1994;51:767-771). (Reprints: Dr Ney, Dept Neurology, EEG Laboratory, Long Island Jewish Medical Center, New Hyde Park, NY 11042).

COMMENT. The exact cause of the cerebellar atrophy was not determined. The partial seizures, the phenytoin, or both factors were involved. Other known causes of cerebellar atrophy had been excluded. Monitoring the serum phenytoin may have provided a correlation between MRI ratings of atrophy and the possible effects of a chronic level of toxicity. Long-term treatment with phenytoin is generally safe provided optimal therapeutic levels are maintained. Current emphasis on monotherapy may lead to dosage increments above acceptable levels, with the attendant risk of a chronic subtle ataxia, especially in patients with refractory epilepsies.

APLASTIC ANEMIA WITH ETHOSUXIMIDE

An 8-year-old girl who developed aplastic anemia after 8 months ethosuximide therapy for absence seizures is reported from the Children's Medical College of Virginia, Richmond, VA. Blood counts and liver enzymes had been monitored 3 months before admission and were normal. She presented with fatigue, headache, streptococcal pharyngitis, hematuria, bruising, and petechiae. Allogeneic bone marrow transplantation was required and the child recovered. Without further AED therapy she has only occasional "staring spells" and the EEG is normal. A total of 8 cases of ethosuximide-associated aplastic anemia have been reported, and 5 died. (Massey GV, Myer EC et al. Aplastic anemia following therapy for absence seizures with ethosuximide. Pediatr Neurol July 1994;11:59-61). (Respond: Dr Massey, PO Box 980121, MCV Station, Richmond, VA 23298).

COMMENT. Ethosuximide-related aplastic anemia is rare but has a high mortality. Monthly blood counts have been recommended, but their predictive value is questioned by the authors. Fever, rash, bruising, and petechiae should certainly require immediate investigation.

HEADACHE

THE EEG IN CHRONIC HEADACHE EVALUATION

A retrospective analysis of records of 312 children with chronic headache and review of EEGs in 257 are reported from the Tel Aviv Medical Center and University, Israel. Headache was classified as migraine in 143 (55%); classic migraine in 12 and common migraine in 121. The mean age at time of EEG was 9 years. The EEG was normal in 80%. Epileptiform activity occurred in 12% and slowing in 8%. Response was higher to hyperventilation in non-migraine patients and to photic stimulation in those with migraine. The incidence of epileptic EEGs was 11% in both migraine and tension type headaches; it was 26% and significantly higher in 15 children with chronic headache described as "very brief," occurring predominantly in girls, several times a week, and without family history for migraine. Prevalence of epilepsy in families of patients with epileptic EEGs did not differ from the total group. Of six children with epileptiform EEGs who were treated with AEDs, 4 responded and had no further headaches and 2 were not benefited. Of 17 children with focal EEG abnormalities, 9 had head CTs, 1 had an arachnoid cyst, and 3 had sinusitis. The authors conclude that the EEG may be of value in some children

with migraine and "very brief" headaches, but epileptiform EEG activity does not prove an epileptic origin for headache and its significance in diagnosis and treatment is minimal. (Kramer U, Harel S et al. The value of EEG in children with chronic headaches. Brain Dev July/Aug 1994;16:304-8). (Respond: Dr S Harel, Institute for Child Development and Pediatric Unit, Beit Habriut Strauss, 7 Balfour St, Tel Aviv 65211, Israel).

COMMENT. See Progress in Pediatric Neurology II (PNB Publ, 1994, p 156) for a report of the EEG findings in children with chronic recurrent headaches and response to phenytoin. Grade III epileptiform EEGs were found in 18% of the total and with the same incidence in migraine patients. Migraine was controlled in 77% but a positive response did not correlate with EEG abnormalities; those with normal EEGs were benefited equally. (Millichap JG. Recurrent headaches in 100 children. Electroencephalographic abnormalities and response to phenytoin (Dilantin). Child's Brain 1978;4:95-104). The significance of the EEG in chronic headache evaluation and the mechanism of the anti-migraine effect of phenytoin and other antiepileptic drugs (eg. valproate) need further investigation.

VASCULAR DISORDERS

STROKE AND CEREBRAL INFARCTS IN HIV INFECTION

Four out of 380 HIV-infected children followed in a 10 year period at the Hopital Bicetre, France, had acute hemiparesis and stroke with MRI and CT evidence of cerebral infarcts. Two patients had giant aneurysms and multiple thromboses, a history of frequent infections, a severe clinical course, and poor or fatal outcome. Two had an isolated thrombosis or necrotic area, a less progressive disease, and a more favorable outcome. In two additional patients, stroke was secondary to a massive cerebral hemorrhage and thrombocytopenia, and to sickle cell disease. (Philippet P, Tardieu M et al. Stroke and cerebral infarcts in children infected with human immunodeficiency virus. Arch Pediatr Adolesc Med Sept 1994;148:965-970). (Reprints: Dr Tardieu, Neurologie Pediatrique, Hopital Bicetre, 94275 Le Kremlin, Bicetre Cedex, France).

COMMENT. Stroke in HIV infected children is rare but variable in underlying pathology and prognosis. The authors anticipate a more frequent incidence of this complication because of improved management and longer survival of patients with HIV.

CEREBRAL ARTERIOVENOUS MALFORMATIONS

A retrospective analysis of 62 children with cerebral arteriovenous malformations (AVM) seen over 17 years is reported from Hospital B, Lille, France. Ages ranged from 3 months to 14 years. Seven had a previous history of headache, and 5 (8%) had been treated for epilepsy. Intracranial hemorrhage and stroke was the presenting manifestation in 54 (87%). AVMs were supratentorial in 41 and infratentorial in 11. Total excision of the AVM was achieved in 47 of 52 operated. At follow-up, 50 had a good clinical outcome based on the Glasgow scale, 6 mild, 2 poor, and 4 died. Recurrent hemorrhage occurred in 3, fatal in 1. AVM recurrences in 2 were treated successfully by radiosurgery. Of ten with aphasia before surgery; 5 had improved. Of 25 with hemiparesis on admission, 12 recovered function and 7 have severe deficits.