



NERVECENTER

Events, people, and issues in academic neurology

 JUNE 2008

Contact *Annals of Neurology*, aon@ucsf.edu

NEUROIMAGING TURF BATTLES FLARE

The latest salvo in the ongoing turf battles surrounding neuroimaging – a Web message from the current president of the American Society for Neuroradiology (ASNR) delineating strategies to “protect neuroradiology’s turf” – has sent more than a few shock waves through the neurology community.

In his President’s Message for the November 2007 ASNR E-News, published on the ASNR home page, David M. Yousem suggested several “strategic maneuvers” to the members of his organization, including “keep nonradiologists out of our fellowship programs” and “voice your objections to equipment manufacturers that sell MR/CT equipment to nonradiologists who are engaging in self-referral.” He also urged neuroradiologists to be active on hospital credentialing and privileging committees to fight for making neuro-radiology certification or fellowship a prerequisite for interpreting neuroimaging studies.

Neurologists who specialize in neuroimaging were not surprised so much by the content of the message – those with their ears to the ground on these issues are well aware of the behind-the-scenes choreography – as by the audacity of the move.

“This isn’t any different than what we’ve seen before; it just was interesting to see it spelled out in such vivid detail and to have it in an official context,” said William Preston, a neurologist on the faculty of University of California-Irvine. “A lot of neurologists, and certainly people who were involved in neuroimaging, were shocked by the self-aggrandizing tone of the message and by the rather blatant power play that was evident in his words.”

Others echoed this sentiment. New York University neurolo-

gist Ruben Kuzniecky called the message “pretty shocking and unfortunate.” Larry Wechsler at University of Pittsburgh said: “This was a challenge to us and an indication that things were going to heat up again.”

Heat up they have. Wechsler, a vice president of the American Society of Neuroimaging (ASN), shared a copy of the ASN response to Yousem’s message (see sidebar), lambasting him for “inflammatory, self-serving and unprofessional statements” and for using “smoke screens of ‘self-referral’ and ‘high quality’ interpretation to mask their true goal of protecting their ‘turf’ (read ‘income’).”

Converging Trends

These latest flare-ups are symptoms of converging trends in neurology, radiology, and medicine in general. In the last decade, advances in neuroimaging tools and techniques have helped propel its use beyond neuroscience research and into clinical practice, where diagnostic scanning is rapidly integrating into neurologic decision-making and patient management in a number of conditions.

“It’s become a huge part of practicing neurology,” said Elaine Jones, a neurologist in private practice in Rhode Island. Lazslo Mechtler of the Dent Institute, a neuroimaging training center for neurologists, said neuroimaging is a “natural extension of what a neurologist should be doing: interpreting MRI in patients on which they have to make decisions for and for which they are medico-legally liable.”

Organ-specific imaging is a growing trend across medical practices, having been pioneered by cardiologists and now expanding not just to neurology but also to orthopedic surgery, gastroenterology, and other fields. This spells trouble for radiology.

AAN/PA Position Statement on Neuroimaging

The board of the American Academy of Neurology Professional Association (AAN/PA) approved a position statement on neuroimaging on March 28. It calls for neurologists “to play a leading role in the design, training and provision of neuroimaging to ensure that the greatest potential and most efficient and ethically sound uses for these tools are realized.”

The statement spells out several steps aimed at fostering education and quality standards, including expanding neuroimaging training standards as part of ACGME and ABPN accreditation, promoting the UCNS neuroimaging certification and accreditation program, improving quality and access to neuroimaging facility accreditation, and establishing neuroimaging practice standards.

The academy also used the statement to clarify its position on several access-to-care issues, including:

- Supporting the use of “innovative outpatient models of care incorporating neuroimaging”;
- Supporting public and private payer reimbursement to “appropriately trained” neurologists;
- Opposing payers’ prior-authorization programs without a “reasonable means” of being exempted upon proof of competency;
- Opposing “efforts to prevent neurologists from providing imaging services,” such as denying hospital scanning privileges, requiring multiple imaging modalities in office settings, and requiring “additional specialty physicians” to be present during imaging;
- Opposing further restrictions on self-referred imaging practices and equipment ownership beyond those of the federal Stark provisions.

