TEXAS NEUROLOGICAL SOCIETY SUMMER 2014

Broca's Area

The Voice of Texas Neurology

President's Message

Kimberly E. Monday, MD

TNS Members,

40th Anniversary Year is well underway. The TNS Winter Conference was a tremendous success, setting all time attendance records thanks to the impressive and relevant line-up organized by Aziz Shaibani, MD. I would also like to thank Dr. Mark Schwartz, our past president, for his dedication to TNS and tremendous leadership.

Fortunately for most of us, Medicare recently announced the new ICD-10 start date has been pushed back to October 15, 2015. For those of you who have not been following this issue, ICD-10 and ICD-11 are substantially different from ICD-9. It will be important to allow sufficient time for your staff to become fluent with the new terminology before October 2015 so your claims are not delayed or rejected.

While TNS will continue to prioritize educational programs, many of our members are struggling to survive clinical practice. As such, I will devote a good amount of my effort this year addressing the issues that threaten neurology practice and the care of neurology patients. Changes in health care reimbursement, PQRS requirements, Meaningful Use I and II rules, sequestration reductions, and the SGR dance have forced many Texas neurologists to limit or cease care for the most vulnerable adult population, the Medicare Patient.

In my own practice, I graduated to the designation of Meaningful Use II which now requires me to report nine 'quality' measure for Medicare patients rather than three. Throughout January, I struggled to understand how the time required for this new documentation was possibly compensated by Meaningful Use and PQRS Incentive payments. I was spending an extra 15 minutes per patient, could not change the level of charge as pre and post care issues are covered in the RVU. I found the calculation parameters used by Medicare to determine costs associated for PQRS reporting. For giggles I encourage your review at http://tinyurl.com/Calculation-Parameters. Using this Medicare Math, each parameter is estimated to cost on average 12 dollars per patient, a number determined by using labor data for IT and front desk personnel. There is no calculation for the physician time to choose parameters or more importantly discuss the additional clinical issues surrounding the measures. Using the 50 percent reporting requirement on the nine measures this would calculate to 259K annually. I don't remember my incentive check balancing this mandate.

Kristi Barrier, our medical economic advisor, will be providing practice updates to physicians and office managers to help you with socioeconomic issues. In addition, Greg Herzog, our TNS lobbyist, is busy with scope of practice issues; for example, the Texas Dental Board recently decided to move forward with expanding their dentists' scope of practice to include sleep medicine. We will keep you updated on our efforts to challenge this shift.

Politically, this is the time of the legislative cycle to support friendly candidates. If you have no interest in researching candidates yourself, TexPac vets candidates for their commitment to physicians and their website is www.texpac.org. If you are interested in supporting specific candidates or hosting a fundraiser please use the expertise of Greg Herzog who can answer your questions on a candidate's history and position regarding the practice of neurology. He can be reached at greg@capelolaw.com.

Health and Human Services reported on May 1st that 733,000 Texans have purchased insurance through the exchange. TMA is working overtime to stay ahead of the multitude of issues. Follow their alerts, updated answers to FAQs, and recommendations at www.texmed.org.

I look forward to seeing everyone in July at the Summer Conference—July 18-19 at La Cantera Hill Country Hotel in San Antonio, Texas.

See you in July

Mark Your Calendar

2014 SUMMER CONFERENCE

July 18-19, 2014

La Cantera
Hill Country Hotel
San Antonio, Texas

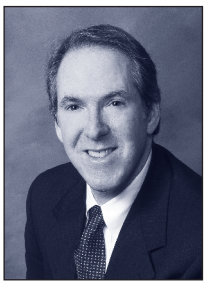
(more details see page 7)

After the conference...

Getting More out of your Practice—Practice Managment for Neurologists

July 19
1:00 - 3:00 pm

Registration open at
www.texasneurologist.org



Editor's Notes

Randolph W. Evans, MD

This issue

I thank our officers and other contributors for their excellent submissions to this issue. As TNS celebrates its 40th birthday, past president, Susan Blue, provides a history of TNS and past president and founding Broca's Area editor, Tom Hutton, provides a history of this publication.

We look forward to seeing you at the TNS Annual Summer Conference in San Antonio, July 18-19. Waleed El-Feky, program chair; Bob Fayle, education committee chair; and the education committee have planned an excellent program. Be sure to make your La Cantera Hill Country hotel reservation and register in time for the early bird discount.

Are neurologist's more likely to be left-handed than the general population?

Background: As a left-hander, Stan Appel has anecdotally observed that neurologists are more likely to be left-handed than the general population and suggested to me that we do a survey of members. In the general population, about 12 percent of men and 10 percent of women are left-handed (Papadatou-Pastou, M; Martin, M; Munafò, MR; Jones, GV. Sex differences in left-handedness: a meta-analysis of 144 studies". Psychological Bulletin. 2008;134: 677–99) and up to 30 percent are mixed-handed (which includes the rare ambidextrous or equally good with either hand) where there is a change of hand preference between tasks

Methods: I performed a pilot survey using a convenience sample of those of you present on 3/1/14 for an afternoon lecture. I thank those of you who participated and Kim Monday and Ky who assisted with counting hands responding to each question (no tech, no budget, but quick). I asked the questions of women and then men. The results may in error because nobody responded for the mixed-handedness question. We also need to account for error in hand counting.

Results: Females: 15/84 left-handed or 18 percent. Males: 14/91 left-handed or 15 percent

Conclusion: This pilot study supports Dr. Appel's observation that neurologists are more likely to be left-handed than the general population.

The only other physician survey of handedness I can locate with a pubmed and google search is one in the UK which found a similar rate of left-handedness among medical students and doctors similar to the general population (McManus IC, Jonvik H. Right and left-handedness and medical specialty choice in a large prospective study of medical students and doctors. Available at http://www.ucl.ac.uk/medical-education/publications/unpublishedmanuscripts/Handedness_and_Medical_Specialities/Handedness_and_Medical_Specialities/HandednessAndMedicalSpecialityChoice.pdf).

By comparison with another occupational group, in a survey of 3647 professional basketball players who played during the period between 1946 and 2009, only 5.1 percent were left-handed (Lawler TP, Lawler FH. Left-handedness in professional basketball: prevalence, performance, and survival. Percept Mot Skills. 2011;113:815-24). Left- handers had better performance averages and significantly longer careers than right- handed players.

Neurologists and medical malpractice claims

Texas Medical Liability Trust (The Reporter, Volume 1, 2014) published the specialty group statistics for claims from 1/1/03 to 12/31/12 submitted by 24 member companies of the Physician Insurers Association of America which is a trade association of liability insurance companies including TMLT that insure more than 60 percent of private practicing physicians in the United States.

For neurologists, there were 1626 closed claims, 386 paid claims, 23.74 percent paid to closed claims, indemnity paid of $160, 898,197, and an average indemnity of $416, 835. The average indemnity paid was second highest only to neurosurgeons which was $439,146 with Ob/Gyn third at $$415,837.

The most prevalent medical misadventures and associated patient conditions:

1. Errors in diagnosis
   -headache
   -occlusion and stenosis of cerebral arteries
   -convulsions

2. No medical misadventure (there is no allegation of inappropriate medical conduct but the claim has legal merit because of associated issues such as problems with the medical records, consent issues, communication between physicians, vicarious liability, product liability, etc)
   -back disorders including lumbago and sciatica
   -headache
   -cerebrovascular accident

3. Improper performance
   -back disorders including lumbago and sciatica
   -displacement of intervertebral disc
   -headache

Let's review one TMLT closed case (The Reporter, Neurology, 2013).

Case presentation

"A 35-year-old woman delivered her third child and was discharged from the hospital two days later. Her pregnancy had been complicated by preeclampsia and gestational diabetes. On January 29 — six days postpartum — she came to the emergency department (ED) with a severe headache in her occipital and frontal regions and pain in the back of her neck. The patient had taken ibuprofen, acetaminophen, and butalbital/acetaminophen without any relief.

The patient reported the head and neck pain as 10/10. Her blood pressure was also elevated. Her ob-gyn suspected a muscle spasm headache. However, due to the persistence of symptoms, the ob-gyn admitted the patient for treatment of her symptoms and for lab tests for preeclampsia.

During her hospital stay, the patient was treated with carisoprodol and hydrocodone for her headache. She reported an improvement

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to 5/10 in intensity. The patient also reported that the pain in her neck was still present and had not improved.

At the request of her husband, a neurologist saw the patient on January 31. The neurologist noted that the neck pain and headache were most likely musculoskeletal origin. He agreed with continuing methocarbamol, butalbital/acetaminophen, and hydrocodone as needed for pain, the use of a heating pad, and gentle, passive neck exercises. He advised that patient that he would consider doing x-rays of her cervical spine if the headache persisted. She was discharged.

Three days after discharge, she collapsed at home. On arrival in the ED, she was dysarthric with a possible right sided droop. That night, she developed a right sided hemiplegia. She was found to have an acute left middle cerebral artery stroke with complete occlusion of the left internal carotid artery and dissection of the left internal carotid artery.

Following her hospital stay and therapy, she still had right sided weakness, memory, and cognition difficulties.

The ob/gyn and neurologist were sued with the following allegations against the neurologist: failure to properly diagnose and treat dissection of the carotid artery, failure to order anticoagulation therapy, and failure to properly and timely diagnose and treat pregnancy-induced hypertension and severe preeclampsia.

The case was settled on behalf of the neurologist and ob-gyn."

This is one of the closed cases exemplifying the number one reason for medical liability payments, diagnostic errors with headaches and occlusion and stenosis of cerebral arteries, the most common causes in closed cases and in this case.

So what are the causes of post-partum headaches? In a prospective cohort study of 985 woman delivering over a three month period in a single tertiary care institution in Toronto, 39 percent reported headaches or neck/shoulder pain within one week of delivery with a median time to onset of two days and a duration of four hours (Goldszmidt E, Kern R, Chaput A, Macarthur A. The incidence and etiology of postpartum headaches: a prospective cohort study. Can J Anaesth 2005; 52:971). Primary headaches accounted for more than 75 percent (most commonly tension type and migrainous) and postdural puncture headaches accounted for 4.7 percent. Only 4 percent of the headaches were incapacitating. Significant risk factors for development of postpartum headaches were a previous headache history, multiparity, and increasing age. Postpartum fatigue, sleep deprivation, stress, fluid shifts, weight changes, and estrogen withdrawal were suspected triggers for primary headaches. So most post-partum headaches are mild to moderate and not life-threatening.

Is there a patient population with severe persistent headaches similar to the case presentation? A retrospective study evaluated 95 women who were hospitalized at University Hospital, Cincinnati with severe unrelenting headache present for more than 24 hours from the time of delivery and within 42 days after delivery (Stella CL, Jodicke CD, How HY, et al. Postpartum headache: is your work-up complete? Am J Obstet Gynecol 2007; 196:318.e1). The mean onset of headache was 3.4 days (range, 2-32 days) after delivery. The causes and frequencies were the following: tension-type, 39 percent; preeclampsia/eclampsia, 24 percent; postdural puncture, 16 percent; migraine, 11 percent; pituitary hemorrhage/mass, three percent; cerebral venous sinus thrombosis, three percent; and other, four percent.

Cervical artery dissection is rare postpartum. In a consecutive series of 245 patients with cervicocephalic dissection, the six women with postpartum dissections (a total of eight, six vertebral and two internal carotid artery) were compared to 96 with nonpostpartum dissections younger than 50 years (Arnold M, Camus-Jacqmin M, Stapf C, Ducros A, et al. Postpartum cervicocephalic artery dissection. Stroke. 2008;39(8):2377). So in this series of dissection, postpartum dissection accounted for six percent of spontaneous dissections. Headache and/or neck pain was the initial symptom in all postpartum patients followed by ischemic events in three (TIAs in two, cerebral infarction in one). Postpartum patients more often had coexisting conditions such as reversible cerebral vasoconstriction syndrome (2/6 vs 2/96), reversible posterior leukoencephalopathy syndrome (2/6 vs 1/96), and SAH without signs of intracranial extension of dissection (2/6 vs 0/96).

