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HEADACHE DISORDERS

ASPARTAME-TRIGGERED MIGRAINE

Two patients with known aspartame-triggered and rizatriptan-responsive migraine had their headaches worsened following use of an aspartame-containing formulation of rizatriptan (Maxalt-MLT), in a report from Albert Einstein College of Medicine, Bronx, NY. A 14-year-old boy with a 2 year history of migraine with aura was tested with an elimination diet and found to have attacks triggered by aspartame-containing foods and drinks. On at least 20 occasions, these attacks were rapidly aborted by treatment with triptans, including an oral preparation of rizatriptan. The headaches worsened and persisted for six hours when rizatriptan oral wafers were substituted for the aspartame-free tablets. A 36-year-old woman with a 30-year history of migraine without aura had headaches consistently triggered by aspartame-containing foods, monosodium glutamate, and nitrites. On 15 occasions, headaches were relieved within 45 minutes by treatment with oral rizatriptan. Following substitution of the aspartame-containing wafer form of rizatriptan, the migraine attack steadily worsened and lasted 6 hours. In both patients, further attacks were aborted by aspartame-free tablets of rizatriptan. Neither patient would agree to a rechallenge with the wafer formulation. (Newman LC, Lipton RB. Migraine MLT-down: an unusual presentation of migraine in patients with aspartame-triggered headaches. Headache October 2001;41:899-901). (Respond: Dr Lawrence C Newman, The Headache Institute, 1000 Tenth Ave, Suite 1C10, New York, NY 10019).

COMMENT. Despite the small amount of aspartame (3.75 mg) in the 10 mg wafer of rizatriptan, aspartame is a probable migraine-trigger in these two patients with known aspartame sensitivity. In two of three double-blind, randomized, placebo-controlled studies, cited by the authors, headaches were more frequent during aspartame treatment.

Egger J, Wilson J and associates at the Hospital for Sick Children, London, have previously demonstrated the importance of some foods as precipitants of migraine in children and the value of an "oligoantigenic" elimination diet in

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treatment. Food items found to trigger headache include cow milk, orange juice, wheat, eggs, tomato, pork, and chocolate (Lancet 1983;2:865; J Pediatr 1989;114:51-58). See Progress in Pediatric Neurology I and III, PNB Publ, 1991 and 1997, for reference to diet including aspartame as a migraine trigger.

TRIPATAN-WITHDRAWAL HEADACHE

The duration and severity of withdrawal headache after overuse of various headache drugs, including analgesics, ergots, and triptans, were determined in a prospective study of 95 patients (mean age 45+/-12 years; 80 women, 15 men) at the University Hospital Essen, Germany. Sixty-nine (73%) had migraine, 12 (12%) tension-type, and 14 (15%) a combination of headaches. Withdrawal headache is often associated with nausea, vomiting, and sleep disturbance, lasting up to 10 days or longer. The intensity of withdrawal headache typically increases between the second and fourth days and decreases by the sixth and eighth days. After standard inpatient withdrawal therapy over 14 days, the duration of withdrawal headache was shorter in patients overusing triptans (4.1 days) than in those overusing ergots (6.7 days) or analgesics (9.5 days, $p<.002$). Duration was also shorter in patients with migraine (6.7 days) than in patients with tension-type (9.6 days) and combination headache (8.5 days, $p<.02$), but only patients with migraine had overused triptans and none with tension-type headache. Mean headache intensity was the same on the first day of withdrawal for all medications but by day 14, it was lower in patients overusing triptans than in those on ergots or analgesics ($p<.005$). Of triptan overusers, 85% were headache-free by 14 days compared to only 23% of analgesic overusers, and the need for rescue medication was less in triptan withdrawal patients. (Katsarava Z, Fritsche G, Muessig M, Diener HC, Limmroth V. Clinical features of withdrawal headache following overuse of triptans and other headache drugs. Neurology November (1 of 2) 2001;57:1694-1698). (Dr Limmroth, Department of Neurology, University Hospital Essen, Hufelandstrasse 55, 45122 Essen, Germany).

COMMENT. The treatment of choice for medication-overuse headache (MOH) is complete withdrawal of headache medication. Most studies of MOH have involved ergots and analgesics. The increased use of triptans has been associated with an increase in prevalence of MOH and the need to withdraw triptan treatment. The duration and intensity of withdrawal headache are less following triptan withdrawal than that following analgesic or ergot withdrawal. Withdrawal headache is dependent on the type of overused drug and pharmacological mechanisms, including specificity for 5-HT receptors or other enzyme systems. The milder withdrawal headache in migraineurs reflects the overuse of triptans, whereas the more severe withdrawal symptoms in tension headache patients is associated with overuse of analgesics. A similar study involving adolescents with migraine would be of interest. The safety and effectiveness of sumatriptan in children has not been established by controlled study. A beneficial response is reported in two open label studies of subcutaneously administered sumatriptan in patients <18 years (Cited by Maytal J. Overview of recent advances in migraine and other headaches. In Millichap JG ed. Progress in Pediatric Neurology III, PNB Publ, 1997).