# PEDIATRIC NEUROLOGY BRIEFS

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### MIGRAINE HEADACHES

#### SUMATRIPTAN IN ACUTE MIGRAINE

The efficacy of oral sumatriptan 100 mg in 61 patients with acute migraine was assessed in a double blind, randomized, placebo-controlled, crossover study at the Department of Neurology. The Prince Henry and Prince of Wales Hospitals, Sydney, and Austin Hospital and Repatriation General Hospital, Melbourne, Australia, The International Headache Society guidelines were used in diagnosis. The youngest patients were 18 years (mean 39 years) and all had 1 to 6 migraine attacks with or without aura per month for at least one year. Current prophylactic treatment was continued during the trial in 30% of the 47 patients analyzed. The response rate was significantly greater with sumatriptan than with placebo, 51% vs 10%. Rescue medication was needed at two hours in 41% and 88%, respectively. Of 28 patients who were headache-free at 2 hours after sumatriptan, 11 (39%) had a recurrence of headache within 24 hours. A tight feeling or tingling sensation in the head were the commonest side effects (Goadsby PJ et al. Oral sumatriptan in acute migraine. Lancet September 28 1991: 338:782-783).

**COMMENT.** Sumatriptan is a 5-hydroxytryptamine agonist found superior to ergotamine in a previous multi-national study (<u>Eur Neurol 1991; 31:314-22</u>). Trials in children are under consideration and FDA approval is in progress.

The International Headache Society guidelines for diagnosis of migraine used in the above study are complex and have not been widely adopted in clinical practice. Diagnostic criteria for practicing physicians are proposed by Solomon S and Lipton RB (Headache 1991;

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31:384-387). The criteria proposed for office diagnosis of migraine without aura (common migraine) are as follows (any two of the four features): (1) headache - unilateral; (2) headache - pulsating quality; (3) associated nausea; (4) associated photophobia or phonophobia. If preceded within one hour by visual, sensory, or motor symptoms lasting 5 to 60 minutes the headaches are diagnosed as migraine with aura (classical migraine). Organic disease must be ruled out and the patient should have had several similar attacks in the past. Tension type headache is usually diagnosed by negative criteria and by ruling out migraine, cluster headache and headaches due to organic disease. Cluster headaches are differentiated from migraine by the frequency of attacks (daily) and the associated autonomic symptoms (ipsilateral conjunctival injection, tearing, nasal congestion, ptosis or miosis).

#### EPISODIC MYDRIASIS AS MIGRAINE EOUIVALENT

A 14-year-old girl who presented with yearly attacks of bilateral internal ophthalmoplegia, nausea and headache since the age of 9 is the subject of a case report from the Department of Child Neurology, University Hospital Nijmegen, The Netherlands. She complained of blurred near vision when reading, associated with photophobia, phonophobia, nausea and aspirinresistant bitemporal headaches. Attacks lasted 1 to 7 days. The pupils were symmetrically dilated during the attack and there was no response to direct or consensual light with complete loss of accommodation. The father and paternal aunt had migraine (van Engelen BGM et al. Bilateral episodic mydriasis as a migraine equivalent in childhood: a case report. Headache June 1991: 31:375-377).

COMMENT. The authors note that ophthalmoplegic migraine with bilateral mydriasis has not previously been described in children. A single ischemic lesion localized in the central parasympathetic nucleus of Perlia and the Edinger-Westphal nuclei is proposed as the likely mechanism for the bilaterality of the mydriasis. Other causes including drugs, deodorant-antiperspirants, perfumes were excluded.

Unusual clinical manifestations of migraine are reviewed by Ehrenberg BL in Seminars in Neurology June 1991; 11:118-127. Some patients have headaches without aura, some have confusional spells, memory lapses and episodes of speech arrest resembling complex partial seizures. Basilar migraine is manifested by auras of vertigo, dysarthria, tinnitus, decreased hearing, diplopia, disturbances in both visual fields, bilateral sensory loss or weakness, or alterations in consciousness. The syndrome of benign epilepsy of childhood with occipital paroxysms is preceded by hallucinations or visual loss and associated with occipital spike-wave activity on interictal EEG. Episodes with auras or hallucinations lasting 5 to 60 minutes resemble migraine attacks. Numerous studies show a high incidence of EEG abnormalities in large populations of migraine patients (Millichap JG Child's Brain 1978; 4:95-105). A beneficial response to phenytoin in