The most frequent initial symptom of spontaneous cervical artery dissection is unilateral more often than bilateral head and/or neck pain reported in 60-90 percent of cases. Headache may be the only manifestation (Arnold M, Cumurciuc R, Stapf C, et al. Pain as the only symptom of cervical artery dissection. J Neurol Neurosurg Psychiatry. 2006;77(9):1021). The onset of headache is usually gradual but up to 20 percent can have a thunderclap onset. Vertebral artery dissections typically produce unilateral cervical and occipital pain while cervical internal carotid artery dissections may cause temporal and facial pain more often than facial pain (Mokri B. Headache in cervical artery dissections. Curr Pain Headache Rep. 2006;6:209). About 25 percent have a Horner syndrome due to distension of the sympathetic fibers of the external surface of the internal carotid artery.

The average annual incidence rate for spontaneous cervical carotid artery dissection is 1.72/100,000 and for vertebral artery dissections 0.97/100,000 (Lee VH, Brown RD Jr, Mandrekar JN, Mokri B. Incidence and outcome of cervical artery dissection: a population-based study. Neurology 2006; 67:1809). Spontaneous dissections account for about 20 percent of ischemic strokes in young adults.

Many experts recommend antiplatelet therapy with aspirin alone for cervical dissection presenting with pain without ischemic symptoms (Georgiadis D, Arnold M, von Buedingen HC, et al. Aspirin vs anticoagulation in carotid artery dissection: a study of 298 patients. Neurology 2009; 72 (21): 1810). There have been no completed randomized prospective trials comparing antiplatelet drugs to anticoagulants (Lyrer P, Engelter S. 2010. Antithrombotic drugs for carotid artery dissection. Cochrane Database Syst Rev:CD000255).

Successful Meaningful Use Attestation by EHR Vendor for Neurologists in Texas

According to data provided by CMS for April 1, 2011 through December 31, 2013, the following were the EHRs with the greatest number of neurologists' attestation for meaningful use:

Epic	69 neurologists
eClinical Works	56
Allscripts	36
GE Healthcare	29

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Information on successful attestation by vendor for other specialists is available on the Harris County Medical Society web site at: www.hcms.org/practice-resources/hit/ehr .

Neurologist Compensation

Medscape surveyed 24,075 physicians from December, 2013 to January, 2014 on compensation and their attitudes with neurologists accounting for two percent of respondents (http://www.medscape.com/features/slideshow/compensation/2014/public/overview). Neurologist's annual average compensation was $214,000 as compared to the highest compensated specialties (orthopedics, $413,000; cardiology, $351,000) and the lowest (family medicine, $176,000). On average, self-employed physicians made more than those employed. Only 39 percent of neurologists felt fairly compensated. 62 percent of neurologists reported spending more than 40 hours per week seeing patients. 56 percent of neurologists concurred that they would choose medicine again as a career, and 45 percent of neurologists would choose neurology again.

A Day in the Life

A recent web article, "How being a doctor became the most miserable profession," (Drake, D. The Daily Beast, 4/14/14), states, "Simply put, being a doctor has become a miserable and humiliating undertaking. Indeed, many doctors feel that America has declared war on physicians-and both physicians and patients are the loser." In this context, I considered events one day in the office.

Express Scripts Medicare
I have been following Mrs. Y since 1991 with relapsing remitting multiple sclerosis stable on Betaseron for 22 years. She just switched to a new Medicare pharmacy plan, Express Scripts Medicare, which sent me a letter advising me that, "There is no indication that the patient has tried Avonex or Rebif. The review uses plan rules based on FDA-approved prescribing and safety information, clinical guidelines, and uses that are considered reasonable, safe, and effective."

As she could not refill her Betaseron and was out for 10 days, she urgently came in for an office visit. I discussed the difference in interferons, discussed switching, and why this problem may have arisen (to save money for someone). She advised me that she had no side effects on Betaseron, was doing well, and wished to continue.

The Express Scripts letter advised me to call a certain number for an expedited appeal. With Ms. Y in the exam room, I called the number and was passed from one person to the other providing multiple times her name, date of birth, and case ID. Finally, I was told that this was a specialty drug provided by Accredo and was transferred to them. Same sequence, multiple people asking for same ID information passing me around. Finally, I was told that Express Scripts was responsible for the appeal, not Accredo and transferred to Express Scripts again.

Elapsed time on the phone: 35 minutes.

As it was now nearing one hour for the allotted 15" appointment, I told her that I couldn't keep the other patients waiting any longer and suggested that she call the same number and try the appeal on her own which was an option given in the letter. Two days later, she called back, asking for a prescription for Rebif.

MedSolutions
This 52 year old woman with NF 2 recently moved to Houston with last scans two years ago. I requested MRI scans of the brain and spine for follow-up surveillance. The brain was approved but MedSolutions ("Intelligent Cost Management") denied the spine and requested a peer to peer review. I called the number given, pressed the two extensions given, and waited 13 minutes and 20 seconds for someone to come on the line. After two additional minutes of providing the case number, dob, etc, I was transferred to a physician who promptly approved the scans. Elapsed uncompensated time 17:14 minutes. The physician reviewer, of course, was compensated.

I asked the screener whether this wait time was reasonable and he apologized. I asked him to report the long wait time to his management but he was not interested.

Is this approval time reasonable? Are your scans ever denied when you go through the peer to peer process (most scans are approved)? Should we be compensated for our time?

EHR
I have had the same EHR for the last three years, one of the most commonly used by neurologists. Version 10 was recently released (ICD 10 compatible with other new features) so my IT person advised me it was time for the simple upgrade onto my server (yes, I prefer having my own server).

The simple download was not simple and took him many hours due to glitches in their software. The EHR company did not advise me that the version came with numerous bugs. The most egregious on this day was substituting the name of the 9:30 patient for the name of the 9:00 am patient while I was trying to send her prescriptions and check her out. Mixing up patient identities is a huge bug! I got my IT person on the phone who got the EHR company's engineer on the phone. Apparently, they were aware of this bug and yet were still releasing v10. Just a huge HIPAA violation among all the other potential disasters with this bug.

The bug was quickly fixed. Other minor bugs are still being discovered, reported, and fixed. We're captives of software companies. Switching is no guarantee as there is no guarantee of competence or longevity of any of the 300 odd vendors. As ICD10 has been pushed back one year, I should have delayed upgrading and recalled that early adopters are beta testers.

FDA: Much Ado About Nothing?
On this not atypical day, I received the usual numerous phone calls, lab results, pre-certs, insurance company messages allegedly to improve my care of patients, etc. One recurring pharmacy fax which is particularly annoying is, "Our records indicate your patients received the following prescriptions: SUMATRIPTAN AND VENLAFAXINE HCL ER. Use of triptans and serotonin reuptake inhibitors may increase the risk for serotonin syndrome." You know the rest of the warning.

In our American Headache Society position paper (Evans RW, Tepper SJ, Shapiro RE, Sun-Edelstein C, Tietjen GE. The FDA alert on Serotonin Syndrome with Use of Triptans Combined with Selective Serotonin Reuptake Inhibitors or Selective Serotonin-Norepinephrine Reuptake Inhibitors: American Headache Society Position Paper. Headache 2010; 50:1089-1099), we concluded, "With only Class IV evidence available in the literature and available through the FDA registration of adverse events, inadequate data are available to determine the risk of serotonin

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syndrome with the addition of a triptan to SSRIs/SNRIs or with triptan monotherapy. The currently available evidence does not support limiting the use of triptans with SSRIs or SNRIs, or the use of triptan monotherapy, due to concerns for serotonin syndrome (Level U)."

Sclar and colleagues estimated that for 2007-2008, an estimated 5.2 million patients were prescribed a triptan, 68.6 million were prescribed an SSRI or SNRI, and 1.4 million were co-prescribed a triptan and SSRI or SNRI (Sclar DA, Robison LM, Castillo LV, et al. Concomitant use of triptan, and SSRI or SNRI after the US Food and Drug Administration alert on serotonin syndrome. Headache. 2012;52(2):198-203). So twenty five point one percent of those who were prescribed triptans simultaneously were prescribed an SSRI or SNRI. So where is the epidemic of serotonin syndrome? It is certainly not in the peer reviewed medical literature or anecdotally reported by colleagues. Neurologists have concluded that the FDA alert is not warranted (Tepper SJ. Serotonin syndrome: SSRIs, SNRIs, triptans, and current clinical practice. Headache. 2012;52(2):195-7).

What does amaze me is the FDA's enforcement against importation of medications from Canada (which I believe are as safe as obtained from U.S. pharmacies when care is taken to choose the source) and the paradoxical blanket endorsement of generics accounting for over 80 percent of prescriptions (you're familiar with the bioequivalence controversy as well) even when the safety is questionable with an unknown percentage of substandard drugs and counterfeits (Harris G. Medicines made in India set off safety worries. New York Times. February 14, 2014). The FDA does not have adequate staff to inspect plants in India which supply 40 percent of U.S. drugs (Edney A. FDA chief to focus on generics' safety on visit to India. Bloomberg News. February 6, 2014) and China will not provide visas for plant inspections.

So?

Each of you can provide your own "day in the life stories" from clinical practice and research. Many of our patients might not agree that our complaints about the deterioration of medicine have made our lives to some extent on some days "miserable and humiliating" and could care less. But they should. Pretty soon, there's no time or compensation to see patients or do research and physicians and patients are indeed losers. The legions of NPs and PAs can't substitute for what we do.

I'm not sure how to fight back. The numerous people I spoke to at Express Scripts were not interested or concerned that their expedited appeal number was not correct because they were not responsible. Imaging review companies like MedSolutions are very profitable by exploiting our uncompensated time. The EHR company has captive users. I suppose they're trying to get new customers but complaints won't go far at this point. The FDA is still convinced that there is merit to the alert (Fine A, Bastings E. Triptans and serotonin syndrome. Headache. 2012;52(7):1184-5) despite our point to point arguments to the contrary (Tepper SJ, Shapiro RE, Sun-Edelstein C, Evans RW, Tietjen GE. Triptans and serotonin syndrome-a response. Headache 2012; 52:1185-1188).

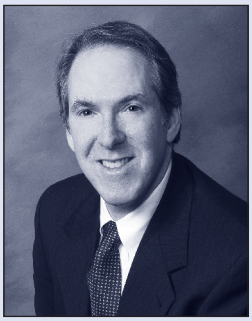
At the Winter Conference, Stuart B. Black, MD (left) introduced 2014 Lifetime Achievement Award recipient, Randolph W. Evans, MD (center). Stanley H. Appel, MD (right) was responsible for Evans choosing neurology as a specialty and was his residency department chairman.

Legislative Update

Greg Herzog, TNS Lobbyist

On the government affairs front, TNS leadership remains very concerned by the effort of the Texas Dental Board (TBD) to increase the scope of practice of dentists into the medical condition of Sleep Apnea. At the last meeting of the TDB it adopted rules that would allow dentists to order independently tests, diagnosis, and manage treatment for 'Snoring' and other conditions related to Sleep Apnea. The TNS Government Relations team, in conjunction with other concerned parties including TMA, actively worked to change these rules to accommodate our concerns. The Texas Medical Board, in a rare move, even issued a letter to the TDB explaining that these rules would involve the practice of medicine, not dentistry. These actions were subsequently ignored. Now that TDB has adopted these rules, TMA, TNS, and other affected parties are considering legal action to prevent this obvious increase of scope of practice by dentists.

The Texas Primary Election has come and gone and the field for the November General Election has been set. Several statewide positions including Lite Gov. and Attorney General will elect new individuals to these positions for the first time in nearly a decade. It is important that we individually engage our elected officials and participate in the political process at every opportunity. TNS has committed to greater legislative and government affairs involvement in Austin, in order to help our membership face the challenges that threaten our specialty. However, building individual relations with those who represent us personally is the challenge we each must accept to have lasting impact.



