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BULLETIN

SPECIAL FEATURE PG 05

Do We Finally Have an Answer for Treating Chronic Lower Back Pain?

by KEVIN E. MACADAEG, MD
IMS Member, founding member of Indiana Spine Group and minimally invasive spine specialist

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TABLE OF CONTENTS

IN THIS ISSUE

SPECIAL FEATURES

ANNOUNCEMENTS

NOTE FROM THE EDITOR

Content, especially editorial articles, in the Bulletin are produced by the authors and are not the opinion of the Indianapolis Medical Society (IMS), IMS Board of Directors, or IMS Executive Committee. The goal of all articles and content contained in the Bulletin is to inspire debate and opinions among the membership on public health-related matters and keep the membership informed of issues facing physicians in central Indiana. Opposing viewpoints, comments, and counterpoint arguments are not only welcomed but encouraged and will be printed in the Bulletin by members of the Society by those who wish it. Members who wish to submit articles for publication should do so to me, Morgan Perrill, at mperrill@indymedicalsociety.org.

THE PRESIDENT'S PAGE

ANN MARIE HAKE, MD

Ah, summertime! The weather is warm, the days are long, and many of us take the opportunity to take a break from work and school.

It is also time to start thinking about the ISMA Annual Convention. "But wait," you may say, "that's not even until September!" While that is certainly true, the ISMA has added new ways to prepare for and participate in the Annual Convention activities. One of my favorites is the ISMA Pulse app, which was launched last year ahead of the 2021 Annual Convention, ISMA's first (and only, so far) virtual convention. For 2022, the Annual Convention is back and completely in person (September 9-11 at the Embassy Suites in Noblesville), but the Pulse app, rather than being banished to the junk drawer, has been enhanced to allow even greater opportunities for members to observe and participate in the resolution and policy-making process.

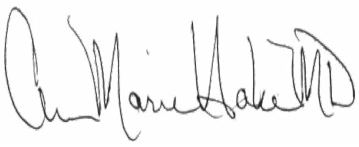
When Pulse was debuted last year, allowed members to submit feedback on proposed resolutions in two different comment periods. This year, the process has been simplified to one single, but longer, comment period. Additional functionality includes the ability to not only view the proposed resolutions, but also to see the feedback and comments of others even if you do not leave a comment. Commenters may also reply to the feedback of others who have commented on the same proposal. Commenters can also receive a daily email update on interaction on their comments. You may also opt to allow your email address to be made visible with your comments and to allow others to email you directly. (You may also change your mind later and opt out of the email visibility and direct communication option if you decide you do not want that after all.) Although comments can not be edited or deleted once posted, you can make additional comments as long as the comment period is open. A summary report of the comments and feedback for each of the resolutions will be available in Pulse after the end of the comment period. In contrast to last year, there will not be an interim Reference Committee meeting before the in-person meetings during the Convention. This will help simplify not just the duties of the Reference Committee members, but also enable interested members to keep track of their resolutions of concern more easily.

It is hoped that the availability of the Pulse app will not only help to streamline the work of the Saturday Reference Committees by obtaining feedback and input in advance of the meeting, but also to obtain input from more members without requiring them to appear for in-person testimony, thus providing both transparency to the process and greater representation of the membership.

Pulse went live for this year's Convention on July 1, so it is already available for members to view and give input. Information about the Convention, including links to registration and Pulse, is available at https://ismanet.org/ISMA/Convention/Convention-2022.aspx. The Pulse app is web-based (no separate app to download to your device) and can be found at https://www.ismapulse.com. (Note that the address for the ISMA site is "dot org" while the Pulse app is "dot com".) You will be asked to enter your ISMA login credentials for the app and opt in or out to allowing your email address to be visible. While you must register for the Convention in order to attend the Reference Committee meetings on September 10, you are not required to register for the Convention in order to review, comment, or leave feedback on Pulse. Pulse is open to comments 24/7 through August 14, so you still have time to make your voice heard on any of the 99 resolutions that will be considered at this year's Convention. It is also not too early to start thinking about resolutions that you might want to propose for the 2023 Convention, if you have ideas that are not addressed by this year's proposals!

I hope you are all enjoying this summer season! And remember, it is always the right season to speak out on behalf of our patients.

Sincerely,



Ann Marie Hake
President
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Do We Finally Have an Answer for Treating Chronic Low Back Pain?

by KEVIN E. MACADAEG, MD
IMS Member, founding member of Indiana Spine Group and minimally invasive spine specialist

Do we finally have an answer for treating Chronic Low Back Pain?

I have been in the practice of diagnosing and treating patients with spinal disorders for 32 years. Chronic Low Back Pain (CLBP) is one of the most common and difficult problems we see and yet the most difficult to treat. In most cases, we are left with attempts to only manage their back pain instead of treating the root cause.

The intervertebral disc has historically received the most attention as the most likely etiology of CLBP, with billions of dollars spent annually in the treatment of it. Spinal intradiscal therapies consisting of chemicals, biologics and heat have come and gone. Despite all attempted conservative measures, the overall success rate in resolving CLBP at 2 years is a paltry 26%.1 Furthermore, fusion for CLBP secondary to degenerative disc disease is problematic and controversial. A meta-analysis of 26 studies that included 3,060 patients who underwent fusion for degenerative disc disease showed only modest improvement at 1-to-4-year follow-up and a reoperation rate of 12.5%.2

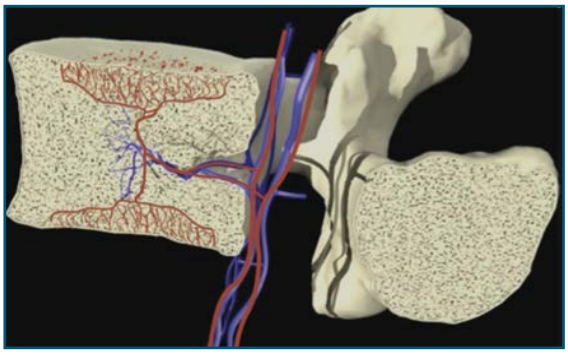

Fig 1. Cross section of the lumbar vertebra with basivertebral nerve arborizing to the vertebral endplates (red).