To read the full statement: <http://aan.com/advocacy/issues/tools.99.pdf>



The radiology profession has been down this road before, with interventional procedures, and has seen that lucrative specialty largely slip from their grasp. Yousem alluded to this in his statement, noting that the reason the Society for NeuroInterventional Surgery is “in the pickle they are now” is because they allowed neurologists and neurosurgeons into their fellowship programs.

“Radiologists have seen their kingdom disintegrate,” said Charles Wilson, former chair of neurosurgery at UCSF. “They’re fighting a losing battle to try to slow down an unstoppable trend.”

The Case for Specialization

An oft-cited 2007 commentary by Stanford radiologist Scott Atlas, which made the case for subspecialization within radiology as the key to the profession’s survival, questioned whether general radiologists could “understand more about imaging studies of the brain than a neurologist or neurosurgeon who sees these patients and their imaging studies all day long.” Atlas went so far as to say: “To continue having non-subspecialty-trained radiologists interpreting sophisticated, complex imaging studies on patients with diseases that are virtually always cared for by subspecialist referring doctors is unacceptable patient care.”

The fact is that there simply are not enough neuroradiologists to serve the entire country. The result is that smaller hospitals and rural areas are often dependent on general radiologists who may be more familiar with skeletal X-rays than with the subtleties of MR interpretation, a problem that extends to larger hospitals during off-hours or weekends. In many communities, neurologists have stepped in to fill the gaps in qualified brain scan interpretation.

Take John Gambin for example, a private-practice neurologist in Eureka, Calif. His group purchased a CT scanner in 1976, when the technology was just emerging, because “we were in a small enough community that none of the hospitals or radiologists were willing to put themselves on the line and get a CT scanner,” he said. He and his partners enrolled in training programs, attended conferences, and received certification in neuroimaging from the American Society of Neuroimaging. Still, they have been challenged repeatedly over the years as radiology practices moved into the area and hospitals got their own scanners, and each new partner joining the Humboldt practice “had to work harder to get reading privileges,” Gambin said.

Getting into training programs is getting harder too, it seems. One of Gambin’s colleagues was even turned down for a week-long neuroradiology training program run by a major public university “when they realized he was a neurologist,” according to Gambin, who had himself attended the same training course years earlier. There are also anecdotal reports of neurology residents being shunned by radiology-run interventional fellowships, a trend that is likely to grow if Yousem’s proclamations become manifest.

In the bigger picture, the practice of medicine itself is changing, with ever more oversight by insurers and government payers. Medicare reimbursement is a favorite target for federal budget-cutters, and the growth in imaging costs – driven by greater utilization across many specialties – is seen as ripe for trimming. The trickle-down effect of federal healthcare funding cuts has pushed many states to legislate their own cost-cutting initiatives, which sometimes leave nonradiologists out of the imaging loop.

There is also a great deal of talk – if considerably less action – about moving away from a departmental “silo” structure to a service-line-oriented model, which would team up neurology with neurosurgery and neuroradiology. The Cleveland Clinic has gone this route, and its service is run by a neuroradiologist.

Jumping Hurdles

These trends are dramatically changing the landscape of neuroimaging practice, and the future is likely to look a lot different than the present. Right now though, the landscape is not too friendly – some would say downright hostile – to neurologists who want to pursue neuroimaging as a career focus or to just be able to perform and interpret scans within the context of their current clinical practice. First, they must clear a series of hurdles.

Specialty certification is the first, and the key – though not a guarantee – to having any chance of clearing the other hurdles to come. Neuroradiology training programs or fellowships are generally not open-armed to nonradiologists unless they complete a radiology residency. A combined ACGME-accredited training program jointly run by radiology and neurology was created in early 90’s to provide venues for nonradiologists to train in neuroimaging – NYU had such a program for several years, for example – but such programs are in peril if the Yousem dictum takes hold.

