

AEDs. Controlled studies are needed to identify risk factors for AED-induced cognitive and behavioral disorders in children treated for epilepsy.

Bourgeois BFD, the author of the above review, also summarizes the indications, pharmacokinetics, and side effects of the newer antiepileptic drugs, felbamate, gabapentin, lamotrigine, tiagabine, vigabatrin, and oxcarbazepine (Arch Neurol Sept 1998;55:1181-1183).

Clobazam Efficacy. Clobazam (CLB) has equivalent efficacy to carbamazepine and phenytoin as monotherapy for childhood epilepsy, according to a report by a Canadian Study Group for Childhood Epilepsy (Camfield P et al. Epilepsia 1998;39:952-959). The authors conclude that CLB should be considered a first line monotherapy for partial and selected generalized childhood epilepsies.

Lamotrigine Monotherapy for Partial Seizures. A controlled multicenter trial of lamotrigine (LTG) monotherapy compared to valproate (VPA) for partial seizures in adults found 56% successfully maintained on LTG compared to 20% on VPA. (Gilliam F, Vazquez B, Sackellares JC et al. An active-control trial of lamotrigine monotherapy for partial seizures. Neurology Oct 1998;51:1018-1025).

HEADACHE DISORDERS

HEADACHE CHARACTERISTICS WITH BRAIN TUMORS

The incidence and clinical features of headache in 60 children, aged 5 to 18 years, with brain tumors were determined and compared to the pattern of primary headaches in 50 children (migraine without aura (25) and tension-type headaches (25)), in a study at the University of Padua, Italy. In the group with brain tumors (supratentorial in 17 and infratentorial in 43), headache was the first symptom in 27% and the only presenting feature in 10%. Mean time interval from onset of headache to diagnosis of tumor was 3 months for infratentorial and 17 months for supratentorial tumors. The incidence of headache was significantly higher in patients with infratentorial tumors (91%) than with supratentorial tumors (59%). Tumor histology and specific localization showed no correlation with headache patterns. Compared to primary, migraine and tension headaches, secondary tumor headaches were associated with a significantly higher incidence of projectile vomiting (51% v 22%), nocturnal or morning onset (47% v 18%), lack of triggering factors (73% v 22%), and failure of relieving factors such as rest and sleep (77% v 20%). Nausea, photophobia, and phonophobia were infrequent symptoms with brain tumors. (Battistella PA, Naccarella C, Soriani S, Perilongo G. Headache and brain tumors: different features versus primary forms in juvenile patients. Headache Q 1998;9:245-248). (Reprints: PA Battistella MD, Department of Pediatrics, University of Padua, via Giustinani 3, Padova 35128, Italy).

COMMENT. The distinctive features of brain tumor-related headaches include morning or nightly onset, projectile vomiting, and lack of triggering or relieving factors. Although brain tumor is an infrequent cause of childhood headache, in patients with headache of recent onset, having these specific features, neuroimaging is warranted. Brain imaging indications in children with headaches are discussed in Progress in Pediatric Neurology III, PNB Publ, 1997;pp185, 167; and vol II, 1994;pp164-6).

HEADACHE AND PSYCHIATRIC DISORDERS

Headaches and psychopathology were evaluated in 1013 children, aged 9 to 15 years, enrolled in the Great Smoky Mountains Study, and reported from Duke University Medical Center, Durham, NC. Headaches lasted at least 1 hour and

occurred each week during the 3 months prior to interview. The overall prevalence of headaches was 10.3% (10.4% of boys and 10.2% of girls). An increased prevalence with age was similar in boys and girls and did not affect associations with psychiatric disorders. Of those with internalizing disorders, depression and anxiety, 20.5% had headaches, compared to 9.2% in children without psychiatric disorders. Girls were affected more than boys (30.6% v 13.1%). Of externalizing disorders, conduct disorders were associated with a 2-fold increase in prevalence of headache only in boys, whereas ODD and ADHD did not predispose to headaches. Although ODD in girls was not associated with an overall increase in headache prevalence, this comorbidity resulted in an impaired quality of life, with headaches that were more prolonged, affected school attendance, and required greater medical intervention. (Egger HL, Angold A, Costello EJ. Headaches and psychopathology in children and adolescents. J Am Acad Child Adolesc Psychiatry Sept 1998;37:951-958). (Reprints: Dr Egger, Developmental Epidemiology Program, DUMC Box 3454, Durham, NC 27710).

COMMENT. Depression and anxiety disorders are associated with an increased prevalence of headache in girls, and conduct disorders predispose to headaches in boys. Girls with ODD have greater morbidity resulting from headaches, with increased school absences and medical intervention. The authors discuss the common neurotransmitter, serotonin, in the regulation of headaches, depression, anxiety, aggression, and hostility, and the relation to Carroll's theory of central pain mechanisms as a cause of depression.

Classification of Headache. Cluster analysis failed to identify groups of symptoms corresponding to the World Federation of Neurology definition of migraine in 150 children with recurrent headache, attending neurology clinics at Royal Manchester, Booth Hall, and Birmingham Children's Hospitals, UK. Three groups of symptoms that were identified were not stable, not clinically useful, and did not correspond to any of the International Headache Society classifications. The authors propose a continuum theory of headache disorders based on signs and symptoms associated with the headache, course, response to treatment, and prognosis, rather than the severity and character of the headache itself. (Viswanathan V, Bridges SJ, Whitehouse W, Newton RW. Childhood headaches: discrete entities or continuum? Dev Med Child Neuro 1998;40:544-550).

INFECTIOUS DISORDERS

INFLUENZA-ASSOCIATED ACUTE ENCEPHALITIS

Ten patients with acute encephalopathy or encephalitis associated with influenza-like illness, admitted to hospitals in Nagoya, Japan, during 12 months, 1996-97, mainly mid-winter, had cerebrospinal fluid examined by PCR for influenza A and B. Seven patients, aged 2 to 4 years, had generalized convulsions within 2 days of fever onset and evidence of recent influenza infection, type-A/Hong Kong (H3N2) in 6 and type B in 1. PCR for influenza A was positive in the csf of 5 patients. Two died, one had sequelae, and 4 recovered without complications. One child had clinical features similar to Reye's syndrome. (Fujimoto S, Kobayashi M, Uemura O et al. PCR on cerebrospinal fluid to show influenza-associated acute encephalopathy or encephalitis. Lancet Sept 12 1998;352:873-75). (Respond: Dr Shinji Fujimoto, Department of Paediatrics, Nagoya City University Medical School, Kawasumi, Mizuho-cho, Mizuho-ku, Nagoya 467-8601, Japan).

COMMENT. An outbreak of influenza-associated encephalopathy or