AAPM’s Efforts to Develop Pain Champions in Medical School Education

The American Academy of Pain Medicine (AAPM) continues to be proactive in fostering a national momentum to support and improve pain education. One area of particular focus is in medical school education, which is overseen by Medical School Sub-Committee Chair Beth B. Murinson, MD PhD. Dr. Murinson is associate professor of neurology at Johns Hopkins School of Medicine and team leader for the Johns Hopkins University Center of Excellence in Pain Education in Baltimore, MD.

Pain Medicine Network had the opportunity to speak with Dr. Murinson about the purpose of the Academy’s medical school education committee and its current efforts. “We’ve revitalized the medical education sub-committee, which brings committee members together each year at the Annual Meeting. Even though we only meet in person once a year, we are launching joint projects, creating a new dynamic, and generating excitement as we share innovations and discuss what is happening around the country in medical school education,” Dr. Murinson states.

Part of the Committee’s recent efforts included a survey of AAPM leadership to help gauge what types of pain curriculum recommendations would benefit medical schools. One of the issues in medical school education has been the standard recommendations presented in the curriculum developed by the International Association for the Study of Pain (IASP). First introduced in 1993, the original curriculum was heavily weighted towards basic science. The AAPM leadership believes that there is a need for a much more clinically focused curriculum that integrates

continued on page 7

Inside...

FELLOWS CORNER
Current Evidence and Controversy Surrounding Transforaminal Approaches to Lumbar Epidural Steroid Treatment …….. Page 2
Prevardhan Birthi, MD, Fellow in Pain Medicine
Department of Anesthesiology, University of Kentucky College of Medicine, Lexington, KY

AAPM Expands Its Online Education! …………. Page 4
Get the latest sessions and archived coding webinars
Your time, your space
FELLOWS CORNER

Current Evidence and Controversy Surrounding Transforaminal Approaches to Lumbar Epidural Steroid Treatment

Pravardhan Birthi, MD, Fellow in Pain Medicine
Department of Anesthesiology, University of Kentucky College of Medicine
Lexington, KY

Lumbosacral radicular pain is characterized by pain radiating in one, or occasionally more than one, lumbar or sacral dermatomes. From a nomenclature perspective, the terms radicular pain, radiculopathy, and radiculitis are often used interchangeably, although radicular pain more precisely suggests only algesia while radiculopathy is associated more commonly with motor or sensory abnormalities. Lumbar radicular pain is a common condition with an annual prevalence ranging from 9.9% to 25% (Van Boxem et al., 2010). Development of radicular pain depends on both mechanical factors and concomitant nerve irritation by chemical mediators released from the disrupted disc (Marshall & Trethewie, 1973). These chemical mediators result in an intense localized inflammatory reaction that is associated with neuritis; therefore, local application of corticosteroids to the compressed, inflamed nerve root has emerged as a treatment option via the interlaminar and transforaminal approach.

The transforaminal epidural approach, by definition, results in application of the steroid to the affected nerve, resulting in greater specificity of treatment while offering minimal risk of dural puncture when compared with interlaminar and caudal epidural techniques (Manchikanti, 2000; Thomas et al., 2003). Transforaminal injection has also been demonstrated to result in the spread of medication preferentially to the symptomatic side.
Recently, based on a critical reanalysis of the anatomy of the neuroforamen, an alternative approach utilizing the “Kambin Triangle” has been advised as a potentially safer alternative to the classic “Safe Triangle” method.

and along the nerve root (Van Boxem et al., 2010). The spread of contrast can also potentially provide additional information about functional foraminal stenosis not detected by spinal imaging, electrodiagnosis, and physical examination of patient by interpretation of the contrast dye pattern (Datta et al., 2007).

