



Anger, Disappointment in the Wake of Stem Cell Research Veto

Ethicists, scientists, physicians and patient advocates all supported it. Actor and Parkinson's disease sufferer Michael J. Fox made an impassioned plea for it. Gallup polls show that 61 percent of the American public believe using stem cells from human embryos is morally acceptable, and more than half of the House of Representatives backed a measure to allow fertility clinics to donate frozen embryos to researchers instead of destroying them.

But the dream of new sources for stem cell research was not supported by the one person with the power to stop it. On July 19th President George W. Bush signed his first veto to defeat the measure, and afterwards said in a press conference, "It crosses a moral boundary that our decent society needs to respect." The House attempted to override the measure immediately afterwards but failed to gain a two-thirds majority, effectively leaving the legislation dead on the floor.

One of the most critical reactions to Bush's veto came from Arthur Caplan, PhD, Director of the Center of Bioethics at the University of Pennsylvania. In a commentary for www.msnbc.com titled "Bush to Stem Cell Community: Drop Dead," he attacked Bush's reasoning, writing that it made no moral sense to allow research to continue from embryos already destroyed and *not* allow it for embryos headed for destruction. "Not only was Bush's science wrong, the ethics behind his so-called compromise were deeply flawed, too," he writes.

Many advocates of ongoing research also publicly expressed their disappointment. Sean Tipton, President of the Coalition for the Advancement of Medical Research, said that the more than 100 million Americans suffering from Alzheimer's, Parkinson's, spinal cord injuries and other debilitating disorders and their caregivers "will remember this day as the day their president signed away their right to life, liberty and the pursuit of happiness." In a letter to *The*

Oregonian, Portland neurologist Kirk L. Weller, MD wrote, "Because of Bush's scientific illiteracy and very hypocritical moral crusade, we are asked to deny hope for millions who are actively suffering." But William B. Hurlbut, MD, Professor of Neurology at Stanford University and a member of the President's Council of Bioethics, was quoted in the *Stanford Daily* as saying the veto was "predicted, and consistent with the president's campaign promise and longstanding policy."

While there may be no new support or funding coming from DC, there may yet be progress made through other sources. California governor Arnold Schwarzenegger approved a loan of \$150 million to strengthen his state's research initiatives, and the European Union voted to continue funding research through 2013 under rules that prevent human cloning and destroying embryos despite public opposition from the Vatican. **PN**

SHORT TAKES

■ **Picture Perfect Neuroimaging.** Those who consider themselves skilled at interpreting images of the brain will soon have a way of certifying their expertise. The United Council for Neurologic Subspecialties has approved neuroimaging as its sixth member, the first step towards accreditation and certification. The UCNS Accreditation Council will now work to develop the requirements for fellowship programs to improve the uniformity of training opportunities.

■ **The Opening Line on Dementia.** A new test reported in the August 3rd online edition of *The Lancet Neurology* may help physicians determine a patient's risk of dementia. A test

developed at the Aging Research Center at the Karolinska Institutet in Stockholm compares such factors as age, education levels, hypercholesterolemia, hypertension and obesity, and was based on data from a longitudinal population-based study. While the results may only be able to deliver a quantitative estimate of the probability of a patient developing dementia, the authors say it can help raise awareness about factors that raise the risk.

■ **Just Add Lamotrigine.** Children with primary generalized tonic-clonic seizures may benefit from having lamotrigine (Lamictal) added to their treatment regimen. A randomized, double-blind placebo-controlled study found that, in a subgroup analysis of 45 patients age two to 20 years with PGTC seizures, adding lamotrigine as a second or third AED was associated with a 77 percent

median decrease in episodes compared to 40 percent in the control group. The adverse effects profiles were also similar in both groups, indicating that the treatment is well tolerated. (*Pediatrics* 2006;118:e371-e378)

■ **tPA A-OK for Older Patients.** Odds are there won't be many ischemic stroke patients over the age of 80 who are not contraindicated for tPA, but for those who are free from these can receive the injection safely. A study reported in *J Neurol Neurosurg Psychiatry* 2006;77:826-829 found that there was no significant difference in the risk of symptomatic intracerebral hemorrhage between patients over the age of 80 and those under that age. However, older patients were more likely to have atrial fibrillation, hypertension, or heart disease and also tended to have more severe episodes.

