

vomiting as a form of epilepsy in children. Pediatrics June 1955;15:705-714). In reviewing my paper, I find that 39% of the patients had a family history of migraine and while phenytoin was effective in prevention of cyclic vomiting, suppositories of ergotamine tartrate with caffeine helped in their alleviation. In this group of patients seen at an epilepsy center, the diagnosis of ictus emeticus was firm in 21%, and suggestive in the remainder. The nondominant temporal lobe is involved in the epileptic discharge in some reports of ictus emeticus. I concede that migraine is a possible alternative explanation for some of the cases and others I have encountered more recently are entirely idiopathic. This sometimes most distressing and protracted cyclic vomiting requires further study, both neurological and metabolic. (See Progress in Pediatric Neurology III, (PPN III) 1997;pp51-54, for further articles on ictus emeticus and autonomic epilepsy).

STRESS FACTORS IN MIGRAINE AND OTHER HEADACHES

Factors associated with migraine and nonmigrainous headache in a group of 3580 children aged 8 - 9 years were evaluated by mail questionnaire at the Turku University, Finland. Migraine was diagnosed in 95 (2.7%) and nonmigrainous headache in 977 (27%). Children with migraine at 8 - 9 years had headaches by 5 years of age in 34%. Reports of bullying, stress at school, and poor peer relationships occurred more frequently in children with migraine and other headaches than in a group of controls without headache. Stress in school was strongest among girls with migraine, despite the absence of learning difficulties. Boys with migraine were particularly plagued by poor peer relationships. (Metsahonkala L, Sillanpaa M, Tuominen J. Social environment and headache in 8- to 9-year-old children: A follow-up study. Headache March 1998;38:222-228). (Respond: Dr Liisa Metsahonkala, Department of Child Neurology, Turku University Hospital, Kiinamylynkatu 4-8, 20520 Turku, Finland).

COMMENT. Bullying, stress, and problems in relating to other children at school are associated with migraine and nonmigrainous headaches in children. Girls are particularly affected by stress at school whereas boys have more trouble with peer relationships. In this study, parents of children with migraine had a lower level of education than parents of children without migraine. Psychosocial intervention and relaxation/biofeedback training are important in treatment. Biofeedback treatment of migraine is reviewed in PPN III, 1997;p191-194.

DEVELOPMENTAL MALFORMATIONS

NEURONAL METABOLISM IN CORTICAL MALFORMATIONS

Proton magnetic resonance spectroscopic imaging was used to study 23 patients (mean age 28 years (range, 9 to 47)) with cortical developmental malformations and refractory epilepsy examined at the Montreal Neurological Institute, Canada. Lesions included cortical dysplasia (5), heterotopia (12), polymicrogyria (4), and tuberous sclerosis (2). Most focal cortical dysplasias and one half the heterotopias had N-acetylaspartate/creatine (NAA/Cr) signal intensities more than 2 SD below the normal means. The maximal NAA/Cr decrease indicating metabolic dysfunction was localized in the MRI identified malformation and spread to surrounding normal appearing tissue. (Li LM, Cendes F, Bastos AC et al. Neuronal metabolic dysfunction in patients with cortical developmental malformations. A proton magnetic resonance spectroscopic imaging study. Neurology March 1998;50:755-759). (Reprints: Dr D L Arnold, Montreal Neurological Hospital, 3801 University Street, Montreal, Quebec, Canada H3A 2B4).