Comparative studies have suggested better clinical efficacy for transforaminal techniques when compared to midline interlaminar applications of epidural steroids (Ackerman & Ahmad, 2007). The transforaminal approach also suggests a tendency toward improved pain scores, improvement in activities of daily living, and decreased pain-related anxiety and depression (Thomas et al., 2003). Despite the tendency of the literature to suggest superiority of the transforaminal epidural route of steroid administration, the technique does come with several potential complications. For instance, transforaminal epidurals have been associated with intravascular injection, air emboli, vascular trauma, particulate emboli, cerebral thrombosis, epidural hematoma, and nerve root or spinal cord damage or both (Glaser & Shah, 2010). By far the most devastating complication of this technique is the potential for spinal cord ischemia/vascular injury secondary to needle trauma or intravascular injection of particulate material. Additional catastrophic spinal cord injuries can occur due to vasospasm, intimal flap formation, and vascular transection (Glaser & Shah).

The blood supply of the spinal cord in general, and the neuroforamen in particular, is complex. Secondary to the significant oxygen requirement of the highly metabolic neural tissue of the spinal cord and dorsal root ganglion, there is significant redundancy built into the spinal cord arterial circulation. It is this copious vascular supply that presents the technical risk to the interventionalist. The largest artery is the Arteria Radicularis Magna, also known as Artery of Adamkiewicz, which is present in the majority of patients in between T9 and L1 but can be found as high as T7 and low as L4. While inadvertent damage to this large artery represents a significant risk of morbidity when performing interventional procedures, an equally important and potentially greater risk is damage or injection into the small segmental arteries that lie within the neuroforamen, ultimately resulting in segmental ischemia due to embolism (Bogduk, 2004; Glaser & Shah, 2010).

Several techniques have been described for the transforaminal approach to the epidural space with the most commonly used technique taught as the “Safe Triangle” or supraneural approach (Glaser & Shah, 2010). The safe triangle of the neuroforamen descriptively is situated just lateral to the inferior margin of the pedicle, dorsal to vertebral body, and cephalad to nerve root. To reach the safe triangle, the classic “Scotty Dog view” is obtained fluoroscopically using an oblique view. This view brings the pedicle towards the middle of the vertebral body. The needle is then directed through the skin toward the inferior lateral boundary of the pedicle and is advanced until the needle touches the vertebral body. The needle tip will ultimately be positioned in the 6 o’clock position (if the pedicle were a clock face with the 12 o’clock position being cephalad and the 6 o’clock position caudad) (Kambin, 1991). This approach, though suggested for its safety, nevertheless has been associated with case reports of devastating neurologic complications (Glaser & Shah). Despite being known as a “Safe Triangle,” these reports demonstrate that perhaps reevaluation of the technique is warranted as the

continued on page 8
Online AAPM Educational Sessions and Webinars Available as Pay Per View

The Academy continued to expand its online store in 2012 with educational books, webinars, video recordings, and voice-over PowerPoints. These are all intended for pain specialists, primary care physicians, and clinicians who are involved in the pain area. Continuing medical education (CME) eligibility is indicated where applicable. The following is a brief overview of what is available.

Video Recordings: Big Bad Glial Cells, Central Mechanisms of Pain, and Public Policy on Prescription Opioids

Practicing clinicians learned the latest on clinical information and translational research and how it applies to their daily practice. The meeting also addressed how the changing healthcare environment affects practicing clinicians and their patients.

“Pain is an extraordinarily and rapidly evolving field,” stated Sean Mackey, MD PhD, Annual Meeting Co-Chair and Chief of the Pain Management Division at Stanford University Medical Center in Palo Alto, CA. “The amount of knowledge [pain clinicians] expected to have and apply to our patients is changing on a moment-by-moment basis. This meeting provided the most contemporary, up-to-date research and evidence-based medicine approaches to understanding pain medicine and how to translate that into the most optimal care for our patients.”

