



In Focus

Spotlight on the February 25 Issue

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Anesthetic drugs in status epilepticus: Risk or rescue? A 6-year cohort study

Of 171 patients, 37% were treated with IV anesthetic drugs (IVADs). IVADs were associated with infections and a 3-fold greater relative risk for death independent of measured confounders and without effect modification. These results heighten awareness regarding adverse effects of IVADs in patients with status epilepticus.

See p. 656; Editorial, p. 650

Ketogenic diet for adults in super-refractory status epilepticus

Ten adults received the ketogenic diet for super-refractory status epilepticus; 9 achieved ketosis, with status epilepticus resolving in all patients in whom ketosis was achieved. This study demonstrates that the ketogenic diet is a promising treatment for adults with super-refractory status epilepticus.

See p. 665; Comment, p. 669

Early pediatric antiepileptic drug nonadherence is related to lower long-term seizure freedom

This study focused on antiepileptic drug adherence and seizure freedom in a consecutive cohort of 124 children (ages 2–12 years) with newly diagnosed epilepsy. Four years after antiepileptic drug initiation, children who had early nonadherence were 3.24 times more likely not to be seizure free compared to children with near-perfect adherence.

See p. 671

From editorialist Janelle Wagner: "Moving forward, researchers must design multisite randomized controlled trials to examine further the efficacy of psychosocial interventions that focus on these modifiable factors and whether early intervention targeting such factors will indeed improve adherence as measured by objective evaluation."

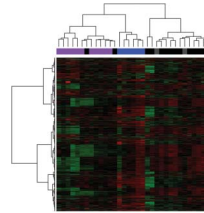
See p. 652

Pregnancy outcomes in the clinical development program of fingolimod in multiple sclerosis

The authors reported the outcomes of 89 pregnancies that occurred during the fingolimod clinical development program. Of 66 pregnancies with exposure to fingolimod, there were 28 births, 9 spontaneous abortions, 24 elective abortions, 4 ongoing pregnancies, and 1 pregnancy with an unknown outcome. While the present study does not allow firm conclusions about safety in pregnancy, given animal data and the present findings, women of childbearing potential should use effective contraception during fingolimod therapy and for 2 months after discontinuation.

See p. 674; Editorial, p. 654

Naive CD4 T-cell activation identifies MS patients having rapid transition to progressive MS



Altered T-cell biology identified MS patients with rapid conversion to secondary progressive MS (SPMS), a critical determinant of MS prognosis. Microarray, flow cytometry, and T-cell receptor stimulation experiments identified an activated T-cell signature in patients having rapid transition to SPMS. SPMS patients with this signature may benefit from anti-inflammatory therapies.

See p. 681

APOE ϵ 4 worsens hippocampal CA1 apical neuropil atrophy and episodic memory

The authors examined 11 patients with Alzheimer dementia, 14 patients with amnesic mild cognitive impairment, and 14 controls with no group differences in APOE ϵ 4 carrier status. Each patient underwent ultra-high-field 7.0-tesla MRI targeted to the hippocampus and neuropsychological assessment, demonstrating that the APOE ϵ 4 gene may contribute to hippocampal atrophy and associated memory deficits.

See p. 691

Evaluation of SLC20A2 mutations that cause idiopathic basal ganglia calcification in Japan

The SLC20A2 mutation is a major cause of familial idiopathic basal ganglia calcification (IBGC) in Japan and in other countries. The authors found 6 new mutations in SLC20A2 in 69 patients with IBGC, with each mutation showing similar patterns of calcification in the brain and similar clinical manifestations.

See p. 705

SPECIAL ARTICLE

Summary of evidence-based guideline update: Prevention of stroke in nonvalvular atrial fibrillation

This summary updates the 1998 American Academy of Neurology practice parameter on stroke prevention in nonvalvular atrial fibrillation (NVAF). Clinicians might obtain outpatient cardiac rhythm studies in patients with cryptogenic stroke to identify patients with occult NVAF and should routinely offer anticoagulation to patients with NVAF with a history of TIA/stroke.

See p. 716

NB: "Bilateral jugular paragangliomas: A rare cause of raised intracranial pressure," see p. 732. To check out other NeuroImages, point your browser to www.neurology.org.

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