“Radiology has in fact shut down all the combined programs,” said Kuzniecky.

The Dent Institute in Buffalo was among the first to establish a year-long neuroimaging fellowship primarily for neurologists, now replicated at a half-dozen other medical centers in the U.S. ASN has long provided certification in neuroimaging; last year, accreditation was taken over by the United Council of Neurologic Specialties (UCNS), an umbrella group of neurology professional associations. About 45 people took the first UCNS board exam in March, and about half passed, according to Mechtler, who helped write the exam.

The hope is that UCNS certification in neuroimaging will enable neurologists to clear the next hurdles of institutional and private-payer credentialing. At the institutional level, radiologists often hold sway on credentialing committees, and as Yousem’s statement makes clear, they are on these committees for a reason: to keep imaging privileges within the purview of radiology. As a lucrative service line for hospitals, when radiology talks, hospital administrators listen – a version of the “golden rule” that goes: he who owns the gold makes the rules, as Preston pointed out. “Imaging facilities are owned by radiologists and they control who reads,” he said.

Specialty certification in neuroimaging should also help neurologists win battles at the level of insurance payers. “There are efforts at the insurer level to limit interpretation of imaging to radiologists,” said Wechsler. “But as long as there is some legitimate process in place that credentials neurologists, then I think it’s very difficult for an insurer to say ‘We’re not going to let [neurologists] interpret imaging studies.’ That’s where the UCNS examination is going to be very helpful.”

Still, those battles will likely be fought insurer by insurer, as each follows their own set of policies that differ from region to region. In New York, for example, CareCore National, a for-profit company, controls imaging facilities and providers. Kuzniecky, who

ASNR President Dave Yousem's Message: Training, Quality, Innovation, Activism Protect Neuroradiology's Turf

As I stated in my previous E-News column, the issue that neuroradiologists most view as a threat, as voted by attendees of the Eastern Neuroradiological Society annual meeting in Stowe, Vermont this summer, is loss of turf. Rather than go through the genesis of how our subspecialty has been threatened by nonradiologists with less training, I would like to try to suggest some important strategic maneuvers that I believe will prevent further erosion of the high quality of neuroradiology that is performed by appropriately trained neuroradiologists. Some of these suggestions may not be palatable to all radiologists but I feel they will serve our specialty well:

1. Neuroradiology should be performed by fellowship-trained neuroradiologists. I agree with Scott Atlas' opinion statement in the recent Journal of the ACR that subspecialty clinicians are more likely to complain about quality of interpretations and use that as a justification for reading cases on their own if general radiologists who are not subspecialty trained read neuroradiology studies. There was a time when two-year fellowships in neuroradiology abound. How can one expect to defend turf if practitioners with three to four months of neurorads are trying to "talk the talk" with neurologists and neurosurgeons who have been seeing cases for years? Even if this means using subspecialty teleradiology services, we should insist that subspecialty certified neuroradiologists read neuroimaging studies.
2. Join your hospital's credentialing and privileging committees. Yes, it can be boring, but a radiologist needs to be at the committee defending quality image interpretation and insisting on adequate training for anyone interpreting (neuro)imaging studies. Make fellowship training or subspecialty certification -- or at the very least ABR radiology certification -- required to interpret such studies. Live by the notion that you demand the highest quality care.
3. Do the same for outpatient services credentialing and certification by managed care organizations. Sit on those committees and demand that quality care requires individuals with expertise at the level of fellowship training.
4. Voice your objections to equipment manufacturers that sell MR/CT equipment to nonradiologists who are engaging in self-referral. They may still make those sales over your objections, but they should know where you stand on the issue. All things being equal at bid time, their decision may be a point to remember when you have to decide from which vendor to purchase.
5. Have a quality assurance program second to none. Make sure you can prove by your operations that you stand by outstanding quality. Monitor your work and do not be afraid to counsel any team member who does not meet your high standard.
6. Keep nonradiologists out of our fellowship programs. Yes, there are more positions than candidates, but adding neurologists and neurosurgeons to the diagnostic ranks does not help our subspecialty and is the reason why the SNIS (formerly ASITN) is in the pickle they are in now. Offer positions to foreign trainees or hire physician assistants, but training neurologists in our fellowship programs seems counterproductive.
7. Support neuroradiology research. We maintain our clout by being in the forefront of the field. Contribute to the NER Foundation and support research at the academic institutions in any way you can. When we drive the innovations, we can better influence the future of our specialty.
8. Stay connected and active in the ASNR. We represent you. A body of 3,500 members that best represents your interests is an important network to have behind you. Keep your membership active and be vocal with me, the Executive Committee, and other leaders of this organization.