New Treatments, Directions for Alzheimer's Research Revealed at ICAD 2006

It may be best known for its architecture and nightlife, but from July 15th to the 20th, the city of Madrid was renowned as the meeting place for Alzheimer's disease experts from both clinical and academic settings. The 10th Annual International Conference on Alzheimer's Disease and Related Disorders drew more than 5,000 attendees from 50 countries to share the results of their research and experiences with patients. Some highlights of the meeting include:

- An international study showed that a once-daily rivastigmine transdermal patch (Exelon Patch) may be just as effective as the twice-daily capsule of this medication. The Investigation of Transdermal Exelon in Alzheimer's disease (IDEAL) study was a 24-week, multi-center, randomized, double-blind, placebo- and active-controlled trial that compared the efficacy and tolerability of both forms of this treatment and found

the benefits quite similar, with patients on the patch actually reporting nausea and vomiting less often.

- A trial conducted a year ago showed that donepezil (Aricept) can slow the rate of cognitive decline in patients with mild cognitive impairment, and an adjunct study from the Mayo Clinic in Rochester, MN shows that the change is visible. A series of MRIs of 131 patients with mild cognitive impairment that started with a baseline measurement before vitamin E, donepezil or placebo was administered showed that those treated with donepezil showed less shrinkage of the hippocampus among carriers of ApoE-4.

- When a female AD suspect presents for an examination, it may be helpful to ask if she has been losing weight lately. A case-controlled study from the Mayo Clinic in Rochester looked at data from 560 patients with as many as 30 years of follow-up and found that weight in

women seemed to drop years before full onset occurred. At 30 years the average weight for this population was 140 pounds 30 years before the diagnosis, but this dropped to 136 ten years before diagnosis and 128 at onset. A similar change was not seen in the male patients.

- Working on the theory that abnormal handling of essential brain metals (copper, zinc and iron) may cause beta-amyloid to become sticky and lead to oligomers and neurotoxicity, researchers at the Mental Health Research Institute of Victoria in Australia examined the efficacy of a next-generation metal complexing agent (PTB2) in murine models. They reported that the brains of 15-month-old transgenic Alzheimer's mice treated for nine weeks with 30mg/kg PTB2 showed a 50 percent reduction in both soluble and insoluble beta-amyloid levels and in the number of plaques as well. **PN**

SHORT TAKES

■ **A Shot of Keppra.** Epilepsy patients who may not be able to take the oral form of levetiracetam (Keppra) now have a new way of receiving the treatment. On August 2nd the FDA approved UCB Pharma's application for an intravenous form of levetiracetam, which must be diluted prior to use. Keppra is approved as an adjunctive therapy for partial onset seizures in adults and children four years old and older with epilepsy.

■ **Risk Raiser.** It has been suspected for a long time that an atrial septum aneurysm may significantly raise the risk of multiple ischemic lesions in PFO patients, and a study in *Stroke* 2006;37:2030-2034 quantifies how dangerous

this combination is. Researchers at the University Hospital in Basel Switzerland looked at the data from 48 consecutive patients with cryptogenic ischemic stroke associated with PFO and found that multiple lesions appeared 53 percent of the time in patients with PFO and atrial septum aneurysm compared to 17 percent for those with PFO alone. The study's authors suggested more randomized trials be conducted for PFO treatment comparing closure to medical therapies to optimize therapy for this population.

■ **Caring About Apathy.** A key difference between Parkinson's and adult-onset idiopathic dystonia may lie in whether or not the patient experiences apathy. A study in *Neurology* 2006;67:33-38 compared 80 PD patients to 20 patients with adult-onset idiopathic dystonia and found that 51 percent of the PD patients

suffered apathy compared to 20 percent of those with dystonia. In addition, 29 percent of the PD patients had apathy without depression, which was absent in the dystonia patients.

■ **Heart of the Matter.** Older women who experience migraine with aura may be at a higher risk for cardiovascular conditions such as stroke, myocardial infarction, angina, according to a prospective cohort study published in *JAMA* 2006;296:283-291. The data from 27,840 women aged 45 years and over who were free from angina and cardiovascular conditions at the start of the Women's Health Study found that those who reported active migraine with aura had a multivariable-adjusted hazard ratio of 2.15 for major CVD, 1.91 for ischemic stroke, and 2.08 for myocardial infarction. Those who reported migraine without aura did not have an increased risk for vascular events or angina.