Association of White Matter Hyperintensity Markers on MRI and Long-term Risk of Mortality and Ischemic Stroke: The SMART-MR Study

In a prospective cohort of patients with symptomatic cerebral, coronary, or peripheral arterial disease or an abdominal aortic aneurysm, the volume, type, and shape of white matter changes seen on brain MRI were associated with long-term risks of mortality and ischemic stroke after a median follow-up of 12.5 years.

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From editorialists Yassi and Campbell: “The study… is an important addition to the literature in this field in that it focuses not only on the absolute volume of WMH but also on identifying additional geometric and topographic features that may convey an increased risk of stroke and death.”

Page 781

Risk and Predictors of Depression Following Acute Ischemic Stroke in the Elderly

An analysis of 2016–2017 Medicare data found that among patients older than 65 years, stroke survivors were approximately 50% more likely than those who had had a myocardial infarction to have depression in 1.5 years after the vascular event. A history of anxiety was a strong predictor of poststroke depression.

Page 790

Amyloid Positivity in the Alzheimer/Subcortical-Vascular Spectrum

In a study that investigated the association between Aβ positivity on PET, severity of white matter hyperintensities (WMH) on MRI, and cognition, Aβ positivity was associated with the severity of cognition and inversely associated with WMH severity and other markers of small vessel disease. The results suggest that Aβ and cerebral small vessel disease often coexist and may have synergistic effects on cognition.

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Continued
Contemporary Issues

New Ethical and Clinical Challenges in “Closed-Loop” Neuromodulation

“Closed-loop” neuromodulation devices can treat patients with drug-resistant epilepsy. However, their use raises several ethical and clinical dilemmas. In addition, their use for mood and other psychiatric disorders will lead to questions about patient autonomy and agency. Authors of this paper argued for the need to develop frameworks to understand and resolve these controversies and dilemmas.

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NB: “Nonmotor Seizures as Presenting Feature of Hodgkin Lymphoma CNS Involvement,” p. e2239. To check out other Resident & Fellow Section Pearls & Oy-sters articles, point your browser to Neurology.org/N and click on the link to the Resident & Fellow Section. At the end of the issue, check out the Resident & Fellow Section Teaching Video NeuroImages article examining cluster breathing in a 65-year-old man with metastatic melanoma and another on paroxysmal dysarthria-ataxia in multiple sclerosis. This week also includes a Resident & Fellow Section Education Research article titled “Neurology Resident EEG Education: A Survey of US Neurology Residency Program Directors.”

NEW EPISODE

Neurology® PODCAST
April 27, 2021

Long-term Effects of Cholinesterase Inhibitors on Cognitive Decline and Mortality (see p. 794)

In the first segment, Dr. Jeff Burns speaks with Prof. Maria Eriksdotter about whether cholinesterase inhibitors are associated with slower cognitive decline and decreased mortality risk. In the second part of the podcast, Dr. David Lapides talks with Dr. Martijn Wijburg about pharmacovigilance of patients treated with disease-modifying therapies for multiple sclerosis.

Disclosures can be found at Neurology.org.

CME Opportunity: Listen to this week’s Neurology® Podcast and earn 0.5 AMA PRA Category 1 CME Credits™ by completing the online podcast quiz.