Carl Ellenberger, neurologist, neuroimager and ASN member authored the following response

In a recent ASNR President's Message, president Dr. Dave Yousem asserts: "the issue that neuroradiologists most view as a threat...is loss of turf." He urges his neuro-radiologic colleagues to eliminate this threat, presumably by drawing upon the \$958,291 raised from 2,452 contributors to RADPAC in 2007 to support "strategic maneuvers."

1. There is no place in reasonable civilized discourse for inflammatory, self-serving, and unprofessional statements such as those of Dr. Yousem. The mission of all medical specialties is to help patients, not to succeed in business. No leader in Neurology would consider withholding training from neuroradiology fellows interested in learning neurology. We do not believe that knowledge, or collegiality, stops at artificially erected specialty borders.
2. Dr. Yousem may believe he is advocating quality control but some of his colleagues have used the smoke screens of "self-referral" and "high quality" interpretation to mask their true goal of protecting their "turf" (read "income").
3. We have no reason to believe that the level of intelligence in any specialty is higher than in any other. A neurologist, cardiologist, neurosurgeon, or orthopedist with appropriate training can be capable of interpreting images in his or her respective discipline. The ability to perform procedures or interpret tests depends upon the training and the experience of the individual, not his or her specialty. The AMA House of Delegates has repeatedly affirmed this in principle and thousands of non-radiologist physicians have validated it in practice.
4. Because of a nationwide shortage of subspecialty neuroradiologists a substantial portion of the images of the brain and spine are interpreted by general radiologists who know far less about neuropathology, neuroanatomy, and clinical differential diagnosis than neurologists do. This reality lowers the quality of patient care.
5. "Self-referring" to ourselves EEG, EMG, and other income-generating procedures like MRI, allows neurologists to spend more time with our patients and enhances continuity of care. No credible evidence suggests that self-referral causes overutilization of neuroimaging studies referred and read by neurologists. All of these useful tests, interpreted in the context of our first-hand knowledge of each patient, could be prohibited by a widespread ban on self-referral. Similar considerations apply to other specialties.
6. Without the prospect of adequate clinical reimbursement, clinical neurology could decline and in some communities disappear altogether.
7. Without support and advocacy by our national organizations, like the AAN and ANA, we have no prospect of resisting \$1 million of "strategic maneuvers" by RADPAC.

References

- Yousem D. Training, Quality, Innovation, Activism Protect Neuroradiology's Turf; ASNR President's Message, ASNR E-News, November 2007
- Atlas SW. Embracing subspecialization: the key to the survival of radiology. J Am Coll Radiol 2007;4:752-753.

has done clinical and neuroimaging research for 20 years and has written textbooks in MR imaging, is barred from interpreting studies. "You need to approved by CareCore, which has no legal or gov-

ernment authority, and the only way to be approved is to be a radiologist," he said. "There is no way around it for people who are not radiologists."



Patchwork of Regulations

The New York rule is just one in a patchwork morass of local and state rules and customs that constitute yet another hurdle to neuroimaging practice. Several states are currently considering legislation that would in one way or another limit imaging practice by nonradiologists.