It was 10 years ago when I was approached to be an investigator in a study examining ablation of the basivertebral nerve (BVN) as a treatment for CLBP. This implied that there is a distinctly different source of LBP derived from a rich supply of nerve endings innervating the vertebral endplates that proliferate following vertebral endplate degeneration or injury, which can result in **vertebrogenic** pain. This is a huge paradigm shift, where historically we considered the intervertebral disc as the source of pain (**discogenic**).

Evidence behind vertebral endplate pain

In the 1990s and 2000s, numerous papers were authored describing the presence of a rich nociceptive nerve supply within the vertebral endplate.3 Nerve density in the endplate has been found to far exceed disc periphery nerve penetration.4 In 2017, Lotz reported that in conditions of vertebral endplate failure, disc nuclear cells are hydraulically introduced into the vertebral body, triggering an inflammatory cascade leading to endplate nerve proliferation and potentially vertebrogenic pain generation.5

In contrast, discogenic pain occurs from acute tearing of the outer annulus, stimulating the peripheral nerve supply which originates from sinuvertebral nerves. If the tear is confined to the peripheral annulus, resolution of back pain occurs in a relatively short period of time. Chronic anterior column pain most likely represents a progression of an acute annular tear

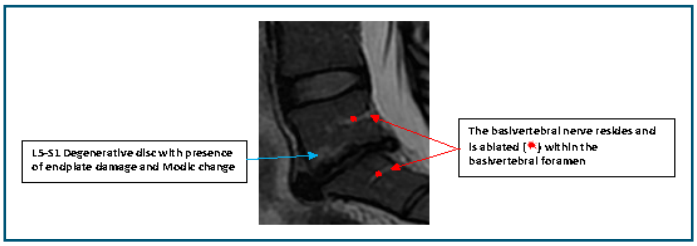

Fig 2. Lumbar MRI of the L4-5 & L5-S1 segment (Sagittal T2)

toward degenerative disc disease and subsequent initial endplate damage, with potentially an additional vertebrogenic pain component.

Patient Recognition

Both vertebrogenic and discogenic pain emanate from the anterior spinal column. Anterior column pain is typically experienced as axial back pain that is worse in the mornings and in the evenings after activity. It is exacerbated by sitting and prolonged standing. The most distinguishing exacerbating maneuver is with bending forward, whereas posterior column pain, i.e., facet arthritis, worsens with extension.

Clinically, the main differences of vertebrogenic vs. discogenic pain is chronicity and evidence of a radiographic biomarker. Whereas discogenic pain is acute and relatively short-lived, vertebrogenic pain worsens over many months to years and is associated with endplate damage followed by seen as Modic changes on MRI.

Indications for BVN Ablation

Basivertebral neuroablation has been FDA approved for the treatment of vertebrogenic pain from L3 to S1 since 2016. Treatment indications include low back pain with failure to conservative care for at least 6 months, and presence of Modic Types I or II on MRI. Exclusion criteria include radiculopathy, symptomatic spinal stenosis, instability, or dominance of posterior column pain.

The Procedure

The procedure is typically performed under MAC sedation. Under fluoroscopic guidance, the vertebral body is percutaneously accessed through the pedicle, a bipolar lead is precisely placed across the basivertebral foramen (BVF) and ablation is performed. The patient is typically given non-narcotic analgesics before their discharge and are allowed to return to work the following day. Relief usually occurs within the first 2 weeks. To this date, other than transient leg pain (about 4%), no serious side effects have been reported related to the procedure.

Clinical Evidence

Unlike intradiscal treatments, BVN ablation went through a series of very high quality studies showing significance before its release to the market.

In a long term analysis of the SMART trial - a randomized, double-blind, sham-controlled, multicenter trial - demonstrated clinically significant improvement in VAS and disability scores seen at the 3 month primary endpoint were maintained out to follow-up of 6.4 years.6 A subsequent randomized control trial compared BVN ablation to usual conservative care was halted early due to overwhelming superiority of intervention group outcomes and allowed early crossover.7 After treatment of both intervention and control groups, there was nearly identical significant improvement with long term follow-up. Likewise, a prospective case series investigation of BVN ablation on real-world patients with Modic changes authored at Indiana Spine Group also demonstrated significant improvement through long term follow-up.8

Combining all available research studies on BVN ablation, there was significant improvement of VAS and Oswestry disability scores along with high satisfaction with the procedures, with half of them being “pain -free” through at least 2 year follow up in all studies. Successfully treated patients decreased health care utilization and opioids use to nearly zero. Because the BVN is unmyelinated, ablation is potentially a permanent therapeutic intervention.

Conclusion

Vertebrogenic pain is an underappreciated etiology for challenging CLBP. Its access and ablation are minimally invasive, direct, durable and safe. Unlike fusion, the treatment is without structural change and patients are unrestricted immediately postoperatively. The

research and experience after thousands performed nationally have shown compelling results. I am now convinced that we have finally found a patient population with vertebrogenic CLBP that we can cure instead of manage.

