Use of a side-effects questionnaire improves quality of care in epilepsy

Gilliam et al. conducted a randomized, controlled trial of a short self-report instrument to improve antiepileptic drug side effects (the Adverse Events Profile). Compared to usual care, use of the Adverse Events Profile was associated with significant reduction in toxicity, more medication alterations, and improved quality of life.

see page 23

In an accompanying editorial, Langfitt and Meador emphasize the general lack of such methodologically rigorous studies of the quality of epilepsy care. They call for more studies like that of Gilliam et al. to understand how effectively, equitably, and efficiently the new treatments of epilepsy are being applied in practice.

see page 6

Normal IQ after prenatal carbamazepine exposure

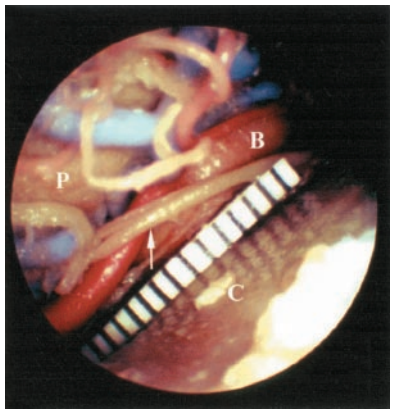
In a prospective, population-based study comprising 182 children of mothers with epilepsy conducted by Gaily et al., IQ scores of 86 children with prenatal exposure to carbamazepine monotherapy did not differ from 141 controls. Polytherapy and valproate exposures were associated with reduced verbal IQ. Results concerning valproate remain provisional because of confounding factors.

see page 28

Although a relationship between maternal administration of antiepileptic drugs (AED) and fetal malformation has been recognized for three decades, Michael Duchowny, in the accompanying editorial, notes that a growing number of investigators are examining whether fetal exposure to AED may cause long-term neurocognitive and behavioral sequelae in offspring who otherwise show no evidence of dysmorphism. Whereas type of maternal epilepsy and the antenatal seizure burden do not appear to influence cognitive outcome, reports of neurobehavioral teratogenicity raise the bar regarding the potential risks of an in utero drug exposure.

see page 8

Abducens length and vulnerability?



Endoscopic lateral view of the right abducens nerve (arrow) with a millimeter ruler to provide a frame of reference

The intracranial portion of the abducens nerve is shorter than several other cranial nerves (e.g., it is one-third of the trochlear nerve length). This observation by Hanson et al. and in situ endoscopic views lead to the conclusion that its vulnerability arises from factors other than its intracranial length.

see page 33

Change in MS-related disability: A 10-year follow-up study

Pittock et al. reassessed the 1991 Olmsted County MS prevalence cohort in 2001. Although survival was reduced and 30% of patients progressed to needing a cane or wheelchair or worse over the 10-year follow-up period, most remained stable or only progressed minimally.

see page 51

Dietary vitamin D intake and multiple sclerosis

In a prospective study of over 180,000 US women, Munger et al. found that the risk of multiple sclerosis decreased with increasing vitamin D intake. Women who regularly took 400 IU/day or more of vitamin D from supplements had a 40% lower risk of MS than women who did not take the vitamin.

see page 60

High burden of ischemic stroke in the oldest old

Marini et al. evaluated the burden of ischemic stroke in a defined Italian population and found that subjects over 80 contributed one-third of healthcare utilization and 59.8% of deaths within 30 days. Older patients with stroke were mostly women with atrial fibrillation, coronary heart disease, and peripheral arterial disease.

see page 77

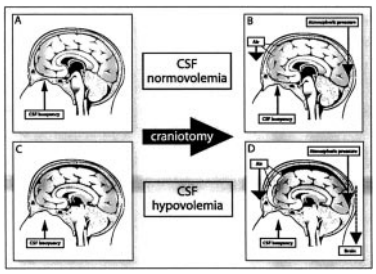
continued on page 3

Are malpractice concerns driving diagnostic testing?

Birbeck et al. identified several non-clinical factors that influence neurologists' decisions to order tests. Among other factors, higher malpractice concerns were associated with more testing. Neurologists substantially overestimated their malpractice risk.

see page 119

Hazards of craniotomy with underlying CSF hypovolemia



The CSF provides buoyancy, which "floats" the brain. Kelley and Johnson present two cases with underlying CSF hypovolemia in which craniotomy caused position-dependent brain herniation and coma.

see page 157

Cytomegalovirus-related focal neuropathy

Pan et al. describe an unusual postinfectious neuropathy in which dysphagia and hand weakness occurred following cytomegalovirus colitis. The neurologic deficits promptly reversed coincident with IV immunoglobulin administration.

see page 153

January 13 Highlights

Neurology 2004;62;2-3
DOI 10.1212/WNL.62.1.2