Biomarkers for Atrial Fibrillation Detection After Stroke: Systematic Review and Meta-analysis

Prolonged cardiac monitoring increases atrial fibrillation (AF) detection after ischemic stroke or TIA. This meta-analysis of 34 studies enrolling 11,569 participants identified several clinical, ECG, and blood-based biomarkers associated with AF detection after ischemic stroke/TIA. Prospective studies are needed to assess their prognostic utility.

Risk of Aneurysm Rupture After Thrombolysis in Patients With Acute Ischemic Stroke and Unruptured Intracranial Aneurysms

To determine whether IV thrombolysis treatment for acute ischemic stroke leads to intracranial aneurysm (IA) rupture, this study identified 132 patients with unruptured IAs among 3,953 patients undergoing thrombolysis. Thrombolysis did not cause any saccular IAs to rupture. However, anticoagulation may have increased the risk of aneurysm rupture in patients with large fusiform IAs.

Cerebral Amyloid Angiopathy Pathology and Its Association With Amyloid-β PET Signal

In this study, regional Amyloid-β (Aβ) PET uptake was compared with pathologically defined cerebral amyloid angiopathy (CAA). No association was found when adjusting for Aβ plaques, suggesting that Aβ-PET is a suboptimal biomarker for diagnosing or monitoring CAA.
Blood-Brain Barrier Permeability in Patients With Reversible Cerebral Vasoconstriction Syndrome Assessed With Dynamic Contrast-Enhanced MRI

To understand blood-brain barrier permeability in patients with reversible cerebral vasoconstriction syndrome, the authors of this study analyzed dynamic contrast-enhanced MRI scans of 176 patients. They found that during the acute stage, patients presented increased microscopic brain permeability without macroscopic blood-brain barrier disruption.

NB: “Child Neurology: Hypotonia and Delayed Teeth Eruption in a 2-Year-Old Girl,” p. 875. To check out other Resident & Fellow Section Child Neurology 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 Clinical Reasoning article discussing vision loss and an unusual gait in a patient with spinocerebellar ataxia. This week also includes a Resident & Fellow Section Teaching Video NeuroImage titled “Bilateral Horizontal Gaze Palsies With Vertical Ocular Dysmetria From a Demyelinating Lesion of the Pontine Tegmentum.”

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