Congratulations!

With distinct pleasure, this year TNS presented its Lifetime Achievement Award to Randolph W. Evans, MD.

The TNS Lifetime Achievement Award is a peer-recognition award honoring members in the state for outstanding service to patients and the profession. There are many neurologists in the state of Texas who have played enormous roles in the development of the practice of Neurology. This award will continue throughout the years to honor those physicians who have had great vision and have worked selflessly to advance our specialty on behalf of our patients and our colleagues.

TNS is now accepting nominations for its 2015 Lifetime Achievement Award. Go to www.texasneurologist.org to submit your nomination.

Randolph W. Evans, MD

A native of Houston, Randolph W. Evans, MD received his B.A. from Rice University in 1974 and M.D. from Baylor College of Medicine in 1978. Dr. Evans completed his internship and residency in Neurology at Baylor College of Medicine in 1982 when he started private practice in Houston. He is board certified in Neurology and subspecialty certified in Headache Medicine and a fellow of the American Academy of Neurology, the American Headache Society, and the Texas Neurological Society. He is on the staff of Park Plaza Hospital, Houston Methodist Hospital, and St. Luke's Medical Center.

As a volunteer clinical faculty member at Baylor College of Medicine and the University of Texas Health Science Center at Houston, over 350 medical students and 120 family medicine residents have rotated with Dr. Evans for their required month of neurology. He has also given many headache lectures to residents and has given a monthly medical student lecture at UT since 1987. Dr. Evans has given numerous lectures on headache nationally and internationally and been a multiple time American Academy of Neurology course director and faculty.

Dr. Evans has a number of publications. Books include the following: senior editor of Prognosis of Neurological Disorders, 1st and 2nd editions and editor of Neurology and Trauma, 1st and 2nd editions; Iatrogenic Disorders; Diagnostic Testing in Neurology; Neurologic Treatment; the Saunders Manual of Neurologic Practice; Case Studies in Neurology ; Secondary Headache Disorders, 1st and 2nd editions; Neurology Case Studies; Common Neurologic Disorders; Migraine and other Primary Headaches; and the co-author of Handbook of Headache, 1st and 2nd editions. He has been the editor of the Texas Neurological Society Newsletter since 2008. Dr. Evans is an author of over 250 journal publications and 75 book chapters.

Most of Dr. Evans publications have been in the field of headache medicine which have covered most types of headache. He and colleagues have performed many surveys of neurologists on diverse topics including attitudes on postconcussion syndrome, migraine management, prevalence of migraine among neurologists, self-treatment and treatment of family members, bothersome patient behaviors, likeability of neurological disorders, functional headaches, migraine and the presidency, EHRs, and practice satisfaction and burnout. Surveys of injuries of Broadway and West End (London) performers have also been performed. Drs. Evans is the first author of the AAN assessment on prevention of post-lumbar puncture headaches and the AHS position paper on triptans and serotonin syndrome. He has been particularly thrilled to have co-authored research articles with his father and his daughter, Rochelle Evans Edwards, PhD.

Dr. Evans is on the editorial boards of many publications including Headache, Medlink Neurology, BMC Medicine, BMC Neurology, Headache Currents, Practical Neurology, Medscape Neurology and Neurosurgery, and consulting editor of Neurologic Clinics. Dr. Evans has been an ad hoc peer reviewer for numerous additional journals including Cephalalgia, BMJ, Lancet, Lancet Neurology, Neurology, and the New England Journal of Medicine and is a subject adviser for BMJ.

Media appearances include ABC-News, CNN-Headline News, Univision, CBS radio, The Learning Channel, BBC radio, the Houston Chronicle, the New York Times, the LA Times, Wall Street Journal, USA Today, todaynbc.com, foxnews.com, and msnbc.com. Dr. Evans has been listed in the publications "Best Doctors in America," "America's Top Doctors," "Guide to America's Top Physicians," "US News Top Doctors," "Texas Super Doctors," "Top Doctors in Houston," and "Doctors Choice Award."

Offices held include chairman of the Houston Maimonides Society (1993-1995), president of the Harris County Neurological Society which he founded (2002-2003), president of the Texas Neurological Society (2005-2006), and chief of neurology at Park Plaza Hospital. (1986-2008, 2014-). He has been on numerous hospital and society committees as well as an abstracts and grant reviewer.

Dr. Evans is grateful for the love, support, and guidance of his parents, the late Zena A. Evans and Richard I. Evans, PhD, Distinguished University Professor of Social Psychology and Behavioral Medicine Emeritus at the University of Houston. While Randy was a medical student, his father found a new fourth for their weekly game of doubles tennis, Stanley H. Appel, MD, the new chairman of neurology at Baylor, who was an excellent tennis player and also enticed him to go into neurology. Dr. Appel has been an outstanding mentor, role model, and friend for him and numerous residents. Space does not permit thanking individually all of the other terrific teachers and neurology friends who have been so amazing. Finally, Dr. Evans is also grateful for the love and support of his beautiful wife, Marilyn, and son Elliott, daughter-in-law, Emmie, daughter, Rochelle, son-in-law Corry, and son Jonathan.

Origins of Broca's Area

By Tom Hutton, MD, PhD, FAAN, Founding Editor

I thank our Editor of Broca's Area, Dr. Randy Evans for inviting me to write a retrospective on our society's publication for TNS' fortieth anniversary.

The Texas Neurological society made two decisions in 1992, both of which proved auspicious for the society's future. The first was to break away from the Texas Medical Association's yearly meeting and establish a separate winter meeting for TNS. The second decision was to improve communication in the society via a newsletter, a task that took on special importance lacking the previously enjoyed TMA coverage of our section on neurology. Broca's Area came into existence with the Winter, 1993 issue.

At the time both decisions felt risky and had literally received years of debate by the TNS executive board. Breaking away from the TMA meetings and its secure funding for our scientific program appeared chancy with no guarantee other sponsors would be identified. We also feared we would lose the ability to provide CME hours to our attendees. Both concerns in retrospect proved overwrought.

But to be sure, the TMA meetings conflicted with the American Academy of Neurology meetings and diminished the attendance at the TNS/TMA spring meetings. (At that time we were referred as the TMA Section on Neurology).

It was variously argued that if we were to split from the TMA spring meeting, one of two outcomes would come to pass: the TNS would either grow into a larger and improved society, or else it would dwindle into utter obscurity and cease to exist. We, as a society, ultimately took the plunge and broke away from the TMA yearly conference. With the current level of recognized success for the TNS, the decision in retrospect seems obvious, but such a favorable outcome was not as clear in 1992.

A 1992 survey of members showed overwhelming support for a newsletter. The study identified topics of interest among which were updates on Medicare, Medicaid, and private insurance remuneration issues, state and federal legislative and regulation updates, and medical-legal topics. These same areas during recent rapid change in medicine have continued to spark interest with our members who continue to hunger for good quality information.

The name of the newsletter, Broca's Area, sprang from the creative mind of Dr. Michael Merren of San Antonio. What an inspired name this proved to be! Pierre Paul Broca in 1880 in his famous case reported on "Tan Tan" who demonstrated a motor aphasia due to a stroke in the left inferior frontal area and Paul Broca after pathological examination of the brain claimed, "Man speaks from his left hemisphere."

Our publication, Broca's Area, became, as Paul Broca might have said, the site from which the Texas Neurological Society speaks. The tag line, The Voice of Texas Neurology, was added to the masthead with the Winter, 1994 issue.

Trudy, my wife volunteered (well, there may have been a little arm twisting involved) to assist me with the editorial effort by serving as production editor. The origin of the original masthead for Broca's Area has almost been lost to failing memories. As I recall it, we wished to represent the location of motor speech in the dominant hemisphere along with the TNS logo. With her background in art, Trudy designed the original masthead. We were as proud as new parents of our initial installment, only to discover after publishing that Broca's had been misspelled as "Brocca's." Ouch! With red faces, we corrected the error in the following issue.

Trudy provided invaluable support throughout my editorship and I remain eternally grateful. Also Rachael Reed and others at the TMA Department of Association Management Services provided invaluable support in later years by taking the production aspects of Broca's Area in-house at TMA.

While the purpose of Broca's Area was and remains a forum for Texas Neurologists to share comments, concerns, and knowledge about the practice of neurology in Texas, we nevertheless were flattered when the American Association of Medical Society Executives Pinnacle of Success Awards Program recognized Broca's Area with an honorable mention award in 1995.

The masthead underwent major changes with the Summer, 1999 issue, substituting our current TNS logo instead of the left-brain representation. The iconic reflex hammer, tuning fork, and TNS lone star emblem has appeared in the masthead ever since and is immediately recognizable to our members.

My tenure as editor lasted until February of 2000. At that time Dr. Gage Van Horn assumed the editorship and served until February of 2008. He successfully solicited expanded numbers of submissions for Broca's Area from our members. Dr. Randy W. Evans followed Gage and has capably served as editor for the past six years. He has taken the publication to higher levels of performance.

Gage, Randy, and I have all shared a passion for our newsletter's evolution and improvement. It is surprising that in the entire 21-year history of the newsletter's existence only three editors have served. This speaks to the satisfaction gained from performing this role for the Texas Neurological Society.

I invite those of you who enjoy writing and harbor a latent interest in editing to consider taking on this highly rewarding task when ultimately Randy tires and chooses to pass the editorial pen.

Expert Opinion
Inpatient Management of Parkinson's Disease

Michael J. Soileau, MD, Movement Disorder Fellow
Erin E. Furr-Stimming, MD, Assistant Professor of Neurology
University of Texas Medical School – Houston (UT MOVE)


Michael J. Soileau, MD

Parkinson's Disease Patients in the Inpatient Setting

Parkinson's disease (PD) is the second most common neurodegenerative disease, next to Alzheimer's disease. As these patients advance through their disease, they are hospitalized more frequently than their age-matched controls and tend to stay longer than those without PD. By far, motor symptoms such as wearing off, dyskinesias, or falls related to freezing or postural instability tend to be the most common cause of hospitalization. However, this patient population also may have non-motor symptoms that could complicate their hospitalization including cognitive disturbances such as delirium or psychosis, infections such as aspiration pneumonia from dysphagia, or side effects to anti-parkinsonian medications such as intractable nausea or vomiting. Below are special considerations for managing this complex patient population.

How should I deal with anti-parkinsonian medication while an inpatient?

In the outpatient setting, the patient and neurologist work closely to fine tune the timing and dosing of dopaminergic medications to avoid wearing off and other motor complications. As such, timing is everything. While hospitalized, it is best (if possible) for patients to bring their own medications from home, as sometimes hospitals may not carry certain formulations of these medications (i.e. controlled release formulations of carbidopa/levodopa or medications such as entacopone.) Substitutions should generally be avoided. Because the timing is so important, broad time frames should be avoided and actual times used instead. For example, delays from pharmacy or nursing staff can lead to erratic times in a TID order rather than 8am, noon, and 4pm schedule. Remember that dopaminergic medications should not be abruptly discontinued as this can increase their risk of developing neuroleptic malignant syndrome (NMS), which is characterized by rigidity, high fever, delirium, autonomic instability, and rhabdomyolysis.

Are there any medications to avoid or limit in patients with PD?

In general, anti-dopaminergic medications should be avoided in patients with PD as these can often lead to worsening in motor and non-motor symptoms. These medications are often used in patients with hospital-acquired delirium or with antiemetics for post-operative nausea. When treating psychosis in a patient with PD, quetiapine or clozapine is preferred as they have less extrapyramidal side effects in general. For nausea, ondansetron or trimethobenzamide are good alternatives as they have no anti-dopaminergic properties. Domperidone is another option that is effective for nausea but is not currently available in the US. Benzodiazepines may also be used but place the patient at increased risk for poor balance, confusion, and falls. Lastly, additional medications that could worsen cognition such as narcotics, hypnotics for sleep, and anticholinergics should be used with caution as these patients are often vulnerable to delirium, which some studies indicate, increases the risk of death compared with controls.

