COMMENT. Macrocephaly in children with diabilities, even when not associated with hydrocephalus, is associated with an increased risk of seizures. In addition to hydrocephalus, causes for macrocephaly include true megalencephaly, subdural effusion, pseudotumor cerebri, and familial variant. Megalencephaly may be a hamatomatous malformation, or is associated with metabolic CNS diseases (leukodystrophies and lipidoses), neurocutaneous syndromes, Sotos' syndrome, and achondroplasia.

Lorber (1981) reported on a series of 510 children hospitalized because of macrocephaly. Of these, 75% had increased intracranial pressure, and 20% had primary megalencephaly. In children with megalencephaly, the male to female ratio was 4 to 1, familial incidence was 50%, and intellectual retardation and abnormal neurologic findings occurred in 13%. Abnormal head growth occurred mainly in the first 4 months.

Macrocephaly and epidural mass with acute lymphoblastic leukemia are reported in a 2-year-old female. Chemotherapy led to remission of ALL and MRI resolution of the mass. Macrocephaly may be a rare and early manifestation of leukemia. (Jaing T-H, Hung P-C, Hung I-J, et al. Pediatr Neurol 202;27:401-403).

HEADACHE DISORDERS

BEHAVIORAL TREATMENT FOR TENSION-TYPE HEADACHE

The benefits of brief neurologist-administered behavioral treatment of pediatric episodic tension-type headache were determined at the University of West Florida, Pensacola, FL. Thirty seven children, 26 females and 11 males, mean age 12.3 years (range 9-16 years), with a minimum of one headache per week, were included. Patients kept daily headache diaries for monthly periods, before treatment and at follow-up at 1, 3, 6, and 12 months. Days of headache activity, analgesic tablet counts, and responder rate were the main outcome measures. Patients were seen for a maximum of 30 minutes in groups of 3 to 5, once per week for 8 weeks. Sessions consisted of a review of the prior week, analysis of and coping with headache-eliciting situations, and practice of progressive muscle relaxation training with 8 muscle groups. The first session was tape recorded to guide home practice, and the tape was used once per day during treatment and twice per week thereafter. The treatment sessions were designed by a behavioral psychologist. Improvements, except for the use of analgesics, were significant and persisted through 1 year follow-up. Analgesic tablet consumption was reduced by more than 50%, but the reduction was not significant. (Andrasik F, Grazzi L, Usai S, et al. Brief neurologist-administered behavioral treatment of pediatric episodic tension-type headache. Neurology 8 April 2003;60:1215-1216). (Reprints: Dr F Andrasik, Institute for Human and Machine Cognition, University of West Florida, 40 S Alcaniz St, Pensacola, FL 32501).

COMMENT. Neurologist administered, group treatment sessions involving muscle relaxation exercises and discussion of headache-eliciting situations may offer an alternative to supplemental medication in children with tension-type headaches. Since the behavioral psychologist designed and is trained to conduct group therapy, it may be more appropriate and cost-effective to refer the patient for this form of management.

Attention to the diet factor is another complementary method of management of chronic headache, especially for migraine headaches. Long-term prophylactic drug therapy should be avoided until headache-precipitating trigger factors, including dietary factors have been excluded (Millichap JG, Yee MM. The diet factor in pediatric and adolescent migraine. Pediatr Neurol 2003;28:9-15).

Premonitory symptoms in migraine. Electronic diaries were used in a 3-month multicenter study to record nonheadache symptoms before, during, and after migraine, that might predict an attack. Patients correctly predicted migraine headaches from 72% of diary entries with premonitory symptoms. Nonheadache, premonitory symptoms included feeling tired (72%), difficulty concentrating (51%), and stiff neck (50%). Migraineurs who report premonitory symptoms that impair daily activities can accurately predict an impending attack. (Giffin NJ, Ruggiero L, Lipton RB, et al. Neurology March 25, 2003;60:935-940).

SPORADIC HEMIPLEGIC MIGRAINE: A SEPARATE ENTITY

The clinical characteristics of 105 patients with sporadic hemiplegic migraine (SHM) were compared with those of patients with migraine with typical aura (MA) and patients with familial hemiplegic migraine (FHM) in a study at the Danish Headache Center, Glostrup Hospital, Gentofte Hospital, University of Copenhagen, and the John F Kennedy Institute, Denmark. In patients with SHM, 72% had 4 typical aura symptoms: visual, sensory, aphasic, and motor. Compared with MA, the duration of each aura symptom was prolonged and bilateral symptoms were more frequent. Symptoms typical of basilar migraine occurred during attacks of SHM in 72% of cases. SHM has symptoms identical to FHM and different from MA. The aura is usually followed by the headache in SHM, similar to FHM but not MA. Sporadic hemiplegic migraine should be classified with FHM and is separate from migraine with aura. The age of onset is under 15 years in 40% of cases, and one third have an onset between 10 and 14 years. Females outnumber males, 4 to 1. Only 3% have attacks after age 52. (Thomsen LL, Ostergaard E, Olesen J, Russell MB. Evidence for a separate type of migraine with aura. Sporadic hemiplegic migraine. Neurology Feb (2 of 2) 2003;60:595-601). (Reprints: Dr Lise L Thomsen, The Danish Headache Center, University of Copenhagen, Department of Neurology, Glostrup Hospital, Ndr Ringvej 57, DK-2600 Glostrup, Denmark).

COMMENT. In an editorial, Goadsby PJ of Queen Square, London, comments that the extent of investigation in a case of sporadic hemiplegic migraine should be exponentially increased as the length of the aura exceeds 60 minutes, but it is reassuring to know that the aura may be prolonged and can be benign. (Neurology 2003;60:536-537). About two thirds have symptoms lasting no longer than an hour, but in one third the aura is prolonged, 8% longer than a day. Clinical characteristics include sensory symptoms in 98%, and brainstem symptoms in 75%. Diagnostic criteria require motor symptoms and at least one visual, sensory, or speech symptom, resembling basilar migraine. Differential diagnoses of SHM include epilepsy (Todd paresis), stroke, systemic lupus, metabolic disorders, and inherited disorders such as mitochondrial myopathy. The workup should include the elimination of these and other disorders with similar symptoms.