

HEADACHE DISORDERS

TOPIRAMATE AND COGNITIVE FUNCTION IN MIGRAINE

Researchers at the Johnson & Johnson Pharmaceutical Research & Development, New Jersey and Belgium, and University of California, Los Angeles, CA used the Cambridge Neuropsychological Test Automated Battery (CANTAB) and cognitive adverse events to evaluate neurocognitive effects of topiramate 100 mg/day vs placebo in 70 migraine patients aged 12 through 17 years. The CANTAB includes measures of object recognition, spatial memory span, paired associates learning, reaction time, sustained attention, and word fluency. Subjects responded to visually presented stimuli on a touch-sensitive screen. Slight statistically significant score increases in 3 CANTAB measures, indicating slowing of reaction time and processing, were associated with topiramate during double-blind treatment lasting 16 weeks. The most common adverse events included anorexia, insomnia, fatigue, and dizziness. Learning, memory, and executive function were unchanged. The tolerability profile of topiramate, including cognitive adverse events, appeared to be acceptable. (Pandina GJ, Ness S, Polverejan E, et al. Cognitive effects of topiramate in migraine patients aged 12 through 17 years. *Pediatr Neurol* 2010;42:187-195). (Respond: Dr Pandina, Clinical Leader, Psychiatry, Johnson & Johnson Pharmaceutical Research & Development, 1125 Trenton-Harbourton Road, Titusville, NJ 08560. E-mail: gpandina@its.jnj.com).

COMMENT. An open-label study of the effectiveness of topiramate in 97 children with migraine found that the most common side effects were cognitive (12.5%), weight loss (5.6%), and paresthesia (2.8%) (Hershey AD et al. *Headache* 2002;42:810-818). A randomized, double-blind, placebo-controlled trial of topiramate in 162 children (age, 6-15 years) with migraine found 6.5% discontinued treatment because of side effects (URI infection, anorexia, weight decrease, gastroenteritis, paresthesia, and somnolence (Pearlman WP et al. *Headache* 2005;45:1304-1312). A review of 5 published reports of topiramate and migraine found the frequency of side effects varied considerably among studies, the most frequent being weight loss, anorexia, abdominal pain, difficulties in concentrating, sedation and paresthesia. It was concluded that the disability caused by the migraine should be assessed before initiating prophylactic treatment with potential side effects (Ferraro D et al. *J Headache Pain* 2008;9:147-150).

DEMYELINATING DISEASE

CSF ABNORMALITIES IN EARLIER- AND LATER-ONSET PEDIATRIC MULTIPLE SCLEROSIS COMPARED

CSF cellular and immunoglobulin G (IgG) profiles in 40 earlier-onset (<11 years) and 67 later-onset (>11 and <18 years) pediatric MS patients were compared in a multicenter US study. Earlier-onset patients had a mean age of 7.2 +/- 2.7 years (60% female), and later-age patients 15.1 +/- 1.7 years (63% female). CSF white blood cell counts were higher in earlier-onset patients (median= 9 mm³ vs 6mm³ (p=0.15) but had a