How do I manage psychosis in the PD patient?

Psychosis may occur in up to 40 percent of patients with PD. This is usually manifested by visual hallucinations or delusions. Psychosis is especially increased in the hospital setting due to sleep/wake cycle disturbances, the administration of medications predisposing to altered sensorium, and coexisting delirium. Additionally, medications used to treat PD can also predispose patients to psychosis. If a patient's psychosis seems to fit temporally with the addition of a new anti-parkinsonian medication, then medications should be discontinued in the following order: anticholinergic agents (i.e. trihexyphenidyl), amantadine, dopamine agonists, COMT inhibitors, MAO-B inhibitors, and finally, levodopa. If patients cannot tolerate the weaning of these medications due to worsening motor function, consider a trial of quetiapine or clozapine. Quetiapine usually is started at a dose of 12.5 mg – 25 mg as needed and increased from there. Clozapine is also an atypical antipsychotic that can reduce psychotic symptoms without worsening motor symptoms when used at doses 6.25 to 50 mg/d. However, there is an up to 1.5 percent cumulative 1 year risk of agranulocytosis with clozapine which should be monitored by frequent complete blood counts

What are the considerations for PD patients needing elective surgery or anesthesia?

Some studies suggest that elective general and orthopedic procedures in those with PD have longer hospital stays, higher in-hospital mortality, and increased post-operative complications such as bacterial infections when compared to those without PD. However, we as neurologists should recommend early mobilization, physical therapy, and monitoring of post-operative complications in an effort to optimize surgical outcomes. Prior to surgery, patients should be proactive in discussing PD medications with the surgeon and counseled that PD patients have longer recovery times and an increased risk of delirium post-operatively. Regarding anesthesia, regional anesthesia is preferred over general anesthesia as it avoids, in most cases, the risk of pneumonia after intubation, nausea, sedation, and confusion. If general anesthesia cannot be avoided, special care must be taken in post-operative order sets for nausea as some medications such as metoclopramide and prochlorperazine have anti-dopaminergic properties. Ondansetron, trimethobenzamide, and granisetron are a few options for nausea in the PD patient. Most PD medications should be continued just prior to the surgery start time and restarted immediately following the surgery in order to reduce worsening of motor function. However, rasagiline is typically stopped 2 weeks prior

to surgery to avoid interactions with anesthesia. If the patient cannot take PO, medications should be given through nasogastric tubes if possible. If this is not an option, there is one dopamine agonist available in a patch form (rotigotine) or apomorphine, which is available by injection. These two medications may be more convenient to administer, but do not serve as direct substitutions for the patient's oral regimen. It is important to note there is not a direct conversion between the agonists.

Are patients with PD at increased risk of infections while hospitalized?

Infections such as aspiration pneumonia and urinary tract infections are common reasons for hospitalization in those with PD. In addition, the risk of infection is increased in those hospitalized with PD due to poor motor function. Because patients with PD can have dysphagia as a complication from their disease or difficulty managing increased secretions due to bradykinesia in the throat musculature, these patients are at risk of aspiration pneumonia. In this case, speech and language pathology services should be provided and patients instructed on conservative measures for swallowing such as the chin-tucking maneuver or modification of meal consistency. If assessed by speech pathologists, assessments should be immediately after administration of anti-parkinsonian medications. This patient population is also at risk for developing urinary tract infections. These infections, as in the case of other neurological conditions such as stroke, myasthenia gravis, and multiple sclerosis, can cause worsening of motor function. They may not be symptomatic from their infection and may not complain of dysuria, hesitancy, or frequency. Therefore, a high index of suspicion and low threshold should be considered for ordering a urinalysis. As with other hospital patients, Foley catheters should be avoided if possible and intermittent straight catheterization performed if the patient is unable to void on his own.

How do I approach a fall in those with PD?

The majority of falls in those with PD occur when walking, stopping, turning, standing up, or bending down. This is often attributing to postural instability and the loss of righting reflexes but can also be contributed by motor fluctuations such as freezing or wearing off. Up to 40 percent of patients with postural instability have multiple falls that cause injuries including wrist and hip fractures. If they are admitted for a fall, the etiology should be determined. Often times, falls are attributed to lack of using an assistance device such as a cane or walker. If motor fluctuations are the cause of the fall, the usual approach is to increase the levodopa dose if no dyskinesias are present or to increase the frequency if dyskinesias are present. Other alternatives are to add a dopamine agonist or controlled release formulation of levodopa. However, dopamine agonists and similar medications can potentially worsen orthostatic hypotension. A physical therapy consult for gait and balance training should be obtained to promote postural stability and prevent falls. A home safety evaluation should also be considered. Lastly, the clinician should continue to prevent infections and minimize delirium that would predispose the patient to increased falls while hospitalized.

How do I manage orthostatic hypotension in those with PD or other parkinson-plus syndromes?

Orthostatic hypotension (OH) is defined as a drop in blood pressure by 20 mmHg from a lying to standing position at 3 minutes or an increase in pulse by 10 beats per minute after 3 minutes of standing. In patients with PD, OH is a common non-motor feature thought to be due to a loss of post-synaptic noradrenergic neurons which leads to impaired sympathetic input to the cardiovascular system. In general, the blood pressure will drop or pulse raise prior to 3 minutes when dehydration plays a role. If not dehydrated with other clinical signs, other causes of OH should be considered including cardiac causes (TTE, tilt table, or telemetry) or other medication causes such as diuretics. In this special population, OH can also be attributed to antiparkinsonian medications, especially dopamine agonists, usually in a dose dependent manner. In this case, gradual weaning of these medications or reducing them to a lower dose may help alleviate OH. Once the above measures are done, one can recommend nonpharmacological treatments of OH including avoidance of sudden standing, increasing intraabdominal pressure prior to standing, thigh-high compression stockings, and increasing salt intake with salt tablets (usually >8 grams daily.) Otherwise, pharmacological agents such as midodrine 2.5-10 mg TID, fludrocortisone 0.1-0.3mg daily, or even Droxidopa, a newly FDA approved medication for neurogenic OH.

Are there any special considerations in those with deep brain stimulators implanted?

Deep brain stimulation (DBS) in patients with PD is an accepted treatment that has proven efficacy, safety, and sustainability. However, there are a few specific considerations when treating these patients. In general, imaging such as x-rays, CT's, and ultrasounds can be performed on these patients but MRIs require special attention. MR imaging other than brain imaging is contraindicated due to risk of diathermy. However, Medtronic Inc. has provided good safety data in performing MR imaging of the brain using specific settings. In order to perform MR Brain imaging, the MRI should be a 1.5-Tesla MR machine with a receive-only head coil. Also, the head SAR value should not exceed 0.1 W/kg and the gradient switching (dB/dt) should be limited to ≤ 20T/sec. These are details that can be worked out through the radiology department and MRI technicians. Older devices such as Kinetra or Soletra devices should be programmed to 0 volts and turned off prior to the MRI and reset to the original settings after the study. Newer devices such as the Activa PC, Activa RC, and Activa SC do not need to be set to 0 volts prior to the study but do need to be turned off prior to the study and on after the study. With the newer devices, the patient can turn the device off and on with their handheld patient controller. Other considerations in patients with DBS include turning the device off prior to EEGs or EKGs as it can often cause artifact during the study. Also, when having elective surgery, bipolar electrocautery is recommended with the ground plate kept as far away from the DBS system as possible.

The above points are meant to serve as a general guide to managing or consulting on PD patients in the hospital setting. However, as a general rule of thumb, have a low threshold for contacting the patient's primary neurologist or movement disorder subspecialist.

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http://manuals.medtronic.com/manuals/search?region=US&cfn=37602&manualType=MRI+Technical+Manual

The TNS Summer Meeting

Waleed El-Feky, MD, Summer Program Chair

TNS Summer Conference
July 18th and 19th
LaCantera Hill Country Hotel, San Antonio

Renowned speakers will cover various topics that are of great importance for the practicing neurologist. Jonathan White, MD professor of Neurosurgery at UT Southwestern will discuss the management of normal pressure hydrocephalus. The hot topic of traumatic brain injuries in sports will be covered by Anthony Alessi, MD the head of the Sports Neurology section at the AAN. An update on neurocritical care for the practicing neurologist will be covered by Greg Shalan, MD a neurointensivist practicing in Dallas. Lastly, Joe Hise, MD the chairman of Radiology at Baylor University Medical Center in Dallas will conclude the first day of the meeting with an update on the advances in neurointerventional radiology diagnosis and management in cerebrovascular disease.

Dr. Marc Alberts, the vice-chair of the Department of Neurology at UTSW will open the presentations on the second day of the meeting with a review of the evaluation and management of Intra and extracaranial vascular dissections.

The following lecture will be an exciting video presentation of selected neuromuscular cases presented by Dr. Aziz Shibani, the head of the Nerve and Muscle Center of Texas at Houston.

Dr. Steven Herzog, the head of the Headache Institute at Texas Neurology in Dallas will discuss the management of the challenging patient with chronic migraine headaches.

Lastly, the ethics lecture will cover cyber security another important topic of practical importance to the practicing neurologist. This will be presented by Peggy Block, JD; an attorney at Block & Elmore in Houston.

In addition to completing 8 hours of CME including 1 hour of Ethics, the meeting is a great opportunity to meet and network with colleagues from all over the state in a comfortable and relaxed atmosphere. Your family, should they decide to join you, will enjoy the great amenities that the resort offers as well as the great attractions of San Antonio.

I hope we'll see you at the meeting

Mark Your Calendars!

2015 WINTER CONFERENCE

February 6-8, 2015

Austin Hilton Hotel

Austin, Texas

Texas Neurological Society 1974-2014

The Beginnings and the Evolution

by: Susan K. Blue, MD

"In the early 1970s, neurology was part of the neuropsychiatry section of the TMA. Dr. William Fields, chairman of Neurology at the University of Texas Medical School at Houston, placed a conference call with Dr. William Riley, chief of Neurology at St. Luke's Episcopal Hospital in Houston, and Dr. Robert McMaster, chief of Neurology at the University of Texas Medical School at San Antonio to explore forming a separate neurology section. Dr. Riley sent a letter to the 70 or so neurologists in Texas for a poll on whether to form a separate section and there was only one dissenting vote. Dr. Riley chaired the first meeting of some 35-40 neurologists in Houston in 1974 held during the TMA annual convention. Dr. Fields convened a founding group which developed the charter of the TNS and initial documents were filed with the Secretary of State on November 6, 1974. (see Riley, WJ. The Origins of the Texas Neurological Society. Broca's Area, Winter, 2011, page 13, for more details).

Charter members included Bill Fields, William Riley, Robert McMasters, W.S. Avant, Jr., Charles (Sheff) Olinger, Harold Skaggs, Harris Hauser, Walter Buell, Stuart Black, Doug Hudson, Gage Van Horn, Ernesto Infante, and myself. I was the token female, a position that has never bothered me. Perhaps I was chosen because of my sex, or probably because both Dr. Olinger and I had strong roots in North Carolina. I had been in practice fourteen months at that time. At any rate, the founders set the stage for our strong organization that we have in 2014.

As Bill Avant reminded me, the first few years were very casual. We had no officers, no set meetings, but we managed to get together occasionally and discuss difficult patients and other practice issues. Medicine was rewarding, both financially and emotionally. We could take care of patients and go home at the end of a long day without worrying about managed care, advantage plans, intrusion on medical practice by suboptimally trained providers, and arbitrary payment by insurance plans of the fees they deemed reasonable. By the early 1990's our mentors and the charter members knew many changes were in the wind. Therefore there was a need to plan more organized activity, and to provide education pertinent to the practice of neurology as well as to the business side of medicine.

