Selected Scientific Highlights of AAN Annual Meeting

Hundreds of neurologists made their way to Miami Beach last month to share their knowledge with colleagues and learn about the latest advances at the American Academy of Neurology's 57th Annual Meeting. A few highlights from the meeting:

- Could something as simple as regular use of NSAIDs reduce the risk of developing Parkinson's disease? That's what one large study from the Michael J. Fox Foundation concluded. The study tracked 146,948 participants, including 413 Parkinson's cases, over 8.5 years and noted that routine use of ibuprofen lowered PD risk by 35 percent, regardless of other factors such as age, gender and smoking status. Results were dose-dependent, with those on daily regimens achieving slightly better results (38 percent risk reduction). The Harvard researchers who conducted the study didn't speculate on the possible mechanism of action.

- A new step in headache treatment may entail referring the patient to a dietician for a weight-loss plan. Marcelo E. Bigal, MD, PhD and colleagues at the Albert Einstein College of Medicine studied data on height and weight assessments of 30,850 people who have had at least one severe headache attack. They found that chronic daily headache is more prevalent in patients who were obese (BMI 30 or greater) and morbidly obese (BMI 35 or greater) and that patients in this population reported severe more often than the underweight, normal weight, and overweight groups.

- Low BMI may reduce headache incidence but, unfortunately, older patients who start slimming down may be on the way to developing Alzheimer's. Researchers from Chicago's Rush University studied 918 Catholic clergymen over 5.5 years and found that, in a model adjusted for age, gender and education, the risk of developing AD seemed to increase by five percent for each point on the Body Mass Index scale the patients lost. The team concluded this weight loss could be associated with the pathologic process of the condition.

- Taking MRI scans of the hippocampus may help predict which mild cognitive impairment patients are at risk for developing Alzheimer's if the MRI is used in conjunction with other tests. A study from the Mayo Clinic College of Medicine compared the MRIs from 205 subjects and found the condition appeared to be related to the ApoE4 carrier status, delayed recall learning and hippocampal volume. The authors concluded this information could be useful when work begins to better diagnose AD in early stages.

- Alzheimer’s medications are at least somewhat useful at many stages of the disease. Donepezil (Aricept) appears to have a noticeable effect on the daily activities of patients with severe Alzheimer’s. A randomized, placebo-controlled trial of 145 patients found that the caregivers of treated patients reported their charges were more likely to interact with them and others and appear interested in conversations.

- In a separate study, patients with a moderate-to-severe form of the disease who were given memantine (Namenda) appeared to be significantly less agitated than those in the control group. Cholinesterase inhibitors even offer some benefit even in the early stages of dementia. A study to be published in the June 9th issue of New England Journal of Medicine showed that donepezil treatment delayed conversion of MCI to AD during the first year of treatment.

- Patients who are suffering from seizures caused by a brain tumor might benefit more from levetiracetam (Keppra) than from other anticonvulsant drugs. Researchers from the Cleveland Clinic said this treatment could be more useful because it is not metabolized in the liver and, after maintaining 278 patients on treatment for three years, found that 70 percent could use it as a monotherapy. In a separate study from Ohio State University, 87 percent of 41 patients had an overall seizure reduction from the treatment, including 59 percent who were seizure-free.

- Although it’s too soon to tell if natalizumab (Tysabri) will ever return to the market, the latest research on it is favorable. A two-year trial of 942 patients found that the treatment reduced the risk of greater disability by 42 percent compared to placebo, cut relapse rates by 67 percent, and reduced the mean number of new lesions by 76 percent. Another study found that in vivo treatments result in diminished VLA-4 functional expression in immune cells, this giving the treatment a biological ‘proof of concept’ that it was effective.

