Notable in Neurology

This issue features an article discussing the prevalence of neurogenetic disorders in the North of England and another on new insights from skin biopsies in Charcot-Marie-Tooth disease. Another featured article focuses on claustrum damage and refractory status epilepticus following febrile illness.

ARTICLES

The 2D:4D ratio, a proxy for prenatal androgen levels, differs in men with and without MS

The prenatal environment may represent a developmental window influencing an individual’s risk of multiple sclerosis (MS). Men with MS had a higher average ratio of the length of the second digit to that of the fourth digit than men without MS, possibly reflecting lower prenatal androgen. Exposures influencing prenatal hormones may influence the risk of autoimmune diseases; however, further studies are needed.

See p. 1209

From editorialists Lucas & Banwell: The research by Bove et al. strengthens the evidence that MS susceptibility is determined at least in part by exposures occurring in utero. In the absence of good animal models, it remains particularly challenging to define and quantify the risks and specific periods of risk, and thus whether monitoring and intervention are feasible or useful.

See p. 1193

Interictal, circulating sphingolipids in women with episodic migraine: A case-control study

Bioactive lipids may contribute to migraine pathophysiology. These findings suggest that sphingolipids, a group of bioactive lipids, may be altered in women with episodic migraine. Research on the role of bioactive lipids may increase our understanding of migraine and lead to the identification of novel biomarkers and drug targets.

See p. 1214; Comment, p. 1222

Ictal changes in parasympathetic tone: Prediction of postictal oxygen desaturation

This article shows that ictal and postictal autonomic dysfunction is correlated with postictal hypoxemia and risk of sudden unexpected death in epilepsy. Measuring the parasympathetic tone from the EKG in real time is feasible and could be of value as an “early warning system” in patients with epilepsy.

See p. 1233

Detailed comparison of amyloid PET and CSF biomarkers for identifying early Alzheimer disease

The authors examined 156 participants consisting of cognitively healthy elderly and patients with mild cognitive impairment who later developed Alzheimer dementia and found that ratios of CSF β-amyloid 42/tau performed as well as the best regional and global amyloid PET measures. Amyloid PET and CSF biomarkers may identify prodromal Alzheimer dementia with equally high accuracy.

See p. 1240

NB: Editorial titled: “Neurology® Resident & Fellow Section: The second decade begins!” p. 1188. To check out other editorials, point your browser to Neurology.org. At the end of the issue, check out the Clinical/Scientific Notes discussing electrocortical therapy for motion sickness and TPP1 deficiency as a rare cause of isolated childhood-onset progressive ataxia. This week also includes a Resident & Fellow Section Teaching NeuroImage titled “Subacute encephalopathy in a young woman with THTR2 gene mutation.”

Podcasts can be accessed at Neurology.org