

hypotonic. EEG showed diffuse slowing with right posterior epileptiform discharges. A PET scan showed global cortical hypometabolism. Continued on phenobarbital monotherapy, he presented at 10 months with status and respiratory compromise. IV pyridoxine, 100 mg, controlled the seizure within 4 minutes, he was extubated after 1 day, and was maintained on 50 mg pyridoxine daily. Phenobarbital was tapered without relapse. He gradually recovered muscle tone, walked at 15 months, and was seizure-free at 20 months, but speech was delayed. MRI showed diffuse cortical atrophy, especially frontal. (Shih JJ, Kornblum H, Shewmon DA. Global brain dysfunction in an infant with pyridoxine dependency: evaluation with EEG, evoked potentials, MRI, and PET. Neurology Sept 1996;47:824-826). (Reprints: Dr JJ Shih, Neurology Department, University of New Mexico Health Sciences Center, 915 Camino de Salud, NE, Albuquerque, NM 87131).

COMMENT. Pyridoxine-dependent seizures may be complicated by structural and functional brain disease. These abnormalities demonstrated by MRI and PET may result from the metabolic dysfunction secondary to pyridoxine-dependency, but the effects of hypoxia with repeated episodes of status epilepticus and possibly the use of ACTH in treatment of the seizures could have contributed to the cerebral atrophy demonstrated by MRI. The remarkable clinical recovery of this patient, after the diagnosis was made and specific treatment initiated at 10 months, emphasizes the importance of a trial of pyridoxine for intractable epilepsy, even in older infants and children.

HEADACHE DISORDERS

PREVALENCE OF HEADACHE IN SCHOOL CHILDREN

The prevalence of migraine and other headaches in 7-year-old children, in 1974 and 1992, was determined by school physicians at the time of medical examinations, using the identical study design and a similar urban child population of the same age group, and the data analysed in the Department of Child Neurology, University of Turku, Finland. The prevalence of "present" headache at age 7 years, defined as headache occurring in the preceding 6 months, increased from 14.4% in 1974 to 51.5% in 1992. Boys and girls were affected similarly. "Past" headache, having occurred at any time prior to present headache, also showed a significantly increased prevalence from 23.4% of children affected in the 1974 study to 71.1% in 1992. In both present and past headache categories, those having headaches infrequently, less than once a month or yearly, showed the greatest increase in prevalence. Precipitating factors, fever, fatigue, and head trauma, were equally prevalent in 1974 and 1992. Migraine headache had also increased from 1.9% affected in 1974 to 5.7% in 1992. Migraine prevalence was especially high in city areas with high percentages of council houses and family relocations. (Sillanpaa M, Anttila P. Increasing prevalence of headache in 7-year-old schoolchildren. Headache Sept 1996;36:466-470). (Respond: Dr Matti Sillanpaa, University of Turku Hospital, TYKS, 20520 Turku, Finland).

COMMENT. The prevalence of headache, including migraine, has increased significantly in school age children living in an urban area in Finland, in an 18 year period from 1974 to 1992. Highest increases occur among children exposed to social instability and stress. Similar increases in headache prevalence are known to have occurred in adults in the United States in the 1980s. (see Progress in Pediatric Neurology II, PNB Publ, 1994, pp153-155).

The Children's Headache Assessment Scale (CHAS), a parent questionnaire focusing on situations and events surrounding the headaches, emphasizes stress antecedents and coping responses rather than symptom details, and is of value in following responses to behavioral therapy. Environmental factors, including nutrition, are important in the etiology and management of childhood headache and warrant further study. (see Progress in Pediatric Neurology I, 1991, pp141-150).

ACUTE CONFUSIONAL MIGRAINE

Of 76 children admitted with migraine between 1982 and 1990, 13 had a discharge diagnosis of confusional migraine at British Columbia Children's Hospital, Vancouver, Canada. A retrospective analysis of cases showed a preponderance of males to females (11:2), age range of 6 to 15 years (mean, 10 years), all having headache followed by a period of confusion, lasting 2-24 hours, and 4 having recurrent episodes. Mild head trauma preceded the headache in 4 patients. In addition to confusion, agitation occurred in 8 patients, past history of headache in 7, and a family history of migraine in 10. One of 11 patients with CT scans had an arachnoid cyst. EEG was mildly abnormal in 2 of 4 patients with recordings. CSF was normal in 2 patients studied. (Shaabat A. Confusional migraine in childhood. Pediatr Neurol July 1996;15:23-25). (Respond: Dr Shaabat, Dept Pediatrics, College of Medicine and Allied Health Sciences, King Abdulaziz University, PO Box 6615, Jeddah 21452, Saudi Arabia).

COMMENT. A diagnosis of migraine should be considered in children with episodes of acute confusion and agitation, lasting from 1 to 24 hours, preceded by headache and sometimes, mild head trauma, and a positive family history of migraine. It is interesting that CT scans uncovered an arachnoid cyst in one patient, a space-occupying lesion, usually developmental in origin, and known to be complicated by headaches and seizures in some. Further studies of the EEG, obtained in only 4 of the above patients, and response to therapy would be of interest.

NEURODEGENERATIVE DISORDERS

DECIDUOUS TEETH IN TUBEROUS SCLEROSIS

The diagnostic significance of enamel pits in shed deciduous teeth from 20 patients with tuberous sclerosis was investigated at the University of Copenhagen, Denmark. Examination with a surface microscope found enamel pits in all 87 teeth obtained from 20 tuberous sclerosis patients, but none in 253 deciduous teeth from 142 patients with cerebral palsy, phenylketonuria and Down syndrome, as well as healthy controls. The facial surfaces of the central incisor, lateral incisor and canine teeth were most frequently affected. (Russell BG, Russell MB, Praetorius F, Russell CA. Deciduous teeth in tuberous sclerosis. Clin Genet July 1996;50:36-40). (Respond: Dr Bjorn G Russell, Copenhagen County Dental Clinic for Handicapped, Bank Mikkelsens Vej 1, 2820 Gentofte, Denmark).

COMMENT. The occurrence of enamel pits in deciduous and permanent teeth may be a useful diagnostic criterion for tuberous sclerosis. Examination of the labial surfaces of the cleaned central and lateral incisors and canine teeth, using a magnifying glass, may be as important as the search for hypopigmented macules on the skin.