- WE MOVE launched a public education campaign called “Life in Motion.” This coalition of more than 40 professional and patient advocacy groups aims to raise awareness of movement disorders. Patient education brochures are available at www.life-in-motion.org.
Predictions for Medicare: Patients Pay More, Doctors Make Less

Neurologists who rely on Medicare-based reimbursements for the bulk of their reimbursements breathed a sigh of relief last year when anticipated payment cuts were actually replaced by small increases. But that joy was tempered by the knowledge that rates are scheduled to start declining by five percent every year starting in 2006, resulting in a cumulative reduction of 26 percent by 2011. Paradoxically, patients will be paying more in higher co-pays toward their premiums while the doctors they see are earning less.

The American Medical Association has launched a legislative advocacy movement to fight the cuts, saying that if these go into effect, payment rates will be little more than half of what they were in 1991 after adjusting for cost inflation, which is especially taxing when one considers how the recent increases are still lagging behind the rise in practice overhead costs. The AMA is specifically targeting the Sustainable Growth Rate, the formula that payments are based on, because it does not take into account the rise in practice costs. A survey among AMA members also showed that this cut could result in physicians reducing the number of Medicare patients they accept. For more information, go to www.ama-assn.org and click on “Advocacy Efforts” under “AMA Agenda.”

However, premiums are expected to rise sharply for Medicare patients themselves. Due to doctors seeing their patients more frequently, doing more tests and providing more in-office drugs than Medicare expected, those who pay 25 percent of their costs for non-hospital care (Part B) have had to pay 17 percent more this year, to $78.20 per month, and may have to pay 12.1 percent next year, to $87.70 per month. However, since the spending on doctor’s services rose 15 percent in 2004, more than the 12 percent expected, patients may be paying $89.20 a month next year. This could undermine the AMA’s efforts to stop the proposed payment cuts to physicians, since helping senior citizens is more politically attractive than helping physicians.

The AMA says Medicare should recognize the fact that conditions that used to require hospitalization are now being treated in physicians’ offices at a lower cost to the government, yet Medicare seems to be penalizing the medical community for these advances instead of rewarding them. PN

**SHORT TAKES**

- **Breaking the (Three-Hour) Window.** Whether or not tPA can be administered more than three hours after stroke is a hotly debated subject in the vascular care community, but taking a scan of the patient may help determine whether or not it’s worth the risk. Investigators at the Universitat Autonoma de Barcelona examined patients who presented over three but fewer than six hours after stroke onset with MRI with DWI compared to PWI, then administered tPA to 79 patients with a DWI/PWI mismatch of more than 50 percent. Treated patients in the study achieved results comparable to those given tPA during the three-hour window in terms of recanalization rates at two hours, hemorrhagic transformation rates, and improvement as well as functional independence at three months. (Stroke 2005;36:620-606)

- **Getting Alzheimer’s Number.** Deciding which patients would benefit from cholinesterase inhibitor therapy is a hard call, but a neuropsychological test may help distinguish the cases where it is warranted. A study conducted at the University of Dundee found that patients with a Digit Symbol Substitution Test score of 18 or higher and a CT-scan measure of medial lobe thickness showed improvement with the treatment. However, the study’s authors advised being cautious about using these two techniques as actionable findings until the results are repeated in larger trials. (J Neurol Neurosurg Psychiatry 2005;76:305)

- **Botox Ready for Phase III.** After another clinical trial demonstrated its efficacy over placebo in headache treatment, botulinum toxin type A (Botox) may be ready for phase III trials. This most recent trial, reported in the April 2005 online edition of Headache, involved 355 patients who suffered from chronic daily headache. Those treated with Botox experienced an average of 7.1 fewer headache attacks during a 30-day period after six months of treatment, compared to a 3.7 reduction in the placebo arm. After the study was completed, Allergan announced it will move forward with a large-scale phase III trial, scheduled to begin later this year.

- **Ab-Fab Rehab.** Even though patients over 85 may have a lower success rate for stroke rehabilitation than those a few years younger, it may still be worthwhile to have them go through a rehab program. A prospective study reported in J Rehabil Res Dev 2005;42:27-54 compared two groups of patients, one of over 85-year-olds and a younger group, and found respectively 40 and 52 percent of each arm achieved successful rehabilitation, defined as a score of 80 or higher on the Functional Independence Measure.