"The same tone that is seen in the ASNR President's Message is at work not so subliminally in state legislatures," said Preston, who worked to stave off legislation in California several years ago that would have restricted ownership and leasing of imaging equipment to radiologists alone. In Arizona right now, a similar bill has been passed by the state Senate and is nearing a vote in the House. "There are several other bills like this in other states that the local and state radiological societies are trying to promote," Wechsler said.

Radiology has long been represented by a powerful political action committee, RadPAC that funnels about a \$1 million annually into legislative lobbying and political contributions. Neurology has not had its own PAC, but last year, the AAN Professional Association established BrainPAC. A neophyte in PAC worlds, the group's funding stands at around \$100,000, according to Rod Larsen, deputy executive director of AAN.

"We're a small-time player," said Preston. "There are myriad public advocacy issues that BrainPAC is dealing with, including increasing research support for neurological diseases and improving care for returning servicemen and women who are brain-injured. Neuroimaging at this point is not even registering on the radar screen of issues that will be advocated for with PAC money."

Changing Priorities

Preston and others lament that neuroimaging hasn't received more attention from neurology at the national level – "it just hasn't been a high priority," he said.

Mechtler agreed: "The general neurology community has not embraced neuroimaging as they should have years ago. To allow neuroimaging into the field of radiology and not embrace it in our own field was one of the gravest mistakes that neurologists have made over the last 20 years."

He's beginning to see a change, noting that more than 250 people crowded into his neuroimaging of the spine course held at the AAN meeting in April, and that more neurology journals are

Neuroradiology's Media Campaign

A full-page newspaper ad dominated by a huge brain image appeared in the April 30 issue of The Burlington [VT] Free Press, with the headline, "Your radiologist, more than 13 years in the making."

Surrounding the brain were phrases describing the various chunks of training a radiologist undergoes, such as "4 years in medical school," etc. The most prominent of these, positioned at the top of the brain, read: "1-2 years of advanced sub-specialized training (fellowship)." The ad's take-away message: "Radiologists are the only physicians specially trained in patient diagnosis and care through medical imaging." Readers are urged to visit myradiologist.com.

The ads and Web site are part of a multi-tiered, multi-audience promotional campaign called the "Face of Radiology." ACR launched it this year "to transform the current public misperception about our profession," according to a statement quoting ACR board chair Arl Van Moore, Jr.

A press release on the ACR Web site said the campaign will use "grassroots efforts, advertising, public relations, patient education materials, and social media to deliver and reinforce the message to patients that "your radiologist is the physician expert in diagnosis, patient care, and treatment through medical imaging." It is aimed not only at patients but payers, government officials and other healthcare providers. A video series is also being developed, and will be available to radiologists along with waiting room materials that include brochures and a television and DVD player on which to present the videos, according to a slide show that describes the campaign and is posted on the ACR Web site.

devoting articles or entire issues to neuroimaging. Preston is encouraged by the recent development and publication of a position statement on neuroimaging (see sidebar) by the AAN Professional Association, the advocacy organization formed last year.

In the final analysis, the controversial message from ASNR's president may be just what the doctor ordered to galvanize neurologists who don't want to see further erosion of imaging privileges or reimbursement. "You can argue that [the radiologists' protective maneuvers] aren't fair," said UCSF neurologist Wade Smith, "but I think the thing that neurologists have to wake up to is that we need to be at the table too. Radiologists have just been smarter than us on strategy, and we need to recognize what's happening and play fairly at that level."

And, Smith added, "Radiology needs to play fairly at the level of not restricting trade." **AN**

Brenda Patoine

LONG AGO in the Annals...

NONSENSORY NEGLECT

WATSON RT, MILLER BD, HELLMAN KM

JUNE 1978

ABSTRACT

Five monkeys trained to perform with the extremity contralateral to a stimulus had unilateral neglect induced by frontal and reticular formation lesions. Postoperatively the performance of the animals was abnormal only on ipsilateral stimulation, which suggests that the mechanism underlying neglect in these subjects is not deafferentation or sensory inattention but a defect of intention.