References

1. Navigant Research, based upon Medicare and Commercial claims analysis (2020)

2. Phillips F, et al. Lumbar Spine Fusion for Chronic Low Back Pain Due to Degenerative Disc Disease. A Systematic Review. Spine 2013; 38: E409–E422

3. Ohtori S, et al. Sensory nerve ingrowth, cytokines, and instability of discogenic low back pain: A review. Spine Surg Rel Research 2018; 2:11-17

4. Fields AJ, et al. Innervation of pathologies in the lumbar vertebral endplate and intervertebral disc. Spine J. 2014 March 1; 14(3): 513–521

5. Lotz JC, et al. The Role of the Vertebral End Plate in Low Back Pain. Global Spine Journal 2013; 3:153–164

6. Fischgrund JS, et al. Long-term Outcomes Following Intraosseous Basivertebral Nerve Ablation for the Treatment of Chronic Low Back Pain: 5 Year Treatment Arm Results from a Prospective, Randomized, Double-Blind, Sham-Controlled Multi-Center Study. Eur Spine Journal 2020 Aug 25;29(8):1925–34

7. Khalil JG. A Prospective, Randomized, Multicenter Study of Intraosseous Basivertebral Nerve Ablation for the Treatment of Chronic Low Back Pain. Spine Journal 19 (2019): 1620-1632

8. Macadaeg K, Boody B, et al. A Prospective, Single Arm Study of Intraosseous Basivertebral Nerve Ablation for the Treatment of Chronic Low Back Pain: 12-Month Results. North Am Spine Society Journal 2020;3(September):100030

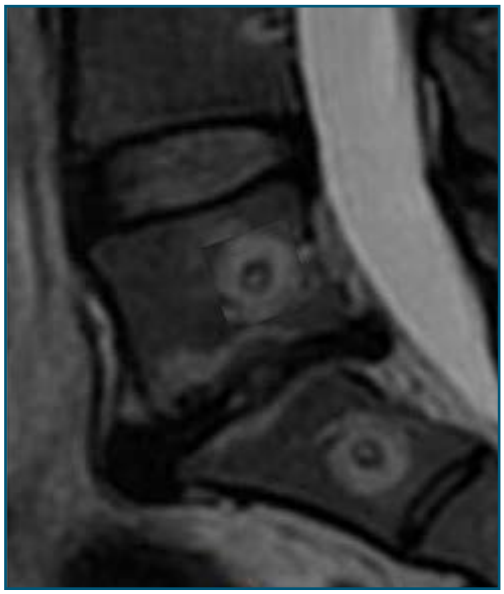

Fig 3. MRI 6 weeks post ablation of the L5 and S1 basivertebral nerves.

Private Equity Investment in Medical Practices Series: STEP 2 - Should I Use a Broker?

by THOMAS N. HUTCHINSON, ESQ. and BRIAN M. HEATON, ESQ.
Attorneys at Krieg DeVault.

Overview

Private equity (PE) health care transactions continue to capture the attention of many in the industry. Whether viewed as an opportunity to grow, stabilize, or exit a business, owners feel compelled--even obligated--to explore PE alternatives before the market cools or they are otherwise left behind.

Unfortunately, health care providers sometimes consider PE transactions at the wrong time or for the wrong reasons, including when their business is experiencing stress (e.g., recruitment or reimbursement challenges) or when they have been approached by a prospective buyer.

While both scenarios can be managed, the better time to consider a PE transaction is when the business is stable (or strong) and you have formulated a strategic plan and longer-term goals. Being proactive is critical and engaging your team of outside advisors is a great first step in the planning process.

Given the complexity of their operations, most health care businesses already have a solid team of advisors. This team should include an accountant and an attorney. When considering these team members for your PE discussions, be sure each professional or someone else in their firm has specific experience with PE. Ask for details of other transactions. Ask for client references.

It is also important to consider adding a business broker / investment banker to your team, who can serve an important role in "packaging" the business for consideration by multiple PE firms.

As noted above, businesses often first consider selling when they get a cold call or an inquiry from a colleague who has been through a recent PE transaction. Although these individuals may have your best interests at heart, they may be incentivized to find more acquisition opportunities. Even in the best case, they are limited in their perspective. Engaging in these discussions without an investment banker can mean limiting your buyer options, sharing information about your business before it is ready, and wasting time with unqualified buyers.

Even if you are in a narrowly focused specialty or niche, and think you know the most likely buyers for your business, a good investment banker can introduce you to other options. At a minimum, as they take you through their process, any previously identified prospective buyer will now know that you are serious and you are considering other opportunities. This process typically results in an increase in the final purchase price, often by 10% or more.

Investment bankers also prepare your business for a possible PE investment. In conjunction with your accountants and attorney, investment bankers will review your business operations and identify areas that may be of interest or concern. They will help you anticipate issues that may be raised by a buyer. For example, how do you define your market? Are your rates competitive? Do you have family members working in the business at above market salaries? Do you rent space in a building you own and have you been charging yourself enough rent? Do you have an old lingering lawsuit? Items like these should be addressed in advance to best present your business to potential buyers.

Buyers do not like surprises. Surprises will slow down the negotiating process and can be used

by buyers to drive down the price, even after you have turned other opportunities away. Your advisor team will help put the business in the best possible light for buyers. They will help you tell your past, present, and future story, and will work with you to articulate your goals.

Anticipating and collecting this information before a buyer requests it also takes some pressure off you and your staff. Although there will still be a large volume of requested information (a process often called "due diligence"), having your own advisors help collect and organize this information will be more efficient than asking your staff to do so. It can also help maintain more confidentiality about the process in the early stages of the discussions when uncertainty around a potential transaction could lead to concerns among your staff.

Investment bankers will ask you to sign an engagement letter or contract. That engagement letter should be reviewed by counsel to ensure that the terms are reasonable. Once it is signed, they will send you a list of requested due diligence items and you should ask that they sign a Non-Disclosure Agreement to protect the confidentiality of the information that is provided.

Once the engagement letter is signed, investment bankers normally charge a flat monthly fee as they help gather data, assimilate and "scrub" it, and explore potential buyers. If you are concerned about the process dragging out and becoming too expensive, a one-time flat fee can also be considered. If a transaction is not completed, you still owe this monthly amount for the work that has been done, but not the larger transaction fee discussed below.