Video recordings are now available of meeting plenary sessions by these internationally renowned experts in pain:

- Linda R. Watkins, PhD, discussed breaking scientific news on the immune and glial factors within the peripheral and central nervous systems that relate to chronic pain states in her presentation: “Glia as the ‘Bad Guys’: Clinical Implication of Glial Dysregulation of Pain, Opioids, and Other Drugs of Abuse.”
- Daniel J. Clauw, MD, discussed the “Central Mechanisms in Pain Syndrome”—a topic “relevant to any physician who takes care of patients with chronic pain, but particularly those who have a great appreciation for the role the central nervous system plays in perpetuating chronic pain conditions,” said Dr. Mackey.
- Based on his work with the White House, federal and state legislators, medical societies and law enforcement officials, Keith N. Humphreys’s, PhD, addressed the tensions and tradeoffs of “Public Policy on Prescription Opioids.” Dr. Mackey said, “We believe that Keith provided a balanced perspective on the risks and benefits of opioids for our patients with chronic pain.”
Many of the still very relevant sessions from the 26th Annual Meeting, Advancing the Science and Practice of Pain Medicine in a Changing Healthcare Environment, are available. Three key areas of the pain care field were addressed and integrated: the science of pain, the practice of pain, and the changing healthcare environment.

Among the many meeting highlights were

- **a mock legal trial**, which was brought back by popular demand. Pain Medicine Litigation Practices Through Mock-Trial Review addressed what every physician should know about courtroom procedures, legal proceedings, testimony, and jury verdicts. Participants included Edward Michna, MD JD, as physician defendant; Peter Voudouris, Esq, as judge; William Tiano, Esq, as attorney for the plaintiff; Patricia Barker, Esq, as attorney for the defense; and Dr. Deer as expert for the plaintiff. The case covered interventional procedures and medical management issues surrounding the use of opioids.

- **a half-day preconference session on neuromodulation**, including spinal cord stimulation and intrathecal drug delivery. “This was pretty special because we only do this presentation once every 5–10 years,” Dr. Deer said. “We focused on everything from intracranial implants to peripheral nerve implants to spinal cord implants. This was a very important review of the entire continuum of advanced therapies.”

- **a panel discussion on the future of Pain Medicine as a specialty**. Panel participants of Pain Medicine Moving Forward: 2010 and Beyond included Kenneth Follet, MD PhD; Scott Fishman, MD; Rollin Gallagher, MD MPH; James Rathmell, MD; and Richard W. Rosenquist, MD. These key opinion leaders deliberated the direction the practice of pain medicine is taking and looked for ways to consolidate disparate interests.

- **a cutting-edge science lecture, Pain Genomics**, by Debra Schwinn, MD, of the University of Washington in Seattle. Dr. Schwinn addressed four specific areas of genomics and their significant implications on the practice of clinical pain medicine moving forward.

- **discussions on medical-legal issues**, including the how-to’s of documentation, as well as reducing, preventing, and responding to lawsuits. “We had some of the world’s top-notch lawyers presenting on these issues,” said Dr. Deer.

Voice-over PowerPoint recordings of all the sessions are available online as bundled packages or as individual sessions.

Bundles available include the entire conference (28.5 CME), the Essential Tools (16 CME), and the Neuromodulation Preconference (4.0 CME). Individual sessions are also offered.

Recent Webinars on Coding for Pain

Medical coders and office or practice managers can keep up-to-date on the latest coding for pain info.

- **Medicare Guidelines for Documenting E/M Services**: Topics discussed include the importance of E/M coding; key definitions that impact the selection of E/M codes; identification of key components and the documentation required for them, including history, exam, medical decision making, and time; and choosing the levels of service.

- **AAPM 2012 Coding for Pain Webinar—What’s New: 2012**
  Coding changes are discussed as they relate to current and future reimbursements for Pain Medicine practices. Keep up-to-date and learn about the new and/or revised CPT and ICD-9 codes. This course will help ensure you have accurate coding for 2012 and get your questions answered.

- **Coding for Multiple Services on the Same Day**: Areas of discussion include reporting multiple procedure codes, procedures with imaging services, and combinations of E/M and diagnostic and procedural services. Particular emphasis is placed on the proper modifier selection and the required medical record documentation.

