Mechanisms of Network Changes in Cognitive Impairment in Multiple Sclerosis

This study evaluates the association of functional connectivity abnormalities with local cerebral blood flow and structural connectivity changes in patients with multiple sclerosis and cognitive impairment. Brain networks with functional abnormalities showed altered cerebral blood flow and anatomical connectivity locally and distally, suggesting there may be a common pathologic change in resting state networks.

Page 892

Prestroke Disability and Outcome After Thrombectomy for Emergent Anterior Circulation Large Vessel Occlusion Stroke

This post hoc study compared patients with stroke with moderate or severe disability (modified Rankin Scale [mRS] ≥2) and those without. The patients were treated with thrombectomy. Those with mRS ≥2 were less likely to accrue additional disability but were more likely to die. These results suggest that clinical trials enrolling patients with disability are needed.

Page 895

Life Course of Physical Activity and Risk and Prognosis of Amyotrophic Lateral Sclerosis in a German ALS Registry

This study looked at the association of lifetime physical activity and the risk of developing amyotrophic lateral sclerosis (ALS). Lifetime leisure physical activity was not associated with the development of ALS. In contrast, the intensity of occupational physical activity was positively associated with the risk of ALS, but this association may be confounded by other occupational exposures.

Page 899
Long-term Risks of Persistent Ventral Spinal CSF Leaks in SIH: Superficial Siderosis and Bibrachial Amyotrophy

To quantify the risk of long-term sequelae of chronic ventral spinal CSF leaks, researchers studied 51 patients with spontaneous intracranial hypotension. Six patients developed superficial siderosis and 2 developed bibrachial amyotrophy, with the probability of these complications increasing over time. Early treatment of ventral spinal CSF leaks may prevent superficial siderosis and bibrachial amyotrophy.

Page 900

NB: “Progressive Auditory Verbal Agnosia Secondary to Alzheimer Disease,” p. 908. To check out other NeuroImages, point your browser to Neurology.org/N. At the end of the issue, check out the Resident & Fellow Section Teaching NeuroImage discussing central pontine myelinolysis in a patient admitted for diabetic ketoacidosis and another on compressive myelopathy caused by fluorosis. This week also includes a Resident & Fellow Section Opinion & Special Article titled “Preventive Neurology: An Emerging Field Toward Brain Health.”