If a PE transaction is achieved, the investment banker is also paid a percentage of the total consideration paid, including purchase price, debt assumed, etc. The amount varies depending on the type of business being sold, the competitiveness of the current market, and the size of the transaction. Commission rates of between 1% and 5% of the total value of the transaction are common, and expect to pay a higher percentage if there is a lower or no monthly fee. Sometimes the rate is tied to different segments of the purchase price, with a higher commission being used for amounts an investment banker achieves above what is a typical market price, which might be considered an additional "success fee." Depending on where your business is in the transaction process, you may be able to negotiate exclusions from the percentage fee or lower percentage fees for certain buyers with whom you have an existing relationship.

If you are considering a PE transaction or would just like to understand the process in more detail, please contact Thomas N. Hutchinson, Brian M. Heaton, or your regular Krieg DeVault attorney.

Disclaimer. The contents of this article should not be construed as legal advice or a legal opinion on any specific facts or circumstances. The contents are intended for general informational purposes only, and you are urged to consult with counsel concerning your situation and specific legal questions you may have.

Tumaini Foundation for Global Health & Humanitarianism

by THOMAS MOTE, MD, M.P.H.
IMS Board Member and ISMA Alternate Trustee

I'm a semi-retired anesthesiologist from Methodist Hospital and in the early 2000s I had an epiphany that I suspect that many of us have experienced. The surgeon was doing a femoral-popliteal bypass and attempting to revascualize the leg of a 54 yo man who already had a transmetatarsal amputation. The surgeon said that it only had a 50% chance of success and most distressing was that the patient continued to smoke and didn't manage his diabetes. So I thought this was crazy and we need to look at the bigger picture and the upstream determinants of health. I'm preaching to the choir, as we all know how few pts. heed their physician's advice or fill their prescriptions after leaving the ER.

Two years later I took nine months off and got a Masters of Public Health in Boston and the late global health pioneer Dr. Paul Farmer handed me my diploma. I came back wanting to do more on the management side but soon became frustrated by politics within my group and those at then Clarian Health so started doing medical mission trips to Africa plus Central and South America. Also as an adjunct I began teaching an Intro to Public and Global Health course at DePauw and now Butler. I've particularly enjoyed bringing outside speakers to the class including IMS board member Dr. Richard Friedman.

In 2013 this morphed into a not-for-profit, Tumaini Global Health where we brought speakers to DePauw U. each semester and took one student each spring to a global health meeting at Yale. The goal was to not only interest students in pursuing public and global health careers but general health literacy as called for by the Institute of Medicine. It is logical to do this for it is about problem solving and breaks down the academic silos for dealing with health problems such as Covid is not just about biology but economics, ethics, psychology, sociology and anthropology. In 2019 we expanded to four schools, adding Butler, Thomas More, and Wabash and brought a professor from the Harvard School of Public Health to speak to 21 faculty from six schools on teaching public and global health using the case method. This is important because several of the schools including DePauw have begun offering concentrations and majors in global health. Then Covid-19 hit and we were limited to Zoom presentations until last fall.

We just added Rose-Hulman Institute of Technology and are reaching out to several other schools. One of these is Berry College in Georgia, which is the first to offer a minor in what is known as One Health – the combination of the health of humans, animals, and our planet. This is important, as some 60-80% of emerging infectious diseases are zoonotic, i.e. coming from other animals plus the specter of global warming.

So far we have been mostly funded by a committed board that includes a physician from Massachusetts General Hospital who is head of their humanitarian initiative, a Johns Hopkins Bloomberg School of Public Health faculty member, a university president, plus several others DePauw University grads. We have a goal of raising $250,000 by the end of 2023 to further this effort and already have $100,000 pledged by a couple of board members. Morgan and the IMS have been helpful by introducing me to the people who designed their website as well as the Corydon Group who we just contracted with to help manage our little foundation and move this off my dining table.

So what is global health? The simplest answer is placing a priority on improving health and achieving equity in health for all people worldwide. So this can be anywhere, from inner city Baltimore to the Kibera slum in Nairobi. By the

Tumaini Foundation for Global Health & Humanitarianism

way I've had friends tell me that we should change the name of our foundation as they think that it indicates a preference for concern with health in Africa. While the greatest burden of disease certainly is there, what with the "Big Three" of HIV, TB, and Malaria we are concerned with health disparities everywhere.

Additionally we have an aspirational goal of along with the undergraduate side building a medical school dedicated to global health. There are two in the world, one in Israel and the other in Cuba where I've visited. Most of the people that we've spoken with have said why don't you simply add support to existing medical school programs such as I.U. SOMs AMPATH's one in Kenya, starting a new medical school is impossible.

My response is two-fold. First is that I.U. has a robust program with residences and fellowships but on the medical school side only summer experiences and fourth years rotations. It is but a sidelight and not in the DNA of the school like ours would have. We plan a curriculum much like Dell's in Austin with basic science the first year plus required rotations the second and elective ones the fourth. This leaves the third year open for research or to pursue M.P.H. or M.B.A. degrees. Plus no offence to those of you who practice for I.U. Health but they like to run things. I should also mention that both former AMPATH director Bob Einterz and his sister Ellen have spoken at our consortium schools.

Secondly Tumaini had the accounting firm who helped set up Marian College's osteopathic SOM do a projection that it would take 30 million to open our doors. While this is a considerable sum I strongly feel that if we could raise 3 million to buy some land and find a founding dean we could leverage the balance from places like the Fairbanks Foundation and Lilly Endowment. So with some luck fundraising to get started this is not impossible.

In the old days you needed faculty office and research space and a lecture hall and lab for first year students and ones for the second year class. This is much like I.U. has at its satellite medical school campuses. Now the emphasis is more on small group learning so you need some more classrooms but not necessarily the big research buildings. I've visited Marian University, ELAN in Cuba, the Dell SOM in Austin, and at the time the newest allopathic SOM in the U.S., the California School of Science and Medicine (CUSM). The latter simply rented space in an office building while they raised money for their own structure. So to get started we would not need that much and can add research facilities later. You also of course need a clinical partner for the third and fourth years and we have spoken to one of the systems in Indianapolis.

