

COMMENT: Thyrotropin-releasing hormone (TRH) therapy has been used in several neurologic disorders, including spinocerebellar degeneration, amyotrophic lateral sclerosis, and infantile spasms with hypsarrhythmia (see Ped. Neur. Briefs June 1987; 1:3). The present patient had an acute cerebellar ataxia following an infection of unknown origin and persisting for 18 months before treatment with TRH was begun.

CEREBELLAR ATAXIA BENEFITTED BY 5-HYDROXYTRYPTOPHAN

Levorotatory 5-hydroxytryptophan (10 mg/kg/day) was found to benefit patients with various inherited or acquired cerebellar ataxias in a long-term randomized, double-blind study at the Hôpital Neurologique, Alexis Carrel Faculty of Medicine, Lyon, France. Of 30 patients in test and placebo groups, 2 had Friedreich's ataxia, 8 had postsurgical ataxia, 6 multiple sclerosis, 2 brain stem infarction, and 12 cerebellar cortical atrophy. The majority were adults, and the degree of ataxia was measured by four semiquantitative subtests. The treatment continued initially for four months, was extended in five patients without controls for a further eight months. Levo-5-hydroxytryptophan significantly improved the ataxia score and modified the time of standing upright, the speed of walking, speaking, and writing. The process appears to be serotonin-dependent and provides benefit particularly in static cerebellar disturbances and speech dysarthria caused by lesions of the anterior vermis. (Trouillas P et al. Improvement of cerebellar ataxia with levorotatory form of 5-hydroxytryptophan. A double-blind study with quantified data processing. Arch Neuro Nov 1988; 45:1217-1222).

COMMENT. The rationale for this treatment was the discovery of serotonergic nerve terminals in the cortex of the cerebellum, and the induction of cerebellar tremor by the experimental depletion of serotonin. The treatment was well tolerated and should be considered for trial in children with Friedreich's ataxia and in static, postsurgical or post-viral cerebellar syndromes.

HEADACHE

EEG AND DIET RELATED MIGRAINE

Thirty-eight patients with a history of diet induced migraine were studied with recording of clinical responses and electroencephalography at the Departments of Neurology and Biometry, Kansas University Medical Center, Kansas City, Kansas. The subjects consisted of 30 females and 8 males aged from 17 to 38 years, all having a history of migraine attacks consistently provoked by either chocolate, cheese, or alcohol. With the exception of one patient with a febrile seizure at age 2, none had a seizure history. There was a family history of migraine in first degree relatives in 22 patients (58%). Tests were carried out on an initial baseline day and on a second day, after challenge with chocolate, red wine, cheese, and fasting. Migraine headache occurred in 16 (42%), four with scintillating scotomata. Electroencephalograms were abnormal in 12 subjects (32%) most abnormalities being nonspecific slow waves. In three cases there were paroxysmal

features. Electroencephalographic response to hyperventilation was exaggerated in eight subjects (21%) but was not related to the occurrence of a headache. Photic stimulation showed high frequency driving in all 16 patients who developed headache but in only 14 out of 22 (64%) who did not develop headache (Lai, C et al. Clinical and electrophysiological responses to dietary challenge in migraineurs. Headache March 1989; 29:180-186).

COMMENT: Foods are commonly cited by patients as the cause of some migraine attacks. Tyramine is present in high concentrations in certain substances frequently producing migraine (various cheeses, beer and wine). Electroencephalographic abnormalities are found during asymptomatic periods in patients with migraine, and focal and unilateral delta rhythms have been described in patients with migraine during symptomatic states. Paroxysmal epileptiform discharges are unusual in adults with migraine but not uncommon in children. Temporal relationships between headache and severe episodic EEG abnormality ("ictal headache") have been reported (Isler H et al in Andermann F, Lugaresi E (eds): Migraine and epilepsy, Boston, Butterworths, 1987).

ASPIRIN PROPHYLAXIS IN CHRONIC PAROXYSMAL HEMICRANIA

A nine year old child with chronic paroxysmal hemicrania (CPH) was treated successfully using small dose aspirin prophylaxis at the California Medical Clinic for Headache, Encino, and the Harbor-UCLA Medical Center, Torrance, CA. Attacks occurred every 1½ hours throughout the day and awakened him from a sleep at night. They lasted a minimum of ten minutes and a maximum of 20 minutes and were localized to the left retroorbital and supraorbital areas. Pain was excruciating and nonthrobbing and was associated with ipsilateral lacrimation, nasal stuffiness, ptosis, and conjunctival injection. No relief was obtained with acetaminophen or phenobarbital. Baby aspirin (243 mg b.i.d. prevented the headaches and the dosage was decreased to 162 mg b.i.d. without further attacks. The aspirin was discontinued after three months without recurrence of headaches. The authors consider that this case is the first report of chronic paroxysmal hemicrania observed in a child, the earliest onset of CPH, and the first case obtaining relief from low dose prophylactic aspirin therapy. The effective daily dose of aspirin used (14.7 mg/kg) was less than the lowest mean level at risk for Reye's syndrome (25.1 mg/kg). (Kudrow D.B., Kudrow L. Successful aspirin prophylaxis in a child with chronic paroxysmal hemicrania. Headache March 1989; 29:280-281).

COMMENT: Indomethacin prophylaxis is considered the treatment of choice in adults with chronic paroxysmal hemicrania whereas salicylates are usually ineffective. Aspirin prophylaxis for chronic headache in children would not be a popular therapy generally because of the concern about Reye's syndrome.

MIGRAINE AS A NEUROVASCULAR METABOLIC DISORDER

Brain oxidative metabolism has been studied in nine patients with classical migraine at the Neurological Institute, University of Bologna, Italy. An increase in plasma lactate was found after standardized muscular effort and deficits of various mitochondrial respiratory chain enzymes in muscle biopsies occurred in 7. Two patients had 72% and 60% depression of