In Focus
Spotlight on the March 4 Issue

Robert A. Gross, MD, PhD, FAAN
Editor-in-Chief, Neurology®

Randomized Evaluation of Carotid Occlusion and Neurocognition (RECON) trial: Main results
Patients with carotid occlusion and hemodynamic failure had cognitive function measured before and after surgical vs medical intervention. Mild cognitive impairment at baseline improved over 2 years, but improvement did not depend on treatment group. There is a growing recognition that cerebral hemodynamic failure contributes to cognitive impairment in patients with large-vessel occlusion.

See p. 744

From editorialists Jacobs & Nichols: “...best medical therapy may have become so effective that it is raising the bar for treatments that may have beaten medical therapy in the past. Although best medical therapy may be better than in the past, it is still not curative, and we need to continue to strive for new treatments that may be better.”

See p. 738

Brain imaging of cognitively normal individuals with 2 parents affected by late-onset AD
Fifty-two normal individuals received MRI, [11C]-Pittsburgh compound B PET, and [18F]-fluoro-2-deoxyglucose PET. These included 4 demographically balanced groups of normal individuals with maternal, paternal, and maternal plus paternal family history of late-onset Alzheimer disease (LOAD), and with negative family histories. Biomarker findings showed a "LOAD parent-dose effect" in normal individuals several years, if not decades, prior to possible clinical symptoms.

See p. 752

Cortical thickness mediates the effect of β-amyloid on episodic memory
The authors measured brain β-amyloid (Aβ) deposition and cortical thickness in 67 patients to determine cognitive function and vascular risk. The presence of vascular risk influenced the associations among Aβ, atrophy, and memory, suggesting that controlling these risk factors might be a valuable strategy to diminish the incidence of Alzheimer disease.

See p. 761

Influence of seizures on stroke outcomes: A large multicenter study
This study included 10,261 patients with ischemic strokes; 157 patients (1.53%) had seizures at ischemic stroke presentation and 208 patients (2.03%) had seizures during hospitalization post ischemic stroke. Strokes associated with seizures have a worse outcome, and having a stroke associated with higher neurologic deficit does not lead to a higher risk of developing seizures.

See p. 768; Editorial, p. 740

Factors affecting cognitive outcome in early pediatric stroke
There is increasing evidence of cognitive sequelae after arterial ischemic stroke in childhood. In a population-based prospective design, 99 children were assessed 2 years after stroke. Young age at stroke, seizures, combined lesions (cortical and subcortical), and persistent neurologic impairment were negative predictive factors. These children need regular neurocognitive follow-up and specific support.

See p. 784; Editorial, p. 742

Effect of pain in pediatric inherited neuropathies
The authors collected standardized assessments of pain from 176 patients (140 children aged 8–18 years, and 36 children aged 2–7 years through parent proxies), along with standardized clinical assessments and quality-of-life (QOL) outcomes. Pain is present in children with Charcot-Marie-Tooth disease and negatively affects QOL. Further studies are needed to improve QOL.

See p. 793

Clinical characteristics and outcome of brain abscess: Systematic review and meta-analysis
Good data are scarce on the presenting clinical characteristics, treatments, and outcomes of brain abscess. In a meta-analysis of data from 9,699 patients with brain abscess included in 123 studies, the majority of patients (86%) had predisposing conditions, such as contiguous or metastatic infectious foci; nevertheless, the prognosis has improved over the past 6 decades due to improved imaging, surgery, and antimicrobials.

See p. 806

NB: "Comparison of symptomatic and asymptomatic persons with Alzheimer disease neuropathology," see p. e76. To check out other Resident & Fellow Journal Club submissions, point your browser to www.neurology.org and click on the link to the Resident & Fellow Section.

Podcasts can be accessed at www.neurology.org

© 2014 American Academy of Neurology

© 2014 American Academy of Neurology. Unauthorized reproduction of this article is prohibited.