I should mention that in public health we speak of the Last Mile and how difficult it is to finish an initiative such as polio eradication. Currently we are on the threshold but it is so had to reach remote areas and conflict zones – in fact polio vaccinators have been killed in Afghanistan. Tumaini's effort to start a medical school has a different problem that I call the "First Mile". One of our board members helped start University High School in Carmel. They had a donated piece of land and an idea but that was it so no one would step forward and support them. Then a lady in Michigan heard of their passion and offered a 1.5 million matching grant that allowed donors to know that the school would be a viable entity and contributors piled in. We just need someone to "prime the pump" so that like University High School supporters will come forward.

I could go on about the need for such a school and why Indiana is the perfect place but in the interest of brevity I will simply say that we have a packet explaining this plus the business plan that I can get to anyone that is interested. We want to add more people to our board and are especially interested in those from the business community. Namely we just need an Ezkenazi or Michael Evans who helped start the Marian SOM to become our individual champion. I might mention that this is what helped Dr. Farmer's Partners in Health (PIH) get started and to build a hospital in Haiti as a Boston millionaire contractor wanted to die broke so funded them. I highly recommend the documentary, Bending the Arc, about PIH that is currently on Netflix.

So as I pass into retirement this has become my passion. If you want to help out or know of someone who might be a supporter please let me know. More information can be found on our website at www.tumainiglobalhealth.org.

The Gun Control Debate

by RICHARD FELDMAN, MD and DAVID BLANK
IMS Board Member, MHM Board Member and Past President, Former Indiana State Health Commissioner and Emergency Medicine Physician at Franciscan

In 2019, an Indianapolis physician colleague, Dr David Blank, and I co-authored a column on gun control. David is a conservative Republican and I a fairly liberal Democrat. We are both gun owners and believe in the right to defend our homes and that the American public should not be disarmed. Gun ownership is also a necessary defense - if it should ever occur in America - to a tyrannical and demagogic government.

However, we believe, as does the vast majority of Americans, that reasonable gun control is warranted. Despite our political differences, we offered our agreed-upon gun control and safety measures.

We recognize and applaud the recent Congressional gun-control agreement. But despite the litany of outrageous gun-violence tragedies, many involving children, we still believe insufficient progress in gun control has been made since our previous column. As of early June, there have been 247 mass shootings in 2022. There have been nearly 19,000 gun-related deaths (10,400 suicides and 8400 homicides, sadly including 716 children and teenagers). Time to co-author another column.

In 2019, we supported enactment of a federal "red flag law" that allows authorities to temporarily confiscate firearms from individuals credibly deemed a threat to themselves or others. Indiana already has such a law that has been used very successfully (when utilized with proper follow through) and without overreach. We supported banning high-capacity magazines, greater funding for mental health interventions, expanding background checks for all commercial gun sales, and funding for gun-safety research.

We remain supportive of these proposals. And although on opposite sides of the political spectrum, we continue finding common ground on this very political and divisive issue.

We favor additional measures. We support processes that interrupt the flow of guns to criminals without interfering with the rights of law-abiding citizens.

According to Bureau of Tobacco, Alcohol and Firearms agents, only 10% of guns used in crimes are stolen. Notably, as at least partially addressed in the recent federal legislation, resources and procedures need to be identified and available to stop traffickers.

Federal data indicate that juveniles committing crimes are more apt to carry guns compared to adults and their weapon of choice is semi-automatic handguns. Consequently, we agree on raising the age to 21 for the purchase of semi-automatic firearms. We support the banning of "ghost guns" without traceable serial numbers. And we favor waiting periods after gun purchases if data are identified supporting effectiveness. Perhaps most importantly, we need to understand why young men of all races find violence to be a fixture in their lives.

These are tough issues without easy answers. We should put partisanship aside and tackle gun violence through federally-funded research coordinated by a broadly represented public-private task force. The political, social, economic, cultural, criminal, and mental health determinants must be addressed in the equation.

We hear once again, "something has to be done." Our goal should not be merely acting but enacting the most meaningful evidenced-based legislative measures that prevent deaths and keep firearms out of the hands of those who are a danger to others – criminals and the mentally deranged.

Congress should challenge itself and finally move beyond partisan talking points and deflection and come to agreement on what is really necessary and achievable, just as we have. Further legislation is warranted.

As we stated three years ago, "Individual rights have never been absolute. We believe that there can be a balance between the common good and preserving individual rights. Bipartisan solutions are possible."

FDA Regulations On Tobacco Flavors in 2022

by RICHARD FELDMAN, MD
IMS Board Member, MHM Board Member and Past President, Former Indiana State Health Commissioner

In 2009, the Food and Drug Administration received authority from Congress to regulate tobacco products. While the legislation statutorily contains some tobacco-product restrictions, it also gives the FDA regulatory powers specifically over cigarettes, cigarette tobacco, smokeless tobacco, and roll-your-own tobacco. For other tobacco products, the law requires the agency to conduct evidenced-based determinations for actions necessary to protect the public health. As a result, the FDA promulgated a 2014 rule extending its authority to e-cigarettes, cigars, hookah, and pipe tobacco. The FDA now regulates the manufacturing, import, packaging, labeling, advertising, promotion, sale, and distribution of essentially all tobacco products.

The FDA has been slow to progressively exercise its authority over tobacco resulting in regulatory gaps. However, recently the FDA began a process of restricting vaping products; and now the FDA proposes to ban menthol flavorings in cigarettes and all flavorings in cigar products, including cigarillos.