- **ICD-10 and your Pain Practice**: Archive of webinar that was presented in late October 2012 about what you need to do to prepare your practice for the coming ICD10 codes.

To review or order these products, visit www.painmed.org/store or call 847.375.4731.
New Coding Resources Now Available on the AAPM Website

2013 Illustrated Coding and Billing Expert for Anesthesia/Pain Management

This all-in-one resource contains all the coding information you will need for your specialty.

2012 Best Practices for ICD-10-CM Documentation and Compliance

This is an excellent resource to help practices prepare for the implementation of the new ICD-10-CM code set.

2012 Advanced Anatomy and Physiology for ICD-10-CM

This resource takes the user through all body systems that ICD-10 uses to identify the appropriate diagnosis and condition.

Visit www.painmed.org/coding to order these and other helpful coding resources specific to pain medicine.

COMING SOON

Watch the AAPMedicine's e-newsletters and e-notifications for the official release date.

Visit www.painmed.org for more details.

Pain Comorbidities: Understanding and Treating the Complex Patient

Edited by Maria Adele Giambardino and Troels Staehelin Jensen • ©2012, IASP Press

An indispensable book about managing the complex patient with pain!

Price: US$85.00
Order now at www.iasp-pain.org/books/comorbid

International Association for the Study of Pain
AAPM’s Efforts to Develop Pain Champions in Medical School Education

continued from page 1

“The AAPM leadership believes that there is a need for a much more clinically focused curriculum that integrates both pain knowledge and professional development in understanding the affective and cognitive aspects of pain.”

both pain knowledge and professional development in understanding the affective and cognitive aspects of pain. It was the opinion of the leaders that a core curriculum for pain should include the basics of pain care, which includes pain assessment, planning a basic diagnostic work-up, and knowing how to treat someone who is in acute or severe pain. If this were achieved, many believe this alone would be a huge advancement in medical school education.

It has also been well documented that medical education for pain care has not kept up with the scientific knowledge and innovations in pain care, nor has it been adequately addressed in medical school curriculums. The Institute of Medicine’s report Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research devoted an entire chapter to medical education. The report highlighted the inadequate attention to comprehensive pain education, citing a recent study by Dr. Murinson. The study found that of 117 U.S. and Canadian medical schools, only four U.S. schools offer a required course on pain (Mezei & Murinson, 2011).

Dr. Murinson herself has developed a 4-day program for Johns Hopkins Medical School and reported the results of the program in a recent article in the Academy’s journal, Pain Medicine, titled “A New Program in Pain Medicine for Medical Students: Integrating Core Curriculum Knowledge with Emotional and Reflective Development” (Murinson et al., 2011). The aim of the study was to “design and deliver a new course in pain establishing foundation-level knowledge while comprehensively addressing the emotional development needs in this area.” The course was designed to address both the affective and cognitive dimensions of pain and incorporated sessions with pain specialists, pain medicine knowledge, and design-built elements to strengthen emotional skills. This report finds that a first-year medical school pain course, integrating cognitive and affective dimensions, is associated with attainment of foundation knowledge, robust engagement in tasks addressing emotional development, and high levels of learner satisfaction.

It is hoped that with continued efforts, the medical school committee will encourage AAPM members to submit their field-tested educational resources to Association of American Medical Colleges (AAMC) MedPortal, a peer-reviewed educational resource repository.

Although there are many challenges ahead, the Medical School Committee is actively seeking to collaborate with other pain organizations to develop new approaches to working with medical school administrators, ones which would enable the tailoring of curriculum to meet the needs of a particular institution.

Much has been accomplished in a short span. It was just 2 years ago when Dr. Murinson was part of a National Health Institute workshop on pain that identified the need for local pain champions for medical school education and launched a new course for AAPM’s medical school education committee. “We need administrators of medical schools to be receptive and supportive not only to the notion of a pain curriculum, but the career path for someone who undertakes that effort—we need more pain champions,” Dr. Murinson concludes.