- **Uncle Sam Gets Stents.** In March, the Centers for Medicare and Medicaid services...
FDA Getting More Strict on AED Labeling

Neurologists have known for some time that anti-epilepsy drugs can have a wide range of potentially harmful side effects. Now the Food and Drug Administration, which is working hard to repair its image after the Vioxx debacle, may be calling for more prominent warnings on AED labels. It has also asked Congress for the authority to dictate what drug labels will read, and while the future of that request remains uncertain it is a safe bet that we’ll see more caveats on many prescriptions used to treat tricky conditions such as epilepsy.

Novartis’s oxcarbazepine (Trileptal) will get a new warning about its label for possible life-threatening skin reactions. These problems include toxic epidermal necrolysis and Stevens-Johnson syndrome, reported in both children and adults at a rate three to 10 times higher than seen in the general population. The company has advised physicians treating patients with this drug to consider discontinuing it if a skin reaction develops and switch to another AED.

The FDA is also demanding that makers of all epilepsy drugs re-evaluate their clinical trial data over the next six months. This action was prompted by a personal injury lawyer’s claim that gabapentin (Neurontin) boosts the risks of suicide and the treatment should come with a prominent warning to that effect on its label. Pfizer released a statement saying it would comply with the FDA’s request to review its gabapentin data. It also said it maintains an extensive tracking program for its products and its data refute any possible connection between the drug and depression, suicidal thoughts or suicidal behavior. PN

announced that the cost of carotid artery stenting was now covered for patients with at least a 70 percent blockage in either carotid artery. While the government was unable to calculate how many patients this would include, most specialists note it would not apply to the majority of patients treated with carotid stenting.

Rethinking AEDs. It’s commonly known that some of the older epilepsy drugs can have adverse cognitive effects, but how about the newer ones? A study in Neurology 2005;64:792-798 compared topiramate and gabapentin versus placebo in 40 volunteers. The results showed three possible biomarkers that could form something of a “molecular footprint” specific to the MS patients.

Beta Test. You may want to think twice before authorizing any refills for patients who are taking a beta-blocker and a diuretic to control their blood pressure and reduce stroke risk. A presentation at the American College of Cardiology revealed results from a 20,000-patient, Pfizer study that reported patients taking amlodipine besylate (Norvasc) and perindopril erbumine (Aceon) had their risk of stroke cut by 25 percent when compared to atenolol and a diuretic pill. The study also found “a substantial excess” of new diabetes cases in the beta-blocker group.

Footprints in Blood. A distinct sign in blood serum could be an indicator of multiple sclerosis if the data from a pilot study can be replicated. This research, reported in J Mo Neurosci 2005;2:83-190(8), compared serum samples of 25 relapsing/remitting MS patients with 25 control subjects using matrix-assisted laser desorption/ionization-time of flight mass spectrometry. The results showed three possible biomarkers that could form something of a “molecular footprint” specific to the MS patients.

King of Pain. Tiagabine (Gabitril), already a well-known part of the epileptologist’s treatment arsenal, may be used for pain management in a few years. In a study of 20 patients with complex regional pain syndrome type I who were given the treatment in escalating doses, 40 percent of patients reported a greater than 70 percent reduction in symptoms; another 40 percent had a 50 to 70 percent reduction. (Am J Pain Manage 2005;15:66-70)

Peace of Mind. Parkinson’s patients who use levodopa in conjunction with tolcapone (Tasmar) and are worried about hepatic effects can get peace of mind thanks to the Tasmar Liver Monitoring Program now offered by Valeant Pharmaceuticals, which enrolls all tolcapone patients regardless of insurance coverage. A recent study by Ray Watts, MD showed that routine liver monitoring has allowed for a five-fold decrease in the incidence of severe liver-related adverse effects since the FDA implemented new liver monitoring guidelines in 1998.