Flavorings in cigarettes were statutorily banned in the original legislation but menthol was excluded pending further FDA evaluation. Flavored cigars also represent one of those regulatory gaps. So delinquent were its actions on menthol, multiple public health groups filed a petition requesting the FDA to prohibit menthol. In a related 2020 lawsuit, a federal judge ordered a deadline for the FDA to issue a final menthol rule, which the FDA is now undertaking. The new proposed rules only apply to cigarettes and cigars and will not apply to some vaping products, smokeless tobacco, and pipe tobacco. The industry will unfortunately increase marketing of these remaining products.

The tobacco industry has aggressively marketed menthol cigarettes (like Newport and Kool) to minority groups, especially African Americans, but also Hispanics and Asians. Eighty-five percent of Black, 46 percent of Hispanic, and 39 percent of Asian smokers use menthol cigarettes as compared to about 30 percent of white smokers. Menthol cigarette use is also higher among LGBTQ individuals. Menthol cigarettes account for about 37 percent the cigarette market.

Menthol increases the health risks of smoking. It intensifies the addictive qualities of nicotine, promotes use, and makes cessation much more difficult. Because it blunts the harshness of tobacco smoke, menthol smokers tend to smoke more and inhale more deeply, increasing the cumulative dose of toxins. African Americans have higher rates of smoking-related diseases, certainly due in part to menthol use.

Similarly, youth smokers are also enticed by menthol's flavor and masking effects of tobacco's unpleasant taste and harshness. About half of teenage smokers use menthol cigarettes, increasing the risks for a lifetime of addiction.

The proposed rule will also address menthol and other flavored cigars and cigarillos. Menthol and other sweet flavorings especially make smoking more appealing to youth. After the 2009 ban on flavored cigarettes there was a shift to flavored cigars among kids (and adults), especially among Black and Hispanic youth who are twice as likely to smoke flavored products as compared to whites. One study found that 74 percent of teens said they smoked cigars because of the flavorings.

One objection to banning menthol and flavorings is that it would place individuals at risk for criminal prosecution for possession of menthol-tobacco products. The FDA is clear that enforcement would only be applied to manufacturers, distributors, and retailers, not individuals.

The bans are an important step to further promote cessation and to reduce smoking-related premature deaths, especially among minorities.

Next up? FDA limitations on the amount of nicotine in tobacco products.

WELCOME NEW MEMBERS

Jan Hummer, MD
Eye Surgeons of Indiana
9202 N Meridian St.
Indianapolis, IN 46260
Ophthalmology
University of Miami, 1991

Kristyn J. Tekulve, MD
Anatomic Pathology Northwestern University Feinberg, 2017

Jordan Phelps, DO
JWM Neurology PC
2330 S Dixon Rd Ste 315
Kokomo, IN 46902-6430
Pediatrics
Indiana University, 2008

Ahmar Sajjad, MD
Eye Surgeons of Indiana
9202 N Meridian St, 150
Indianapolis, IN 46260
Ophthalmology
Baylor College, 2016

RESIDENTS: St Vincent

Flora Achiko, MD
Transitional Year
Indiana University, 2022

Nagasai Adusumilli, MD
Transitional Year
George Washington, 2022

Pedro Amaya, DO
Transitional Year
Kansas City University, 2022

Brett Anderson, DO
Internal Medicine
Marian University, 2022

Matthew Anderson, MD
Internal Medicine
Indiana University, 2022

Nicolas Andrade, MD
Family Medicine
U of Missouri, 2022

Justin Arunthamakun,MD
Cardiac Electrophysiology
Southern Illinois U, 2016

Pravleen Bains, DO
Internal Medicine
Burrell, 2022

Megan Barnett, DO
Internal Medicine
Marian University, 2000

Megan Bernath, MD
Family Medicine
Indiana University, 2022

Taylor Browning, DO
Internal Medicine
Marian University, 2022

Sylas Buller, DO
Transitional Year
Marian University, 2022

Anthony Capria, MD
Obstetrics & Gynecology
Ross University, 2019

Fiore Casale, MD
Transitional Year
U of New Mexico, 2022

Jennifer Choe, MD
Obstetrics & Gynecology
Indiana University, 2021

Christian Cuevas, MD
Transitional Year
Indiana University, 2022

Emily Cumberworth, DO
Pediatrics
Marian University, 2022

Cassandra Daet,DO
Internal Medicine
Marian University, 2022

Erin Deist, MD
Obstetrics & Gynecology
Indiana University, 2022

Harkeerat Dhami, MD
Preliminary Medicine
Indiana University, 2022

Joanna Dong, MD
Dermatology Fellowship
Icahn at Mount Sinai, 2022

Victoria Doss, MD
Preliminary Medicine
Ohio State University, 2022

Joseph Foti, DO
Internal Medicine
Marian University, 2022

Jake Fries, DO
Family Medicine
Marian University, 2021

Steven Gadd, DO
Internal Medicine
U of Pikeville Kentucky, 22

Haley Gesse, DO
Obstetrics & Gynecology
Marian University, 2022

Isaac Gluesenkamp, MD
Transitional Year
Indiana University, 2022

Megan Gray, DO
Obstetrics & Gynecology
Marian University, 2022

Michael Green, MD
General Surgery
Indiana University, 2022

Luke Gunderman, DO
Internal Medicine
Marian University, 2022

Haley Hall, MD
Pediatrics
Indiana University, 2022

Delaney Halloran, MD
Pediatrics
Indiana University, 2022

Kevin Hammond, MD
Transitional Year
Indiana University, 2022

Omar Jawaid, MD
Heart and Transplant
Chicago Med School, 2016

Erin Kay, DO
Family Medicine
Marian University, 2022

Jesse Kestenman, DO
Transitional Year
New York Institute, 2022

Thomas Knowles, MD
Transitional Year
Indiana University, 2022

Mary Kuo, DO
Internal Medicine
U of Pikeville Kentucky, 22

Anita Li, MD
Internal Medicine
U of Vermont Larner, 2022

Kathryn Lindstrom, MD
Obstetrics & Gynecology
Drexel University, 2022

Jonathan McCollum, MD
Cardiovascular Disease
U of Alabama, 2018

Reese Miller, MD
Preliminary Medicine
Indiana University, 2022

Amer Mohiuddin, MD
Transitional Year
Indiana University, 2022

Ezequiel Munoz, MD
Interventional Cardiology
Universidad Central de Venezuela Escuela, 2014