References

“We need administrators of medical schools to be receptive and supportive not only to the notion of a pain curriculum, but the career path for someone who undertakes that effort—we need more pain champions,” Dr. Murinson concludes.
Recently, based on a critical reanalysis of the anatomy of the neuroforamen, an alternative approach utilizing the “Kambin Triangle” has been advised as a potentially safer alternative to the classic “Safe Triangle” method.

The Kambin Triangle (Alleyne, Cawley, Shengelaia, & Barrow, 1998) overlies the dorsolateral neuroforaminal disc space. The hypotenuse is the existing nerve caudad to the vertebral body and its height is the traversing nerve root. To reach the Kambin Triangle, fluoroscopy is oriented in the oblique plane to align the Superior Articular Process (SAP) to the center of the intervertebral disc. The needle is then advanced in a lateral, inferior direction to the SAP. When the needle contacts the SAP, the direction of the needle is changed to the lateral aspect of this bony landmark. Needle advancement and final placement is confirmed with lateral view and contrast imaging. While this technique has been offered as an alternative to the traditional Safe Triangle approach based on a theoretically superior anatomical argument, this technique has not been critically evaluated and verified by other authors in a formal evidence-based fashion.

With regard to the optimal spinal level of treatment with steroids, little evidence is available to guide the clinician. A traditional concept suggests that transforaminal treatment at the level of the irritated exiting nerve root should be employed (Lew, Coelho, & Chou, 2004). For example, this approach would apply medication at the L5 neuroforamen treating an L5 radiculitis caused by impingement of the traversing L5 nerve by an L4/5 displaced disc (Lew et al.). A recent study challenged this traditional view by comparing results of transforaminal application of medication at the level of the disc herniation (preganglionic) verses medication administration at the level of the affected exiting nerve root (ganglionic) (Lee et al., 2006). The findings of that study suggest, in a very preliminary fashion, that treatment at the preganglionic level is more efficacious than the ganglionic level. In other words, if there is a disc herniation at L4/5 impinging the transitioning L5 nerve, it is best to treat at the L4 foramen (or at the displaced disc level). Similarly, Park, Lee, and Park (2011) demonstrated the preganglionic application of steroids via the retrodiscal and the classic approach in the neuroforamen resulted in similar results, suggesting that via any technique preganglionic application of steroids is efficacious.

While interlaminar epidural steroid injections have been suggested to be less beneficial when compared to classic transforaminal approaches with regard to efficacy, a recent novel parasagittal interlaminar technique has recently been proposed by Candido, Raghavendra, Chinthagada, Badiee, and Trepashko (2008). In this preliminary feasibility study, it was demonstrated that the parasagittal approach resulted in dye spread in lateral/foraminal epidural space, suggesting that this approach could be highly effective in the application of steroid to the disc/nerve root interface in lateral recess of the spinal canal (Candido et al.).

In conclusion, while it is well established that cervical foraminal epidural injections carry risk of intrarterial injection with devastating results, it is less well known that lumbar transforaminal
injections also carry risk, albeit to a significantly lesser degree than in the cervical spine. It has been suggested that the previously described “safe” approaches to transforaminal injections may need to be revaluated. Further, the exact site and level of the foraminal treatment resulting in the best outcome in the treatment of radiculitis also remains to be determined, although treatment at the preganglionic level appears to be more efficacious than the ganglionic alternative. Further randomized controlled trials will be needed to answer these lingering questions about this extensively utilized interventional technique.

References
IN MY OPINION

Balancing Continuing Medical Education and Conflicts of Interest in Pain Medicine: An Ethical Imperative

Michael E. Schatman, PhD CPE, Ethics Section Co-Editor of the Pain Medicine journal
Foundation for Ethics in Pain Care, Bellevue, WA

Editor’s Note: The following article is an opinion expressed by the Ethics Section Co-Editor of the Pain Medicine journal. It is not necessarily the opinion or position of the American Academy of Pain Medicine.

