy authorization. However, if there are HIPAA identifiers within the submitted report, the author will need to obtain from the patient a signed HIPAA compliant authorization. Please submit all manuscripts and radiology cases for the Brief Report section to: azjournal@outlook.com



Personal Information						
First Name:	Last Name:					
Address:	City:					
State:	Zip code:					
Contact Information						
Phone Number:	ı	Email:				
<b>Business Information</b>						
Company Name:	Title:					
Address:		City:				
State:		Zip code:				
Custom Fields						
Years of Practice in Arizona:		<b>AZ Licens</b>				
Work Legislative District:	College Graduation Date:					
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	
				Me	mber types effective January 2022	
Payment Information						
Monthly Payment Plan: ☐ Yes ☐No						
Amount (See above chart): Click here to enter tex	t.					
Payment Type:						
Constitutional						
	Credit Card					
Card Number: Expirat	Card Number: Expiration Date: CVV:					
Card Billing Information:						
Address: City:	State:			Zip code:		
ory.	State. Zip code.					
*Please submit this form to <a href="mailed">admin@azchiropracti</a> emailed, please let us know.	<u>c.org</u> . To pay ove	r the pho	ne, call 602.2	246.066	4. If you would like a receipt	





# MEDICAL IMAGING ON A LIEN

701 W. Glendale Ave. | Phoenix, AZ 85021
Tel: (602) 294-9009 | Fax: (602) 294-9012
Southwest corner of 7th Ave. and Glendale