TNS held its first Winter Conference in 1998. It was such a success, that just six years later the first Summer Conference was held at Westin La Cantera. Board members spent many hours discussing the plans for all conferences. They considered topics for lectures, practice schedules, expense, and family obligations. In 2004 the Society had 247 active members. In an attempt to appeal to the younger neurologists with small children, the summer event was scheduled at a family-friendly resort. That event was a break-even one. The Board debated and decided to proceed with another summer conference, because of the positive feedback from the first one. The third summer conference, at Hyatt Lost Pines Resort, returned $5,000 in profit to the organization, thanks especially to the pharmaceutical companies that helped to sponsor the event. The hotel negotiations by Rachael Reed and the program directed by Sara Austin added to the success. Now attendance at both conferences allows the physician to accrue his entire CME requirement for the year.

We became strong just in time to address some of the many issues that threatened the trained and conscientious practice of medicine. TNS formed a peer group to review cases filed against members for alleged malpractice. By 2006 the scope of practice issues affected us and our patients. We found ourselves competing with other providers who performed electrodiagnostic studies without appropriate training in the disease processes that could be evaluated with those procedures. Treatment decisions were then made based on those results, and some patients were subjected to surgery that might have been unnecessary. A diligent and long battle ensued, as neurologists and other physicians worked to educate legislators on the importance of defining scope of practice with attention to training and experience. When I was serving as President of TNS in 2006, I received a typed, unsigned letter from Houston, threatening my personal safety.

Bill Gilmer spent many hours on the scope of practice issues. In 2010 it was determined by the Texas legislature that chiropractors could not perform EMG examination and they could not do spinal manipulation under anesthesia.

We also waged protest when out-of-state or remote companies provided interpretation of electrodiagnostic studies. After another intense effort on the part of neurologists and other physicians, it was determined that anyone who interprets medical test results must have a Texas state license.

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In 2008 I wrote a letter of concern to the Texas State Board of Chiropractors because of a test result on a patient that did not correlate with the history or examination. This report had been sent to me by another neurologist. The interpreter had signed his name as "Dr. ____." Four years later I received a letter from that Board, informing me that the provider had been reprimanded. He had been told to identify his credentials (as a chiropractor), and not just as Dr. on his documents. We now have the influence of walk-in clinics staffed by nonphysicians, extended providers that make therapeutic decisions, and Advantage plans that profit from the exclusion of specialists from the decision-making process. Permission to order an MRI is granted or denied by a nurse in another state who has never seen our patient. We must continue to exert appropriate influence over management of our patients, as we educate and work in collaboration with all other parties who influence patient care.

We have always had strong leadership and support from the staff members provided to TNS from Texas Medical Association. They continue to help organize us and guide us in our activities.

Our Society now has over 750 active members. Our membership is strong, and your Board spends many volunteer hours planning the programs and addressing issues that impact all of us. We have a unique relationship among the private practice neurologists and the academic and institutionally based neurologists. Step up if you are interested in working on some of the committees. Get to know your legislators. Speak to one another at the meetings. Show your gratitude to our sponsors by visiting their booths. Together we will continue to have the greatest, largest, most active group of neurologists in any state.

Some of the Charter TNS members at the Winter Conference: Doug Hudson, Walter Buell, Gage Van Horn, Stuart Black, William Riley, and Ernesto Infante.

Member News:

Corpus Christi Outpatient Neurology

Group of three neurologists seeking a fourth to join our outpatient, general adult neurology practice. No ER call or hospital work and only one outpatient office. Guaranteed salary with partnership potential after one year with no "buy-in."

Contact Paxton Longwell, MD at 361.853.0867 or plongwell@earthlink.net

Welcome New Members!

The following were voted in during the 2014 Winter Conference

Juan A. Acosta, MD	San Antonio
Lauren L. Aldridge, PA-C	Dallas
Ammar M. Alobaidy, MD	Pearland
Julio J. Andino-Velez, MD	Rowlett
Garima Arora, MD	Houston
Irum Basar, MD	El Paso
Carl Brown, DO	Odessa
Kristin A. Brown, MD	Houston
Thomas Bullock, MD	Houston
Mandeep S. Chahil, MD	Houston
Kevin E. Conner, MD	Arlington
Isabel A. Da Cunha, MD	Houston
Srikanth Damodaram, MD	College Station
Alfredo Davalos-Balderas, MD	Houston
Cicely P. Dowdell-Smith, MD	Katy
Kathleen H. Eberle, MD	Pasadena
Elmyra V. Encarnacion, MD	Dallas
Edward Espineli, MD	Houston
Alireza Faridar, MD	Houston
Matthew Freeman, MD	Dallas
Kareem Gadelmola, MD	Ridgeland
A. Palman Ghafoori, MD	Austin
Myrtle K. Jeroudi, MD	Dallas
Peter W. Johnson, MD	Houston
Catherine W. Kamau, NP-C	Dallas
Qinghua Liang, MD, PhD	San Antonio
John A. Lincoln, MD. PhD	Houston
Andrea Lowden, MD	Dallas
J. Alfredo Lujan-Palma, MD	El Paso
Priti M. Manohar, MD	Edinburg
Puja Mathur, MD	Duarte
Michael Morgan, MD, PhD	Houston
Anh T. Nguyen, MD	Sugar Land
Nicki Niemann, MD	Houston
Adeola A. Olowu, MD	Houston
Haseeb A. Rahman, MD	Houston
Samiya Rashid, DO	Austin
Rohini Samudralwar, MD	Houston
Arash Shadman, MD	Houston
Manan Shah, MD	San Antonio
Michael Soileau, MD	Houston
Jessica Stachyra, DO	Spring
Alejandro Tobon, MD	San Antonio
Jerry J. Tomasovic, MD	San Antonio
Chirstopher Topel, MD	Austin
Rebecca M. Verellen, MD	Austin
Robert A. Zajac, MD	San Antonio

Expert Opinion

Bilateral Basal Ganglia Lesions in an HIV Positive Drug User

Sonia N. Krish MD, Frederic N. Nguyen MD, and Paul E. Schulz MD

Department of Neurology
UT Health;
The University of Texas Health Science Center at Houston, Houston, Texas

The opportunistic infections associated with HIV infection and the hemorrhagic strokes associated with cocaine use are well known. But there is a rare disorder associated with the concomitant presence of the two disorders, i.e. basal ganglia strokes. Herein we report an HIV positive illicit drug user who presented with a gait change due to bilateral basal ganglia infarction.

CASE DESCRIPTION

A 54 year-old female with HIV (CD4 count 388), diabetes mellitus, hypertension, un-specified schizophrenia and chronic neuropathy presented with worsening gait ataxia and imbalance. She came to our hospital for evaluation of two days of increased difficulty ambulating and subjective weakness in her lower extremities. She denied any antecedent illness, any difficulty breathing, loss of bowel or bladder continence, no visual changes or loss of sensation. Her family later reported that she was using illicit drugs during that time and she may have been immobile for 36-48 hours.

She had a history of HIV and had been on anti-retroviral therapy for many years. Ten years prior she was diagnosed with chronic demyelinating polyneuropathy (CIDP). She was lost to follow-up, but was able to ambulate with assistance of a walker. Her home medications included lamotrigine, quetiapine, buspirone, ritonavir, darunavir, raltegravir, and lamivudine.

On examination, she was afebrile and normotensive. Her general cardiovascular and pulmonary evaluations were normal. She was awake and alert, oriented to person, place but not to time. She did not have nuchal rigidity. There were no cranial nerve abnormalities. Her motor evaluation was limited by poor effort and cooperation, but she had full strength in flexor and extensor muscle groups throughout. She had decreased vibratory sensation in the lower extremities and her sensory evaluation was intact to pinprick, temperature and proprioception. There was no axial or appendicular ataxia. Deep tendon reflexes were absent bilaterally in the patellar and Achilles tendons and symmetrically decreased at the biceps and triceps. She denied arthralgias or myalgias and no appreciable skin lesions were noted.

She found to have a urinary tract infection and completed three days of ceftriaxone. She had an elevated CK 4761 units/ Liter (normal range 12-191 units/Liter) consistent with rhabdomylosis likely secondary to immobilization and poly-substance abuse.

Initial MRI Brain revealed restricted diffusion, microhemorrhages, and contrast enhancement in the bilateral globus pallidi (Figure). Carboxyhemoglobin levels were normal and she had no history of carbon monoxide exposure. Her comprehensive urine toxicology screen was positive for cocaine and opiates. Her cerebral spinal fluid had a normal protein level (33 mg/dL), glucose level (55 mg/dL), RBC (0 mm3), and WBC (0 mm3). It was not suggestive of inflammatory or infectious etiologies. Repeat electrodiagnostic evaluation was recommended, but the patient refused.

DISCUSSION

This 54 year-old woman with HIV and who had a toxic screen that was positive for cocaine and opiates presented with a gait change and was found to have bilateral basal ganglia infarctions with microhemorrhages.

The basal ganglia (BG) are highly metabolic deep gray matter structures that can be symmetrically affected by several diseases, including toxic poisoning, metabolic disorders, and neurodegeneration with brain iron accumulation (Table) [1-4]. Our patient was not exposed to cyanide, TCAs or SSRIs, and did not have non-ketotic hyperglycemia, hepatic failure, or hyperammonemia [1-4]. Hence, we conclude that the lesions may have been due to cocaine usage. Moreover, HIV infections may promote brain injury, particularly basal ganglia abnormalities, when combined with the use of cocaine and heroin. We found two reports of cocaine associated infarction and necrosis in HIV infected individuals [1,2]. Hence, it may be the combination of HIV and cocaine usage that led to infarction.

While the pathophysiology of BG involvement in HIV patients with drug abuse is under investigation, studies suggest that drugs of abuse may synergize with HIV proteins such as Tat and gp120 to cause increased

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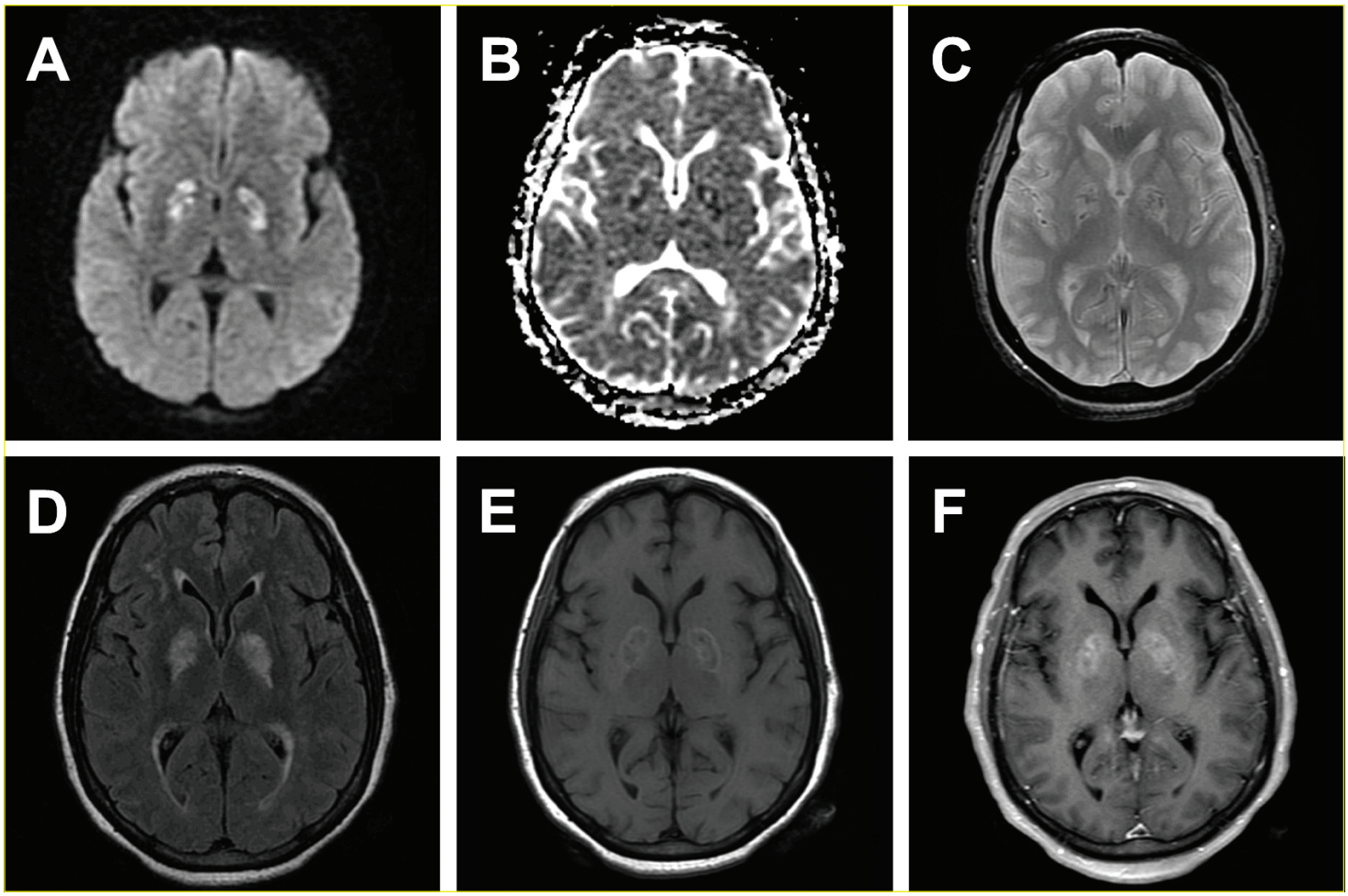

