tDCS in patients with disorders of consciousness: Sham-controlled randomized double-blind study

Transcranial direct current stimulation (tDCS) was delivered in randomized order over the left dorsolateral prefrontal cortex for 20 minutes in patients in a vegetative state/unresponsive wakefulness syndrome or in a minimally conscious state (MCS). They were assessed at least 1 week after the acute traumatic or nontraumatic insult. tDCS may improve signs of consciousness in MCS following severe brain damage.

See p. 1112

From editorialist John Whyte: “If a longer course of tDCS can accelerate recovery for a subgroup of the DOC population, perhaps a positive response to a single session of tDCS can identify the subgroup of individuals who are treatment responders to this or to other treatments…”

See p. 1106

Logopenic, mixed, or Alzheimer-related aphasia?

In a group of 14 patients with primary progressive aphasia (PPA) for whom consensus recommendations failed to classify a specific subtype, voxel-based morphometry demonstrated the atrophy pattern characteristic of putative logopenic PPA. PPA related to presumed Alzheimer pathology was more variable than was captured by criteria for logopenic aphasia.

See p. 1127

High free fatty acid level is associated with recurrent stroke in cardioembolic stroke patients

The authors showed that plasma free fatty acid (FFA) concentration was associated with cardioembolic stroke among stroke subtypes. In addition, the risk of recurrent stroke was increased approximately 2.7-fold with 1 mEq/L increment of FFA. Elevated FFA could be a useful marker for diagnosis and predicting recurrence of cardioembolic stroke.

See p. 1142; Editorial, p. 1110

Hypoglossal nerve dysfunction and sleep-disordered breathing after stroke

Sleep-disordered breathing (SDB) is prevalent soon after stroke. Hypoglossal nerve dysfunction, tested in patients with recent stroke, was common in patients with and without SDB, but hypoglossal nerve conduction latency was linearly associated with severity of SDB. These findings have implications for the role of hypoglossal dysfunction in poststroke SDB.

See p. 1149

Prehypertension and the risk of stroke: A meta-analysis

This meta-analysis showed that after adjusting for multiple cardiovascular risk factors, prehypertension, even if mild, was associated with stroke morbidity. Lifestyle changes should be recommended to patients with prehypertension and future controlled trials of pharmacologic treatment are needed in high-risk subpopulations.

See p. 1153

Rolandic epilepsy has little effect on adult life 30 years later: A population-based study

This article establishes the normal adult psychosocial outcome of childhood-onset rolandic epilepsy, a syndrome that accounts for 5%–10% of all childhood-onset epilepsy. Unlike nearly all other types of childhood-onset epilepsy, rolandic epilepsy always has remission from seizures, normal adult psychosocial outcome, and remarkably better intelligence than do other major epilepsies.

See p. 1162

Untargeted 1H-NMR metabolomics in CSF: Toward a diagnostic biomarker for motor neuron disease

Analysis of CSF from 95 patients and 86 controls identified a diagnostic profile for motor neuron disease and could provide a reproducible metabolic signature. Metabolomics could be used to find diagnosis biomarkers and improve the understanding of motor neuron disease pathogenesis and to distinguish it accurately from other neurologic diseases.

See p. 1167

NB: Please check out our special photo in this week’s issue of Neurology at the end of the Table of Contents. “Myelopathy among zinc-smelter workers in Upper Silesia during the late 19th century,” see p. 1175. To check out other Historical Neurology articles, point your browser to Neurology.org.