Migraine prevention with a supraorbital transcutaneous stimulator: A randomized controlled trial

Patients were randomized to receive transcutaneous stimulation or sham stimulation daily for 20 minutes over 90 days. At the end of the treatment period, 38% of patients who used the effective stimulator had a decrease in monthly migraine days by 50%, compared to 12% for the sham stimulator.

See p. 697; Editorial, p. 694

Alzheimer disease and risk of stroke: A population-based cohort study

In a 1:5 case-control matched analysis, cases were matched to controls according to their estimated propensity scores, based on demographics and existing vascular risk factors. Clinical diagnosis of Alzheimer disease was associated with a considerably increased risk of stroke.

See p. 705

From editorialist Steven M. Greenberg: “Even if AD [Alzheimer disease] itself does not cause stroke, the current data suggest it may be a reasonably strong marker for future stroke and thus identify an at-risk population for intervention.”

See p. 695

Microvascular brain pathology and late-life motor impairment

Many older adults have microvascular brain pathology that might not be detected prior to death. The authors assessed 850 brains postmortem for microvascular pathology, examining the association with the study participants’ global motor scores proximate to death. Microvascular brain pathology was common, representing an under-recognized, independent cause of late-life motor impairment.

See p. 712

Skin sympathetic fiber α-synuclein deposits: A potential biomarker for pure autonomic failure

Twenty-one patients with chronic peripheral autonomic neuropathy showed sympathetic and parasympathetic involvement as confirmed by cardiovascular reflexes and microneurography from the peroneal nerve. A search for neuritic inclusions of phosphorylated α-synuclein in the skin sympathetic nerve fibers may provide a sensitive in vivo biomarker for degenerative peripheral autonomic neuropathy.

See p. 725

Sarcomeric dysfunction contributes to muscle weakness in facioscapulohumeral muscular dystrophy

Sarcomeric function was evaluated by contractile studies on demembranated single muscle fibers obtained from quadriceps muscle biopsies of 4 patients with facioscapulohumeral muscular dystrophy and 4 controls. Based on these findings, sarcomeric dysfunction plays a critical role in the development of muscle weakness in facioscapulohumeral muscular dystrophy.

See p. 733

Characteristics and determinants of restless legs syndrome in pregnancy: A prospective study

Restless leg syndrome (RLS) was diagnosed in 58 of 501 pregnant women examined in each trimester and 8 weeks postpartum. Assessments included interview about RLS symptoms and sleep disturbances and standardized sleep-wake questionnaires. Genetic factors and smoking, but not ferritin, anemia, or estrogen levels, seemed to play a role in the pathophysiology of RLS in pregnancy.

See p. 738

Hepatic mitochondrial dysfunction in manifest and premanifest Huntington disease

There is a growing interest in the peripheral phenotype of Huntington disease (HD). Using a breath test, the authors demonstrated hepatic mitochondrial dysfunction in vivo in both manifest and premanifest HD. The results were relevant for the interpretation of potential medication side effects and in the development of a “wet marker.”

See p. 743