FIGURE LEGEND:

Axial MRI Brain images demonstrating restricted diffusion in the bilateral globus pallidi on (A) the diffusion weighted and (B) apparent diffusion coefficient weighted images, (C) microhemorrhages on gradient echo images, hyperintensity on (D) T2 FLAIR and (E) T1 images, and (F) post Gadolinium enhancement.

neuronal dysfunction[2]. It has also been noted that cocaine can enhance monocyte migration across the blood–brain barrier by inducing gene expression for adhesion molecules and other proteins important in remodeling of endothelial cells [3].

Unfortunately, the patient did not return for follow-up for us to test her degree of recovery.

CONCLUSION

While infections are common in HIV, and cortical or hemorrhagic strokes are common with cocaine use, the combination of HIV and illicit drug use can cause basal ganglia infarction. As a result, such infarctions should be considered when an HIV positive drug user presents with a change in gait.

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Considering Adding a NP or PA to the Practice?

Stuart B Black MD, FAAN
TNS Medical Economics Chair

With the implementation of the Affordable Care Act compounded by the recent multiple changes medicine, it becomes increasingly demanding for many neurologists to keep up with the increased workload. While the implementation of Electronic Health Records has many advantages in addition to the integration of patient care among providers, when one considers the ongoing fees of maintenance and upgrades, it is still an ongoing expense to the practice even after purchase. The new rules and regulations which define government requirements inadvertently impose additional challenges to the average neurology practice. The efforts toward being compliant with the accumulation of new practice mandates are often difficult and time consuming to accomplish. Meaningful Use, the eventual conversion to ICD-10, Accountable Care Organizations, the Patient Centered Medical Home, the "Medical Neighborhood", and now the concept of transforming specialties into Patient Centered Specialty Practices is all emerging so quickly that it adds greatly to the time neurologists would otherwise be caring for patients. Alternative payment models focusing on "quality" and not "quantity" are redefining payment practices while the insurance "Exchanges" seem to be adding increased complexity to reimbursements. It is not uncommon for office and professional responsibilities to impose even more on the important personal time a neurologist has to spend with family and friends or enjoying non-practice related activities.

These are just a few of the issues which have contributed to the growing interest toward adding Midlevel Advance Practitioners (MLAPs), specifically Nurse Practitioners (NPs) and/or Physician Assistants (PAs), to certain neurology practices. While many neurologists previously looked upon MLAPs to be "physician extenders" or auxiliary to the main clinical services of the practice, today's model of these well trained professionals have evolved into important medical providers who can play an instrumental role in patient care. In addition to contributing added value to a practice, NPs and PAs can assist a neurologist in accomplishing the multiple additional demands that are now associated with compliance and patient care; including those mentioned above. The modern educational background of NPs and PAs is not limited to Evaluation & Management services but now may include highly specialized skills which apply not only to a general neurology practice but are valuable assets to neurology subspecialists; including in-patient Neurohospitalists and NeuroIntensivists.

Since many neurologists are in the early phases of considering whether adding a NP or PA to their practice may be beneficial, it is hoped that a more detailed understanding of the background of both specialties and the academic requirements of becoming a NP and PA would be of value. The following is a brief overview of the history, education, certification requirements and licensure of NPs and PAs.

The first training program for nurse practitioners was established in 1965. It had its origin at the University of Colorado Schools of Medicine and Nursing under the direction of Loretta Ford, RN and Henry Silver, MD. Ms. Ford was a public health nurse in post World War 11 rural Colorado. She joined the faculty of the University of Colorado School of Nursing in 1961 and began working with Dr. Silver, Professor of Pediatrics, to develop the visionary model of advanced nursing practice. The early nurse practitioner's program was developed under a Master's Degree curriculum, based on the nursing model of care. In 1967, Boston College initiated one of the earliest master's programs for NPs. NP educational and training programs have since grown in parallel across the U.S. Federal Law defers to State Law regarding NP training requirements, which vary among states. NP formal education beyond high school is usually an additional 6-8 years. While nursing school curricula incorporate all of the basic sciences as chemistry, anatomy, physiology, microbiology, pathology, and pharmacology, to name just a few, an advanced practice nurse (which includes NPs, clinical nurse specialists, nurse anesthetists and nurse midwives) has specialized training in a number of advanced practice specialties. There are a variety of paths to becoming a nurse practitioner in the U.S. Typically the process begins with obtaining a Bachelor of Science in Nursing (BSN) which takes 4 years followed by a Master's of Science in Nursing (MSN) which usually takes an additional 3 years. Doctor of Nursing Practice (DNP) programs require an additional 2-3 years of study beyond the MSN.1 It is not uncommon for NPs to have ten years or more of nursing experience before they go into their practitioner- ship. The scope of a NP practice is state regulated. In some states a NP may work independently of physicians while in other states a collaborative agreement with a physician is required for practice.

With few exceptions, to practice as a NP in the U.S. requires national certification.2 California, Indiana and Kansas are the only states which permit NPs to practice without a national board certification. In those three states, an NP can practice based on graduation from an accredited NP education program and/or completion of a designated amount of work experience.3 NP certification is offered by a variety of non-governmental agencies. The two major national certifying agencies are: American Academy of Nurse Practitioners (AANP) and the American Nurses Credentialing Center (ANCC). Both boards offer certification in a number of different areas; which collectively include adult, neonatal, pediatric, family, geriatric, psychiatric, acute care and women's health. There are additional Nurse Practitioner Certifications Boards, mainly: The National Certification Corporation (NCC) for Obstetric, Gynecologic, and Neonatal Nursing Specialties; American Association of Critical Care Nurses Certification Corporation, and Pediatric Nursing Certification Board. All states require a NP to maintain a cur-

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rent RN license. Nurse practitioners may prescribe controlled substances. On site supervision is not required. NPs recertification requirements require 75-150 CEUs every 5 years as well as a minimum of 1000 hours of clinical practice; both requirements as an NP in the areas of specialization. Recertification requirements are met by meeting clinical practice and continuing education requirements

The first educational program for physician assistants was also established in 1965. Dr. Eugene Stead, chairman of the Department of Medicine at Duke University, established the curriculum; a two year educational model based upon the fast track training of doctors during World War 11. His first students were four Navy corpsmen who had received considerable medical training during their military service. The PA educational program was, and continues to be, modeled on the medical school curriculum; a combination of classroom and clinical instruction. In addition to anatomy, physiology, biochemistry, pharmacology, physical diagnosis, pathophysiology, microbiology, clinical laboratory science, behavioral science and medical ethics, PAs also complete more than 2,000 hours of clinical rotations. PA training is usually 2 to 3 years of consecutive study, completed during their post-graduate studies, for a total of 6-7 years of rigorous science based post secondary education. The most recognized educational programs are graduate programs leading to a Master' Degree in Physician Assistant Studies (MPAS), Health Science (MHS), or Medical Science (MMSC). 4 Most PA students start their medical education with a background of health care experience. Admission to the better PA programs is very competitive. It is not unusual for a highly ranked PA school to receive annual applications in the range of 800 to more than 1,000 for a class of 35-36 students. For those highly rated schools the Graduate Record Examination (GRE) is not required of applicants who have a U.S. acquired Masters Degree or higher; but all other applicants are required to submit GRE scores. While PAs also have a great deal of autonomy, they must work under the supervision of a physician. The rules and regulations which define the extent to which a PA must be supervised differ from state to state.

Once a candidate has completed the formal PA education program, he/she is not qualified to practice until they pass the national Physician Assistant National Certifying Examination, referred to as PANCE. The examination is administered by the National Commission on Certification of Physician Assistants (NCCPA). Upon completion of the examination and receiving the designation of "Physician Assistant-Certified or "PA-C", the PA must then be licensed in the state in which they wish to practice. PAs have delegated prescriptive authority in all 50 states, the District of Columbia, the Commonwealth of Northern Mariana Islands and Guam. Nearly all these jurisdictions allow PAs to prescribe controlled drugs; on site supervision is not required. All Physician Assistants have recertification requirements of 100 hours of CME every 2 years and a recertification examination every 6 years.

The benefits of a neurologist employing a Nurse Practitioner or Physician Assistant are, to a large extent, highly individualized. As with most practice decisions, what might be beneficial for one physician may not be for another. Although NPs and PAs receive their training in different types of programs, by the time they are at the level of specializing in neurosciences, most will have comparable skill sets. It is very common to see MLAPs of both disciplines working side by side providing the same medical services in both the outpatient and inpatient arena. Once the decision is made to add a NP or PA to the practice, the choice is frequently dictated by the availability of the most qualified applicants more than a specific focus on one professional discipline over the other. The decision to employ an Advanced Midlevel Practitioner is usually based upon the demand for services and intent on adding to the quality care the practice already provides. There should be a well defined intended role as to how the NP or PA would integrate into the care team model. This would include a developed planned communication strategy for patients as well as other members of the medical team. While it is true that in today's changing medical environment, more and more patients are increasingly comfortable being evaluated and treated by non-physician advanced practitioners, the introduction of a NP or PA into the practice is still more efficient when there is a transitional period which allows patients to learn about the new clinician and what services he/she will provide. There are also some essential steps to follow before and during the interview process. As is required in the credentialing of physicians for hospital staff, Medicare and other insurance carriers, background checks are important when adding any new professional to the practice. Confirmation of certification and an unrestricted license with the state board should be verified. It is important to be aware of any past or ongoing investigation, including a Medicare audit, disciplinary action, liability litigation, or prior convictions. If there were problems, those circumstances would deserve further exploration. After due diligence is done and employment is agreed upon, the scope of practice, supervision, responsibilities and state practice laws and regulations for the NP or PA should all be clearly defined in a legal contract best written by a healthcare attorney if possible.

As neurologists in Texas and across the nation find themselves spending more time performing tasks to be compliant with the new rules and regulations of maintaining a practice and monitoring reimbursements, for many, the number of work hours in a day often seems to be increasing. Many physicians are seeing more patients to maintain the practice's medical economic stability. The days get longer and the evenings and weekends get shorter. Adding another physician to the practice may be clinically justifiable but the financial structure may not support an additional neurologist. These types of circumstances have created a rather common scenario that has led some colleagues toward considering employment of a Nurse Practitioner or a Physician Assistant. Other neurologists have added NPs or PAs to the practice as a value added model toward patient care. There are many individualized reasons why a neurologist may, or may not, consider employing a NP or PA. Whatever the impetus, hopefully this discussion of the professional educational environment, certification and licensure of Nurse Practitioners and Physician Assistants will be of some added benefit.

