

# HIGHLIGHTS FROM INTERNATIONAL NEUROSCIENCE MEETINGS

## *American Academy of Neurology AAN 62nd Annual Meeting Toronto, Ontario, Canada, April 10th - 17th 2010*

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The 2010 Annual Meeting of the American Academy of Neurology (AAN) was held in Toronto, Ontario, Canada, April 10-17, 2010, where over 10,000 professionals gathered to discuss the latest findings in neurological research. The program included Integrated Neuroscience sessions, Awards Plenary sessions, Clinical Trials Plenary sessions, a Hot Topics session, Contemporary Clinical Issues and Case Studies, and a Late-Breaking Science program.

### *Hot Topics*

#### *Stroke Highlights*

- \* **CREST shows similar net safety and efficacy with stenting versus endarterectomy for carotid stenosis.**

“Results of the CREST (Carotid Revascularization Endarterectomy versus Stenting Trial) just reported at the International Stroke Conference in San Antonio, TX, revealed that carotid stenting had similar long term results to carotid endarterectomy in symptomatic and asymptomatic patients with carotid artery disease. The composite endpoint of stroke, MI, or death was 7.2% with stenting vs 6.8% with carotid endarterectomy, a nonsignificant difference.”

Update on Endovascular Treatment of Cerebrovascular Diseases. Program and abstracts of the AAN 2010 Annual Meeting; April 10-17, 2010; Toronto, Ontario, Canada. Session 3AC.004.

Wilner A. Stent or Carotid Endarterectomy? Cardiologists Smile After CREST. Neuro Notes. Medscape Blogs. 2010 Feb 28. Available from: <http://blogs.medscape.com/neuronotes>

Jeffrey S. CREST Trial Published, but Debate Continues on Stenting vs Surgery for Symptomatic Carotid Disease. Medscape Today. 2010 May 26. Available from: <http://www.medscape.com/viewarticle/722535>

#### *Brain Death in Adults*

- \* **New AAN guideline on determining brain death provides more clarity and direction**

“The new AAN guideline is an improvement over the 1995 guideline and examines recent studies on clinical determination of brain death,” said lead guideline author Eelco Wijndicks, MD, PhD, with the Mayo Clinic in Rochester, Minn. and Fellow of the American Academy of Neurology. “The brain death diagnosis can be made only after a comprehensive clinical evaluation and often involves more than 25 separate assessments. The new guideline includes a checklist that will help doctors with this diagnosis.”

American Academy of Neurology. New AAN Guideline on Determining Brain Death Provides More Clarity and Direction. Press Release. June 7, 2010. Available from: <http://www.aan.com/press/index.cfm?fuseaction=release.view&release=842>

Wijndicks EF, Varelas PN, Gronseth GS, Greer DM. Evidence-based guideline update: Determining brain death in adults Evidence-based guideline update: Determining brain death in adults. *Neurology* 2010; 74: 1911-1918. Available from: <http://www.neurology.org/cgi/content/full/74/23/1911>  
AAN Practice Guidelines & Tools. Available from: <http://www.aan.com/go/practice/guidelines>

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## \* New tool may help improve organ donation rates

“For the study, Yee and his colleagues analyzed the information from all patients during a seven-year period from the neurologic intensive care unit at the Mayo Clinic whose life support was withdrawn. Those who were brain dead or who did not have support for breathing were not included in the study.” “The study identified four factors that make it more likely that a person with irreversible brain damage will be a candidate for organ donation. The four factors are: no corneal reflex, no cough reflex, no motor response or extensor motor response, and high scores on the oxygenation index.”

American Academy of Neurology. New Tool May Help Improve Organ Donation Rates. Press Release. 2010 26 April. Available from: <http://www.aan.com/press/index.cfm?fuseaction=release.view&release=838>

Yee AH, Rabinstein AA, Thapa P, Mandrekar J, Wijdicks EF. Factors influencing time to death after withdrawal of life support in neurocritical patients. *Neurology* 2010; 74: 1380-1385.

## *Behavioural/Cognitive Neurology*

## \* Memory may decline rapidly even in stage before Alzheimer's disease

“Memory and thinking skills may decline rapidly for people who have mild cognitive impairment, which is the stage before Alzheimer's disease when people have mild memory problems but no dementia symptoms, and even more rapidly when dementia begins, which is when Alzheimer's disease is usually diagnosed.” “These results show that we need to pay attention to this time before Alzheimer's disease is diagnosed, when people are just starting to have problems forgetting things,” said study author Robert S. Wilson, PhD, of Rush University Medical Center in Chicago.”

American Academy of Neurology. Memory May Decline Rapidly Even in Stage Before Alzheimer's Disease. Press Release. 22 March 2010. Available from: <http://www.aan.com/press/index.cfm?fuseaction=release.view&release=816>

Wilson RS, Aggarwal NT, Barnes LL, Mendes de Leon CF, Hebert LE, Evans DA. Cognitive decline in incident Alzheimer disease in a community population. *Neurology* 2010; 74: 951-955.

## *Multiple Sclerosis*

\* Children less than 11 years may have clinical and radiological manifestations of MS different than older and younger adults. (AAN course update on multiple sclerosis basic science and clinical)

\* Long awaited oral therapy is on the market, but still post marketing analysis and test of time on their efficacy is awaited. It is unlikely that there will be head to head trials against current immune modulating agents, which remain the mainstay of treatment.

\* Little doubt now that MS is a heterogenous disease with significant grey matter involvement and axonal loss with different clinical presentations at times.

\* Clinical and radiological correlation with conventional MRI is not always linear. Often T2 lesions merely represent blood brain barrier leakage. Magnetic transfer resonance imaging is a new promising modality for brain tissue integrity.

Update on Update on Multiple Sclerosis. Program and abstracts of the AAN 2010 Annual Meeting; April 10-17, 2010; Toronto, Ontario, Canada. Session 2AC.003.