Deepa Namburi, MD
Internal Medicine
Ross University, 2022


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Logan Neuhauser, DO
Preliminary Medicine
Marian University, 2022

Michael Newman, DO
General Surgery
Marian University, 2022

Aaron Peach, MD
Transitional Year
Southern Illinois U, 2022

Kyle Reed, DO
Internal Medicine
Marian University, 2022

Ashley Reinert, MD
Family Medicine
U of Cincinnati, 2022

Justin Rice, MD
Family Medicine
Indiana University, 2022

Luke Richardson, MD
Transitional Year
Indiana University, 2022

Annika Ritz, MD
Pediatrics
Ludwig-Maximilians-Universität München, 2021

Sydney Rivera, MD
Transitional Year
Indiana University, 2022

Tobi Rudoltz, MD
Transitional Year
Rutgers New Jersey, 2022

Genevieve Sell, DO
Pediatrics
West Virginia School, 2022

Kelsey Shoemaker, DO
Family Medicine
Lake Erie, 2022

Evan Singleton, MD
Family Medicine
U of Cincinnati, 2022

Amanda Span, DO
Internal Medicine
Marian University, 2022

Isaac Stevens, DO
Internal Medicine
Lincoln Memorial U
DeBusk, 2022

Diego Tapia, MD
General Surgery
Pontificia Universidad Católica del Ecuador Facultad, 2019

Bryan Wacker, DO
Transitional Year
Indiana University, 2022

Stephanie Wilson, DO
Preliminary Medicine
Marian University, 2022

Robyn Wilson, MD
Internal Medicine
Marian University, 2022

Amy Young, DO
Pediatrics
Marian University, 2022

RESIDENTS

Colton Junod, MD
IUSM - EM
Emergency Medicine
Indiana U Sch Med, 2022

Namratha Sandella, MD
JWM Neurology PC
Neurology
Univ of Cincinnati, 2017

Erica Swanson, MD
IUSM - Internal Medicine
Internal Medicine
University of Missouri-Kansas City, 2020

STUDENT

Rachel M. Hicks, MS
General Surgery
Marian University, 2023

BULLETIN BOARD

BARRETT BOODY, MD

Barrett Boody, M.D., Indiana Spine Group, is nominated by his peers and recognized on Castle Connelly's list of "Rising Stars" in Orthopedic Surgery for both 2022 and 2021. Castle Connolly's "Rising Stars" are early career doctors recognized for their outstanding accomplishments and dedication to the field of medicine. These doctors are emerging leaders in the medical community, with clear contributions to the advancement of healthcare in their communities through clinical care, research and educational leadership.

https://www.beckersspine.com/orthopedic/item/54345-41-rising-stars-in-orthopedics.html

**Correction from June, note the corrected photo.*

RICK C. SASSO, MD

Rick C. Sasso MD, Indiana Spine Group, was honored as the John H. Moe visiting Professor at Twin Cities Spine Center in Minneapolis on May 13, 2022. Dr. Sasso gave two invited lectures, "Cervical myelopathy" and "Cervical deformity" at the day-long symposium. He also participated in case reviews and discussion with the Spine Surgery Fellows and Attending Staff members at the longest running Spine Surgery Fellow training program in the country.
"Cervical Myelopathy." The John H. Moe visiting professor lecture at Twin Cities Spine Center. May 13, 2022 Minneapolis, Minnesota.

Rick C. Sasso MD, Indiana Spine Group, served as the guest professor for the San Diego Spine Fellowship Grand Rounds. Dr. Sasso's invited lecture was "Cervical Disc Replacement". "Cervical Disc Replacement." San Diego Spine Fellowship Program Spine Conference. June 13, 2022. Virtual presentation.

A Multi-center FDA study on the treatment of lumbar microdiscectomy was recently published with a device to try to decrease the incidence of recurrent herniated nucleus pulposus. It was published in a peer-reviewed journal.

Nunley P, Strenge KB, Huntsman K, Bae H, DiPaola C, Allen RT, Shaw A, Sasso RC, Araghi A, Staub B, Chen S, Miller LE, Musacchio M: Lumbar discectomy with Barricaid device implantation in patients at high risk of reherniation: Initial results from a post-market study. Cureus 13: e20274, 2021.

CME & CONFERENCES

MONTHLY EVENTS

	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
1st Week of the Month	Community North: Breast Cancer Conf. 7-8 am	Community East: CHE Admin Conf. 12-1 pm Community North: Psychiatry GR 12:30-1:30 pm Community North: Chest Cancer Conf. 7-8 am Community Heart & Vascular: Imaging Conf. 7-8 am		Community North: Forum 7-8 am Community South: South Case Presentations 12-1 pm
2nd Week of the Month	Community East: Medical GR 1-2 pm Community South General CHS 12-1 pm	Community North: GI/Oncology Conf. 7-8 am Community Heart & Vascular: M&M Conf. 7-8 am Community South: Breast Cancer Conf. 8-9 am St. Vincent Simulation Center: Pediatric GR 12-1 pm St. Vincent Womens: Neonatology GR 12-1 pm	St. Vincent: Electrocardiograph Conf. 7-8 am	Community North: Gynecological/Oncology Conf. 7-8 am
3rd Week of the Month	Community North: Breast Cancer Conf. 7-8 am Community South: South Thoracic 8-9 am Community South: South Molecular 5-6 pm	Community North: Psychiatry GR 12:30-1:30 pm Community North: Melanoma 7:30-8:30 am Community Heart & Vascular: CV Conf. 7-8 am	St. Vincent Heart Center: Cardiac, Medical, Surgery 7-8 am	Community North: GU Conf. 7-8 am Community South: South Case Presentations 12-1 pm
4th Week of the Month	Community East: Breast Cancer Conf. 7-8 am	Community North: GI/Oncology Conf. 7-8 am Community Heart & Vascular: Disease Manage Conf. 7-8 am St. Vincent Womens: Perinatal Case 7-8 am		

