



## In Focus

### Spotlight on the May 20 Issue

**Robert A. Gross, MD, PhD, FAAN**  
Editor-in-Chief, *Neurology*<sup>®</sup>



#### **Amyloid and APOE $\epsilon$ 4 interact to influence short-term decline in preclinical Alzheimer disease**

The investigators found that clinically normal individuals who were APOE  $\epsilon$ 4+ and had evidence of  $\beta$ -amyloid accumulation were at highest risk for cognitive decline. Although APOE  $\epsilon$ 4 and  $\beta$ -amyloid were related, these risk factors were not redundant contributors of decline in aging but rather interacted to promote decline during the follow-up period of this study.

See p. 1760; Editorial, p. 1756; See also p. 1768

#### **Brain reserve and cognitive reserve protect against cognitive decline over 4.5 years in MS**

Patients with MS with larger maximal lifetime brain growth (estimated with intracranial volume) had less decline in cognitive efficiency, and patients with greater intellectual enrichment (estimated with vocabulary) had lower risk for decline in both cognitive efficiency and memory. Identification of patients with MS at risk for future cognitive decline will support early intervention and preventive treatment.

See p. 1776

#### **CSF A $\beta$ <sub>42</sub> predicts early-onset dementia in Parkinson disease**

In patients with incident Parkinson disease, low CSF levels of A $\beta$ <sub>42</sub> at diagnosis predicted an increased risk for progression to dementia. This finding suggests that measuring CSF A $\beta$ <sub>42</sub> may be a possible test to identify patients with Parkinson disease at high risk for early dementia, along with targeting A $\beta$  pathology to halt progressive cognitive decline.

See p. 1784

*From editorialists Siderowf & Logroscino: "...there is a need to refine the predictive ability of biomarkers, particularly the positive predictive value given the moderate short-term incidence of PDD, possibly by further characterizing the relationship between CSF A $\beta$  and other biomarkers in living patients."*

See p. 1758

#### **Risk of cerebral arteriovenous malformation rupture during pregnancy and puerperium**

The authors determined whether the risk of arteriovenous malformation rupture increased during pregnancy and puerperium in 979 female patients with intracranial arteriovenous malformations. Of the 979 women, 797 hemorrhages occurred during 25,578 patient-years of follow-up, yielding an annual hemorrhage rate of 3.11%. However, the risk of cerebral arteriovenous malformation rupture does not increase during pregnancy and puerperium.

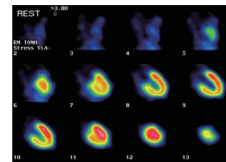
See p. 1798

#### **Separate prediction of intracerebral hemorrhage and ischemic stroke**

The authors developed 10-year cumulative incidence functions for intracerebral hemorrhage (ICH) and ischemic stroke (IS) using stratified Cox regression and competing risks analysis. High total cholesterol to high-density lipoprotein cholesterol ratio decreased the ICH rates but increased IS rates in both models. These functions can be useful in specifying an individual's stroke risk.

See p. 1804

#### **Brugada syndrome in spinal and bulbar muscular atrophy**



Two independent cardiologists evaluated ECGs from a total of 144 consecutive participants with spinal and bulbar muscular atrophy. Abnormal ECGs were detected in 70 participants (48.6%). The accumulation of the pathogenic androgen

receptor may play a role in the myocardial involvement in spinal and bulbar muscular atrophy.

See p. 1813

#### **DPAGT1 myasthenia and myopathy: Genetic, phenotypic, and expression studies**

This study shows that the combination of intellectual disability and myasthenia points to a defect in protein N-glycosylation. Detailed investigations revealed involvement of multiple measures of neuromuscular transmission and decreased expression and activity of DPAGT1, with neuromuscular symptoms of congenital glycosylation disorders accessible to therapy.

See p. 1822

*NB: "Possible role of the basal ganglia in poor reward sensitivity and apathy after stroke," see p. e171. To check out other Resident & Fellow Journal Club submissions, point your browser to [Neurology.org](http://Neurology.org) and click on the link to the Resident & Fellow Section.*

Podcasts can be accessed at [Neurology.org](http://Neurology.org)

# Neurology®

## Spotlight on the May 20 Issue

Robert A. Gross

*Neurology* 2014;82;1755

DOI 10.1212/WNL.0000000000000464

### This information is current as of May 19, 2014

**Updated Information & Services**

including high resolution figures, can be found at:  
<http://n.neurology.org/content/82/20/1755.full>

**Permissions & Licensing**

Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at:  
[http://www.neurology.org/about/about\\_the\\_journal#permissions](http://www.neurology.org/about/about_the_journal#permissions)

**Reprints**

Information about ordering reprints can be found online:  
<http://n.neurology.org/subscribers/advertise>

*Neurology*® is the official journal of the American Academy of Neurology. Published continuously since 1951, it is now a weekly with 48 issues per year. Copyright © 2014 American Academy of Neurology. All rights reserved. Print ISSN: 0028-3878. Online ISSN: 1526-632X.