AAN Update

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- Specialty Medical Homes for Neurologists - Neil A. Busis, MD, FAAN

  https://www.aan.com/practice/new-payment-and-delivery-models/patient-centered-medical-homes/
- Accountable Care Organizations and the Role of Neurologists - Anup Patel, MD

  https://www.aan.com/practice/new-payment-and-delivery-models/accountable-care-organizations/
- Health Insurance Marketplace - Elaine C. Jones, MD, FAAN

  https://www.aan.com/practice/private-insurance-reforms/
- Model Episode of Care: Stroke - Jonathan P. Hosey, MD, FAAN; Bruce Sigsbee, MD, FAAN

  https://www.aan.com/practice/new-payment-and-delivery-models/episodes-of-care/

View all videos at the AAN's YouTube Channel www.youtube.com/AANChannel

CAPITOL HILL REPORT

Learn about legislative action and how the Academy ensures that the voice of neurology is heard on Capitol Hill. The Academy's Center for Health Policy staff in Washington, DC, provides bi-weekly updates on advocacy for neurology and neurologic concerns through Capitol Hill Report. https://www.aan.com/public-policy/capitol-hill-report/

Legislative Committee Report

Sara Austin, MD, TNS Legislative Chair

1. The SGR did not get fixed. We had the best opportunity yet in March with a bill written by Dr. Michael Burgess (Denton). The house leadership encouraged the bill, and then attached a pay for that would never go (repealing the mandate). I think they really never had any intention of making a real effort to get it passed. Of course, it went to the Senate and got shot down. (Don't be fooled, if House had made a real effort to pass something reasonable, the Senate would have shot it down also). They did pass a temporary fix for 1 year, but we will be playing the same games next year. It's incredibly frustrating.

2. State politics are interesting as always. It looks like the tea party is winning some races and putting up some challenges. Whether you are hard right, moderate, or on the left, it matters that you vote this year.

3. It looks like Texas will have a budget surplus this year, somewhere between $ 1 and $5 billion (maybe). I suspect that means some kind of tax relief, or it could mean higher spending on some programs. (Knowing the conservative makeup of the legislature, I would put more money on tax relief).

4. The House of Medicine always faces scope of practice bills and this year is no different. There continues to be a push from the nurse practioners to have independent practice (in spite of the fact that we had an agreed upon a bill last session that loosened some restrictions). The physical therapists are also pushing harder than usual for the ability to see a patient without a referral. The TNS is a member of Patient's First – a group of physicians that work together to try to make sure that patient safety really does come first and that you really do have to have a medical license to practice medicine in Texas.

5. TRANSPARENCY is a big issue this session; one that the TMA is just starting to grapple with. You will hear this again, so pay attention. There is a big push from all sides (business and social services) to have health care charges more transparent. This would apply to physicians, hospitals and other ancillary groups as well. We are thinking that the TMA is better to be proactive about this, rather than wait and have someone force something on us. There is a decent chance that physicians will be required to post a certain number of our most common charges. You need to know that 'charges' are just that, our 'charge master' prices, if you will. Contract prices and cash prices are a much different deal – and the TMA is well aware of that.

Our advocacy committee, along with Greg Herzog, continues to keep an eye on things from a neurology perspective.

Price Transparency: What Does it Mean for Your Practice?

Kristi Berrier, TNS Medical Economics Advisor

"Price" \ˈprˈs\: the amount of money that you pay for something or that something costs; the thing that is lost, damaged, or given up in order to get or do something; the amount of money needed to persuade someone to do something.

The issue of price transparency has been a topic of discussion at the state and federal level for many years. As patients find themselves responsible for an increasing amount of their health care costs, there is a growing need for reliable, consistent price information. In Texas, laws already exist requiring some price transparency on surgical procedures. However, true price transparency will require physicians to provide a deeper level of pricing information. It is highly likely that the 2015 legislative session will bring with it legislation mandating physician price transparency.

THE MEANING OF "PRICE"

In healthcare there are many different uses of the word price. For example: 1) the price a physician charges a health insurance company for providing care to its insureds; 2) the price the insurance company and its insureds actually pay a physician for care; 3) the price a patient with no insurance will pay for care.

By law, physicians are required to maintain a standard fee schedule to be used with all payers (e.g. commercial insurance, Medicare, Medicaid, patients). However, it's rare that these are the prices physicians will be paid. As price transparency in health care becomes a reality, it's important to understand the definitions of a few key terms.

Billed charge is the amount a physician charges for a specific CPT code based on the practice's standard fee schedule. Third party payers require that physicians use this amount when submitting claims for payment. The standard fee schedule should represent "usual and customary" rates for the services provided. There are several methods for calculating standard fee schedules. The practice should select a method and apply consistently apply it in order to determine a standard fee schedule. This fee schedule should be reviewed annually to determine if it is still relevant. If, at any time, a contracted payer is paying the billed charge, the entire fee schedule should be re-evaluated, as this may signal that the practice's fee schedule is too low. The billed charge is also what an uninsured patient with no insurance will pay, unless the patient qualifies for charity care or a prompt payment discount. It these discounts are offered, the practice should have both types well documented in their financial policies.

Allowable or Contracted Rate is the amount a third-party payer will pay for a specific code based on its contracted fee schedule with the practice. Allowables will vary from payer to payer, based on the practice's contracts. Practices should calculate allowables for each payer and all of their associated "networks" using the terms of the contract. It is important to calculate these rates based on contract language, as the sample fee schedules attached to the contracts may not always be accurate. The allowable or contracted rates for each payer should then be entered into the practice management system. This will enable the staff responsible for posting payments to verify that the correct amount has been paid.

Contractual write-down is the difference between the billed charge and the allowable or contracted rate. Insurance companies tout this amount to their insureds as cost-savings, when the reality is that physicians rarely get paid their full billed charges. These write-downs will be posted along with payments on a claim line basis, allowing the practice to track its total contractual write-downs and reconcile payments to billed charges.

Patient Responsibility is the amount of the total payment for medical care that a patient will be responsible for paying. This is the answer to the question "how much is this going to cost me?" Many factors must be considered in order to answer this question, including how much care the patient may require, how much other providers involved in that care may charge and the structure of the patient's health benefit plan. For example, if a patient called the office of a neurologist and asked how much it would cost to receive treatment for migraines; the physician's staff would reply that the patient would need to be examined by the physician before the physician could identify which tests, procedures, etc. may be needed. The patient's benefit structure will also affect the patient's price for care. Factors such as how much of the patient's annual deductible has been met and what their cost-sharing arrangement will significantly affect the patient's cost of care.

The Healthcare Financial Management Association (HFMA) Price Transparency Task Force (Task Force) defines price as "the total amount a provider expects to be paid by

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payers and patients for healthcare services." Given the non-disclosure language present in most managed care contracts, it is not possible for physicians to publish what they expect to get paid by an insurance company without being in direct violation of their contract. This would leave the physicians exposed to the possibility of being dropped from a payer's network and reducing their patient volume.

The Task Force defines price transparency as "the readily available information on the price of healthcare services that, together with other information, helps define the value of those services and enables patients and other care purchasers to identify, compare and choose providers that offer the desired level of value." Further, they define value as "the quality of a healthcare service in relation to the total price paid for the service by care purchasers".

According to the Task Force, the objective of price transparency is to create a system whereby consumers of healthcare services can use price and quality to determine which healthcare providers offer the best value in care. Clearly, physicians will want to play an active roll in determining how price, quality and value are defined. Much of the work on price transparency is being led by hospital organizations and the insurance industry. If physicians fail to get involved in this process, these vitally important decisions will be made for them – by hospitals and insurance companies.

MEDICARE AND PRICE TRANSPARENCY

The April 9th data dump by CMS is an attempt at price transparency, but the lack of context could cause the data to do much more harm than good. The usefulness of the data is limited by such things as : lack of quality data; the exclusion Medicare Advantage patients; lack of specificity and risk adjustment; and opacity regarding the number of providers billing under a PIN, just to name a few.

This information could prove to be extremely misleading to the public, and there is concern among the medical community that it might lead to patients making decisions about their medical care based on misleading data. Physicians should carefully review the data released about their practice and be prepared to answer any questions patients may have. Additionally, if any demographic information about the practice is inaccurate (name, specialty, gender, etc.), steps should be taken to correct this data with NPPES.

Price transparency is a concept that is here to stay. This means it is vital that physicians are prepared to help guide policy makers in the process of determining how this information will be made available to the public. If physicians don't get involved, these decisions will likely be made without regard for their best interest and the best interest of their patients.

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To see this and other archived Broca's Area, please visit the Texas Neurological Society's website at www.texasneurologist.org

2014 Texas Medical Association Leadership College, Recap on A Year of Personal Growth

Eddie L. Patton Jr. MD, MS

I had the honor and pleasure this year to be a member of the 2014 Texas Medical Association Leadership College (TMA-LC). This wonderful opportunity was made possible through the support of the Texas Neurological Society (TNS). Having served on the board of the Texas Neurological Society in the position of resident and fellow section chair. I am constantly looking for ways to improve upon my leadership skills, as well as opportunities to serve the TNS. When I originally heard of the TMA Leadership College I immediately contacted alumni of the program to hear their experience. The majority of the feedback was in support of the effectiveness and design of the program. At that point, I had a strong desire to participate and gain more leadership experience. Going into the program I had two primary goals: first, to increase my participation in physician organizations and leadership, second, to acquire additional skills to be a physician leader.

The application process was clear and concise. Applicants were asked to explain why they were interested in becoming a member of the Texas Medical Association Leadership College. In addition, applicants were also required to present letters of recommendation, specifically from medical leaders in the state. Last, but not least, candidates were advised to identify a sponsoring organization. I am grateful to have had sponsorship provided by the Texas Neurological Society for my application and tenure.

The first meeting of the TMA Leadership College focused on personal growth and attendee networking. A number of different disciplines from all over the state were represented such as surgeons, pathologists, dermatologists, and OB/GYN's among others. After a welcome by the TMA president, we went right into a session on interpersonal effectiveness led by Larry Nieman of the Executive Development Group. Mr. Nieman and his company travel the country hosting team development and leadership training programs hoping to develop corporate and medical leaders. During this session, we reviewed our own Myers-Briggs personality assessment scores. We talked about different styles of leadership and how to use different modes of leadership specifically based on our personalities. The session involved numerous games and interactive tools. As we became more comfortable with one another we realize we all have a lot in common and there was a common bond that brought us all together for this experience. That bond was a desire to change medicine in the state of Texas for the better and to step up as the next wave of leaders in the Texas Medical Association. Another powerful instrument that helped us to learn more about ourselves was the Thomas-Kilmenn and conflict mode instrument. This too was a survey in which we learned how we particularly deal with conflict theory. The five categories included competing, collaborating, compromising, avoiding, and accommodating. It was both surprising and enlightening to find out our scores and which particular conflict strategy we were more in line with using. This also led to some very interesting conversations about conflict resolution and conflict theory.

The next session was held a few months later in Austin, Texas at the TMA headquarters. This session was focused more towards understanding the legislative side of medicine. There were talks on physician volunteerism, board essentials and the legal aspects of leadership. Clifford Moy, Texas Medical Association speaker of the house gave specific instructions on how the TMA functions. In addition, Dr. Moy and Dr. Michelle Berger, TMA's delegate to the American Medical Association, reviewed parliamentary procedures and the process of how to write a resolution and submit it to the Texas Medical Association. One interesting outcome of this session was that two of my fellow classmates came out of the session with an idea of an actual resolution. Their resolution was subsequently submitted and reviewed at the 2014 Tex-Med conference in Fort Worth, Texas.

Furthermore, a portion of this meeting consisted of media training, led by the Director of Media and Public Relations, Pam Udall and the Media Relations Manager, Brent Annear. We were interviewed on topics of our choice; these interviews were videotaped and played back to be critiqued by the experts as well as our classmates. We discussed how to effectively conduct an interview and how to be effective liaisons between the medical community and the general public. There were mock meetings with state legislatures, which were put on by the leadership of the Texas Medical Association. There were also informative talks on social media and how to use social media to promote the issues and inform the public. Following this session, the class began to collaboratively work towards addressing issues in the medical community that we all face. This session increased my knowledge on the legislative process tremendously.