Annual	St. Vincent Womens:	MFM Ultra Sound Series	Quarterly 1-4 pm
	St. Vincent Simulation Center:	Sim Debriefing Essentials	12x/Year
	St. Vincent Simulation Center:	PMCH Crisis Management	12x/Year

WEEKLY EVENTS

Day of the Week	Event
Monday	St. Vincent: General Cardiology 7-8 am
Tuesday	St. Vincent: Trauma Case 12-1 pm
	St. Vincent Womens: Neonatology Journal Club (every other month) 12-1 pm
Wednesday	St. Vincent: CCEP 7-8 am St. Vincent Heart Center: Intervention Cardiology 7-8 am St. Vincent: Advanced Heart Failure 7-8 am St. Vincent: Surgery Didactics 7:30-8:30 am St. Vincent: Surgery M&M 6:30-7:30 am
Thursday	St. Vincent PMCH: Pediatric Cardiothoracic Surgery & Cardiology Conf. 12-1 pm St. Vincent OrthoIndy: Fractures 8-9 am

ONLINE EVENTS

Indiana School of Medicine

Indiana University School of Medicine is committed to providing valuable educational opportunities. Many of our educational activities usually offered as face-to-face meetings, have now transitioned to a virtual format in an effort to keep healthcare teams connected and engaged during the COVID-19 pandemic.

Online activities, visit: https://iu.cloud-cme.com

Please visit https://iu.cloud-cme.com for a list of Regularly Scheduled Series (RSS) activities.

IMS is not responsible for the events listed. We recommend that before attending any CME/Conference events that you check with the provider to confirm the program is still available.

To submit articles, Bulletin Board items, CME & events, opinions or information, email ims@imsoline.org. Deadline is the first of the month preceding publication.

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TBD, Marian Student
Maham Nadeem, IU Student

Delegates

Delegates to the Annual State Convention

The year shown in parentheses indicates year in which the term expires following the conclusion of the ISMA Annual Convention.

Ranai Abbasi (2024)
Linda Feiwell Abels (2024)
Christopher D. Bojrab (2024)
Ann C. Collins (2023)
Carolyn Cunningham (2022)
Julie A. Daftari (2023)
Marc E. Duerden (2023)
John H. Ellis (2024)
Richard D. Feldman (2024)
Bruce M. Goens (2022)
Ann Marie Hake (2022)
Ronda A. Hamaker (2022)
Mark M. Hamilton (2022)
C. William Hanke (2024)
Doris M. Hardacker (2024)
Penny W. Kallmyer (2023)
Clif Knight, Jr. (2022)
John E. Krol (2023)
Mary Ian McAteer (2023)
Ramana S. Moorthy (2024)
Mercy O. Obeime (2023)
Ingrida I. Ozols (2023)
Robert M. Pascuzzi (2023)
J. Scott Pittman (2022)
David M. Ratzman (2024)
Jodi L. Smith (2022)
Eric E. Tibesar (2023)
Maureen Watson (2022)
Steven L. Wise (2024)
Crystal S. Zhang (2022)

Alternate delegates

Delegates to the Annual State Convention

The year shown in parentheses indicates year in which the term expires following the conclusion of the ISMA Annual Convention.

Laurie L. Ackerman (2022)
Gabe Bosslet (2024)
Allison Case (2024)
David Crook (2024)
Richard Hahn (2023)
Paula Hall (2022)
Caitlin J. Harmon (2023)
Brian S. Hart (2023)
Melanie Heniff (2024)
David A. Josephson (2023)
Kathryn J. Kelley (2023)
John Kincaid (2024)
James F. Leland (2022)
Katie McHugh (2024)
Tom Mote (2023)
Valerie Pai (2024)
Scott E. Phillips (2022)
Bui Tran (2024)
Alexandar T. Waldherr (2023)
Joseph Webster (2024)

Indiana state medical association

Past Presidents

**Indicates deceased*

John P. McGoff 2017-2018
Jon D. Marhenke 2007-2008
Bernard J. Emkes 2000-2001
Peter L. Winters 1997-1998
William H. Beeson 1992-1993
George H. Rawls* 1989-1990
John D. MacDougall* 1987-1988
George T. Lukemeyer * 1983-1984
Alvin J. Haley 1980-1981

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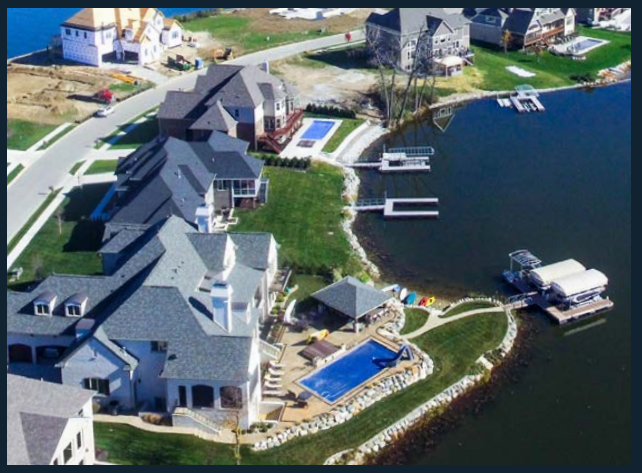

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