Recently, issues of conflict of interest in medical education have become more apparent, gaining considerable attention in the media as well as in scholarly journals. Perhaps in no area of medicine have these issues caused greater controversy than in the field of pain medicine.

This brief article will highlight some of the emerging ethical conflicts associated with conflicts of interest in pain medicine and will hopefully allow readers to recognize the magnitude of the problem and its potential impact on the care that we provide to our patients. Additionally, although this analysis will not necessarily result in a “fix” of the situation, it offers some potential measures that will ideally reduce the impact of the problem.

Conflict of interest has been defined as entering “into arrangements that reasonably tempt one to put aside one’s primary obligations in favor of secondary interests, such as financial self-interest” (Brody, 2010, p. 354). Although few would suggest that it is realistic to expect pain practitioners to subordinate all of our own interests to those of our patients and the field of pain medicine as a whole, both blatant and more subtle examples of profiteering at the expense of patients and our field of practice seem to be becoming progressively more evident, thereby adversely affecting patients suffering from pain as well as our reputations as ethical professionals. These violations have resulted in negative representations not only of industry and individual pain care practitioners but also of professional pain organizations as well.

In an ongoing special series in Pain Medicine, a number of the authors (Kulich & Loeser, 2011; Lebovits, 2012; Perret & Rosen, 2011; Schatman, 2011; Schofferman, 2011; Taylor, 2011) have addressed problems with conflicts of interest in pain medicine and their impact on the manner in which pain treatment is provided, and, ultimately, on potential clinical outcomes. As this series has highlighted ethical issues in our field broadly, these articles have elucidated the roles of numerous stakeholders in the current conflict of interest quagmire, noting that although industry may be the “ringleader” in promoting the provision of questionable educational offerings to students and physicians, practitioners and pain societies have also been complicit. This suggestion of the need to share responsibility for conflicts of interest in pain medicine is consistent with the recent Senate inquiry conducted by Senators Baucus and Grassley in which they opened an investigation into the financial ties between the pharmaceutical industry, pain care providers, pain patient advocacy groups, and professional pain societies (Meier, 2012).

Few would argue that continuing medical education (CME) for all physicians who treat pain (which many believe includes all physicians) is not imperative; our field of endeavor is certainly not a static one, and a moral obligation exists for us to remain current in our practices (Macpherson, 2009). Additionally, it is widely accepted that provision of CME is expensive (Parmley, 2001). Much of the formal pain CME in the United States is provided to primary care physicians and mid-level providers rather than to pain specialists because the vast majority of pain in this country is treated in primary care (Garber & Sox, 2004). Given the lower net incomes of primary care providers (Vaughan, DeVrieze, Reed, & Schulman, 2009) along with time constraints, CME needs to be provided in a cost-effective manner for them. If this is not done, we run the risk of excluding primary care providers from pain CME and thereby putting millions of American pain sufferers at risk, particularly given that primary care physicians are the leading opioid prescribers in the United States (Volkow, McLellan, Cotto, Karanthom, & Weiss, 2009). Still, someone needs to pay for pain CME because the costs of providing high-quality pain education cannot be ignored.

Industry, of course, becomes the obvious choice; they possess the financial resources to do so. Of course, industry cannot be expected to do so purely out of the goodness of their hearts, as they are for-profit entities by definition. However, the question of how one ensures that industry-sponsored pain CME is unbiased and accurate arises.