The final session was held during the Texas Medical Association's Tex-Med conference, May 1-3, 2014 in Fort Worth, Texas. During this third and final session we got to see firsthand a combination of all the things we worked on the previous year. By attending reference committee meetings,

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we were able to follow resolutions as they went through the entire process of being "marked-up" before being presented to the House of Delegates. We attended the Young Physician meeting and, during this meeting, we were given a lecture on changes in medicine. Moreover, we attended the House of Delegates business meeting where policies were reviewed and voted upon. As a delegate of the Harris County Medical Society, I had voting privileges at the Tex- Med conference and my experience during the TMA Leadership College helped me gain a better understanding of the resolutions I voted on as well as their potential implications.

We concluded the meeting with a graduation ceremony. During this ceremony, each graduate reflected upon their own experience and what they took from the program. Our individual projects were discussed with the group. These projects were based on each individual's particular interest. For instance, the project I submitted was a blog post to TMA's website discussing the importance of legal documentation such as Durable Power of Attorneys and Health Care Proxy, particularly in individuals who have dementia.

As I reflect upon this past year as a member of the 2014 TMA Leadership College, I must say this has been one of the most rewarding experiences of my career. Due to this meeting, I am far on my way to accomplishing the leadership goals I set before the program began. One of the greatest outcomes of this program was the ability to network and to meet my fellow classmates. The class of 2014 is a phenomenal class of physician leaders from all over the state. We will continue to communicate and work together to positively impact health care in the state of Texas. The leaders in training will one day step up to grab the reins and continue the great work of this organization. I am very proud to be an alumni of the 2014 class, and I look forward to using the connections, skills, and information I gained over this past year to be a more effective contributor to the Texas Neurological Society as well as the Texas Medical Association.

Please note:
A special thanks to Christina Shepherd as TMA program coordinator. She did an awesome job!

Thank you to our supporters of the 17th Annual Winter Conference

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New Driving Rules For Texas

Sara Austin, MD

The Medical Advisory Board for Texas has just updated the driving rules for our patients. The last revision was almost 25 years ago, so it was TIME. You will need to know the changes so that you can advise your patients. All of the rules were reviewed, including those pertaining to cardiac, neurologic, and endocrinologic diseases. A section on dementia was added, excessive drowsiness while driving was updated, and the seizure section underwent significant changes to better reflect current knowledge (there is now a three month driving restriction for most new seizure patients instead of six months and nocturnal seizures are no longer an exception).

For detailed information, please go to the slides from my lecture from the Winter Conference available on our web site, www.texasneurologist.org. The link to the guide itself is also available on the TNS website. The DPS will eventually have the guide on their website, but it is not available yet.

I would like to especially thank the TNS member physicians who helped with the neurological disease section. This was a significant amount of work and time commitment. Many thanks to Dr. Jeremy Slater (epilepsy), Dr. Robert Fayle (sleep), Dr. Paul Schulz and Dr. Jacqueline Phillips-Sabol (dementia), Dr. Ronald DeVere (dementia), and Dr. John Lincoln (MS). I am hoping that the guide better reflects current scientific knowledge (when it is available), and that it is also more in line with physician's practical recommendations.

Expert Opinion

Case report and discussion of nonketotic hyperglycemic hemichorea

Shila Azodi

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CASE REPORT:

A 60-year-old male with very poorly controlled diabetes mellitus and history of adenocarcinoma of the lung in remission for two years presented to the emergency department with lethargy and confusion. He was admitted with blood glucose of 725 mg/dL and urinalysis showed no ketones. He was initially treated with intravenous fluids and his blood glucose dropped to 200 mg/dL. The neurology team was consulted to see this patient with concern for choreiform movements noted in the left upper and lower extremities.

The patient endorsed having movements in his left lower extremity for two months first noted during the daytime then also keeping him up at night. He did not feel limited in ability to walk or complete ADLs due to leg movements. They were intermittent and the sudden jerking, irregular movements lasted 1-2 seconds involving his thigh, leg, and foot muscles. He did not have an urge to move his legs and did not feel the need to walk or move due to the jerks. Then about one week prior to admission, patient noted irregular, jerking movements also appeared in his left shoulder, arm, and hand. He had no involvement of the right side of his body.

Regarding patient's medical history, diabetes mellitus was initially diagnosed with presentation of diabetic ketoacidosis in 2003. He had a hemoglobin A1c of 7.3 percent on 10/8/2011. In the year prior to his presentation he had not been taking oral hypoglycemic and insulin as prescribed. Patient had 25 pack year smoking history and was treated in 2011 with right upper lobe resection for adenocarcinoma. He also received cisplatin and vinorelbine chemotherapy for pleural involvement. He had regular follow up with oncologist, most recently 8/2013 with no recurrence of tumor. Family history was notable for having no information regarding his father and early death of two brothers at young age, one at age 35 due to an accident and the other at age 40 due to myocardial infarction. Otherwise, there was no neurodegenerative disease or movement disorder in family members.

On general exam, patient was thinly built and moderately nourished with frequent choreiform movements in the left upper and lower extremity. During the interview he was noted to attempt to disguise with movements with rubbing his ear or smoothing his hair. He had normal cranial nerve, strength exam. He had very dry skin of bilateral lower extremities and stocking-glove distribution of loss of pin and vibratory sensation.

Differential diagnosis of choreiform movements in this patient at time of presentation was very broad and included Huntington's disease, stroke, paraneoplastic syndrome including anti-CRMP-5 antibodies, autoimmune disease such as lupus, HIV, neuroacanthocytosis, Wilson's disease, and metabolic from hyperglycemia. Initial labs were unremarkable except for mildly low hemoglobin of 12.6 g/dL and previously range of blood glucose from 50 to 700 mg/dL. Laboratory work up revealed normal number CAG repeats in huntingtin gene, negative paraneoplastic panel, negative anti-NMDA receptor antibody titer, negative antinuclear antibodies, negative HIV, normal peripheral blood smear, and normal ceruloplasmin. His hemoglobin A1c was reported as >18.5 percent.

He had an MRI of the brain that showed no abnormality (see Figure 1). Other imaging studies included MRI of the left brachial plexus showing no tumor infiltration. He had a CT of the chest abdomen, and pelvis that showed no lymphadenopathy or tumor. Other diagnostic test included EEG that showed no epileptiform discharges. Dermatologic consultation confirmed dry skin that resolved with topical treatment.

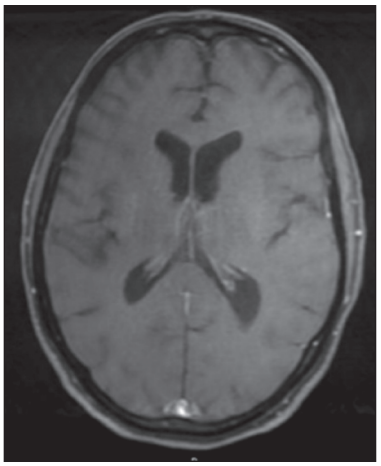

Figure 1. MRI brain 3/19/2014. Post-contrast T1 image shows no irregular enhancement or hyperintensity.

The patient was diagnosed by process of elimination with nonketotic hyperglycemic hemichorea and recommendations were made to control his blood glucose. His chorea worsened with more frequent movements and attempts of treating with clonazepam and quetiapine did not show improvement. His blood glucose was very sensitive to insulin and was difficult to control.

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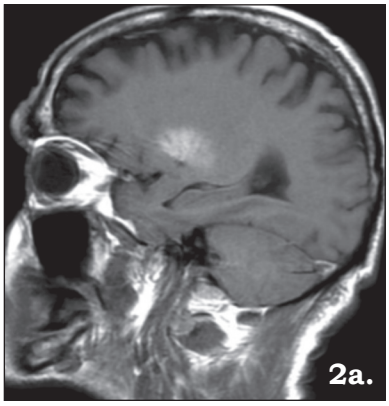
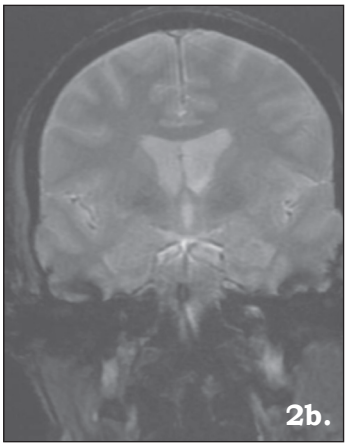
Patient was discharged from hospital with endocrinology follow up. He presented again to the hospital with worsening chorea and underwent repeat MRI brain that is shown in Figure 2. These findings confirmed diagnosis of nonketotic hyperglycemic hemichorea.





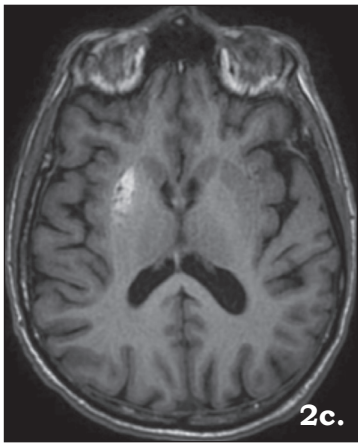


Figure 2. MRI brain 4/24/2014Since 03/19/2014, abnormal T1 hyperintensity has developed in the right right putamen, axial (a) and sagittal (b). Little or no associated signal alteration can be identified on other pulse sequences, GRE (c).

DICUSSION:

Nonketotic hyperglycemia is a relatively rare cause of chorea. Literature review produces case reports (1, 2) and case series (3, 4) of this entity. Of note, all of the cases reviewed had abnormal CT head or MRI with hyperintensities in a basal ganglia structure at time of presentation. Given that our patient had an initial normal MRI it was imperative that we investigate other possible etiologies of chorea given that correct diagnosis is essential to appropriate genetic counseling and therapy (5).

The differential diagnosis for chorea is extensive and a general list is provided in Table 1. The extensive work up in our patient is reviewed in the case report. Given our patient's prior cancer history we investigated a paraneoplastic syndrome as a potential etiology. Anti-CRMP-5 antibody (6) as well as anti-NMDA receptor antibody has been described in presentation with movement disorders.

Category	Diagnosis
Vascular	Basal ganglia stroke
Autoimmune	Lupus, Antiphospholipid antibody syndrome, Sydenham chorea, celiac disease
Infectious	HIV, Creutzfeldt-Jacob disease
Neoplastic/Paraneoplastic	Tumor, paraneoplastic syndrome
Genetic	Huntington's disease, Wilson's disease, neuroacanthocytosis, Lesch-Nyhan syndrome, mitochondrial disease
Metabolic	Hyper/hypoglycemia, hyper/hyponatremia, hypomagnesemia
Medications/Drugs	Prochlorperazine, metoclopramide, atypical antipsychotics, crack cocaine

Table 1. Etiologies of chorea.

Nonketotic hyperglycemia has been most often reported in postmenopausal women (1). Treatment of the diabetes has been reported to reverse the movement disorder although it may recur or persist. The imaging finding of T1 hyperintense basal ganglia structures, most commonly the contralateral putamen, is thought to reflect breakdown of the blood brain barrier due to inflammation, edema, or ischemia (5). The pathogenesis of hyperglycemic hemichorea is not well understood although depletion of GABA in the basal ganglia leading to excess excitatory cortical output is hypothesized (1, 2).

Treatment of hyperglycemic hemichorea ultimately depends on blood glucose control. If patients continue to have debilitating movements, options for pharmacotherapy include clozapine, quetiapine, amantadine, carbamazepine, benzodiazepines (4,5).

Our case report is unique in that the patient did not have abnormal findings on the initial MRI brain. If the diagnosis is suspected, repeat imaging is warranted to confirm diagnosis.

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