To be eligible for CME credit, medical education content is required by the Accreditation Council for Continuing Medical Education (ACCME; 2012) to be reviewed to ensure accuracy and a lack of bias. Theoretically, such a requirement precludes undue influence by industry on presented content. In fact, however, this is not necessarily the case. Two strategies for circumventing ACCME CME requirements are common. First, most pain conferences include non-CME “educational” events, frequently accompanied by meals that are provided to attendees. As CME units are not typically sought by
industry sponsors, the content of these presentations can be biased and inaccurate without substantial challenge. In some instances, the bias may be subtle. However, other non-CME meal-accompanied presentations are essentially nothing more than “infomercials” for the product being marketed by the sponsoring industry. Frequently, off-label use of products that have no evidence basis whatsoever for such use (as well as presenting serious risks to patients) is encouraged by presenters. Although the organization running the conference may be aware of the bias in these non-CME presentations, the sponsoring industry pays the conference organization handsomely for the privilege of providing “educational” meals to attendees. Conference organizers may argue that these non-CME presentations offset the costs of running their conferences. However, is there not an ethical violation associated with presenting potentially naïve attendees with information that may be biased, thereby ultimately putting patient well-being at risk? The solution to this dilemma is a relatively simple one: Industry presentations need to undergo the same scrutiny for accuracy and lack of bias? The solution to this dilemma is a relatively simple one: Industry should be permitted to offer non-CME events, although such presentations need to undergo the same scrutiny for accuracy and lack of bias as do those presentations that qualify for CME credit. Of course, if this were done, the non-CME events would likely become CME-eligible, thereby offering an additional incentive for conference attendees to actually attend them.

The second way in which ACCME regulations are potentially circumvented and accordingly result in a conflict of interest is more subtle and insidious. Pain societies require industry funding in order to survive, and different societies rely upon industry funding to varying extents. Although proving that sponsoring industries play any role in determining which proposals are accepted for presentation is likely impossible (without the complicity of a whistle-blower who holds a high-level position with a pain society), accusations have been made regarding this alleged practice. Impropriety within pain societies need not actually exist; the mere appearance of impropriety is sufficient to cast a shroud of incredibility on a professional organization. To deal with this dilemma, one pain society’s (the American Pain Society) Ethics Committee has presented its Board of Directors with a policy requiring divestiture of board members from industry in order to help avoid such potential conflicts of interest. It is hoped this will become a practice among all pain societies.

A third problem associated with potential conflicts of interest in pain education relates to professional journals accepting research papers that are written by members of industry (with these industries frequently advertising in the very journals in which their papers are published). Again, even if the research is methodologically sound and appears to make a potential contribution to the field, the appearance of impropriety can delegitimize the piece of research and the credibility of the involved journal as “professional.” One cannot lose sight of the fact that industry has a considerable stake in publishing their research in peer-reviewed journals. Given the history of fines and other penalties for illegal and unethical behavior, the possibility that data will be falsified cannot be ignored. Accordingly, pain journals should perhaps consider banning the publication of research conducted by industry in order to minimize the potential for bias.

In summary, the relationships between industry, pain professionals, professional societies, and scholarly journals in pain medicine are extremely complex and fraught with opportunities for conflicts of interest. Our field of endeavor is a crucial one in which practice based on inaccurate education can not only cause perpetuation of suffering, but can also actually be deadly. To take industry out of the pain education equation is not necessarily realistic, and, accordingly, an approach of rapprochement should be considered. However, change is drastically needed. The recommendations that I have made will not be particularly popular among industry, certain practitioners, pain societies, and journal editors. Yet, without some fairly substantial changes to the character of these relationships, we will continue to potentially perpetrate a disservice to our patients, as well as to the field of pain medicine as a whole.

References
the AMERICAN ACADEMY of PAIN MEDICINE

PLAN NOW TO ATTEND
AAPM’S 29TH ANNUAL MEETING

The premier meeting for physicians and their treatment teams in the field of pain medicine

FORT LAUDERDALE
GREATER FORT LAUDERDALE/BROWARD COUNTY CONVENTION CENTER

REGISTRATION IS NOW LIVE!

APRIL 11–14, 2013

For more information, visit www.painmed.org, call 847.375.4731, or e-mail info@painmed.org.