

valproate exposure. These findings are in contrast to the absence of delayed cognitive performance in children exposed in utero to levetiracetam.

PREVALENCE OF VIGABATRIN-INDUCED VISUAL FIELD LOSS

The magnitude of risk of vigabatrin-associated visual field loss and any clinical predictors of risk were determined by systematic review of 32 studies identified by electronic searches of the literature. Reports were analyzed at the Universities of Liverpool, Cardiff, Birmingham, and Warwick, Coventry, UK. Of 1,678 patients exposed to vigabatrin, 738 (44%) had visual field loss compared to 30 (7%) among 406 controls. The random-effects estimate for the proportion of children with visual field loss was 34% compared to 52% for adults. The relative risk for visual field loss was 4.0. Risk factors for a higher proportion of patients with visual field loss were a larger mean cumulative dose of vigabatrin and increasing age. The authors conclude that vigabatrin should be reserved for patients with epilepsies known to be unresponsive to other alternative therapies or for patients receiving benefit from vigabatrin that outweighs the risk. (Maguire MJ, Hemming K, Wild JM, Hutton JL, Marson AG. Prevalence of visual field loss following exposure to vigabatrin therapy: A systematic review. *Epilepsia* Dec 2010;51(12):2423-2431). (Respond: Dr Melissa Maguire, Newcastle General Hospital, Westgate Rd, Newcastle-upon-Tyne, NE4 6BE, UK. E-mail: maguirem@doctors.org.uk).

COMMENT. Vigabatrin, an analog of GABA, irreversibly inhibits GABA transaminase, and increases brain levels of GABA. Bilateral concentric constriction of visual fields with relative sparing of the temporal fields, first reported in 1997, affects one third of children and one half of adults treated with vigabatrin. Apart from age, male gender, and cumulative dose over time, risk factors for this adverse effect of vigabatrin are unknown. Its use in children is restricted to patients with infantile spasms and tuberous sclerosis and as adjuvant therapy for partial seizures refractory to alternative treatments. Visual field examination is required prior to and at intervals during treatment. The intervals and optimal frequency of perimetry has not been determined. Ongoing research concerning risk factors and early detection of visual field loss associated with vigabatrin includes a possible genetic predisposition and use of imaging as a biomarker of nasal retinal nerve fiber attenuation (Moseng L et al. *Acta Ophthalmol* Jan 21, 2011;10:1111). Several studies show that the visual field loss may be permanent.

SEIZURE DISORDERS

REVISED AAP PRACTICE GUIDELINES FOR EVALUATION OF THE CHILD WITH A SIMPLE FEBRILE SEIZURE

An AAP subcommittee on febrile seizures has revised the practice guidelines of 1996 for the diagnosis and evaluation of a simple febrile seizure in children 6 months through 60 months of age. Articles published since the last guideline through 2009 were reviewed, and recommendations were assessed until consensus was reached. The committee notes that the following do not indicate an exclusive course of treatment, and variations according to individual circumstances may be appropriate:

- Identify the cause of fever;
- Consider meningitis in the differential diagnosis;
- Perform LP if the child is ill-appearing or there are clinical signs or symptoms of concern;
- LP is an option in any infant 6-12 months of age who presents with a seizure and fever and who has not received immunization against *Haemophilus influenzae* type b or *Streptococcus pneumoniae*, or when immunization status cannot be determined;
- LP is an option for children pretreated with antibiotics;
- In general, further evaluation is not usually required, specifically EEG, blood studies or neuroimaging.

(AAP subcommittee on febrile seizures. Clinical practice guideline—neurodiagnostic evaluation of the child with a simple febrile seizure. **Pediatrics** Feb 2011;127:389-394)

COMMENT. In this revised guideline, compared to that published in 1999, specific indications for LP based primarily on age are modified. LP recommended in a child who is “ill-appearing” addresses the importance of clinical acumen of the treating physician, an indication omitted in the previous guidelines for children <18 months of age. It should be emphasized that these guidelines do not apply to children with complex febrile seizures.

HEADACHE DISORDERS

ALICE IN WONDERLAND SYNDROME ASSOCIATED WITH TOPIRAMATE FOR ADOLESCENT MIGRAINE PREVENTION

Neuroscientists at the University Medical Centre Hamburg, Germany, report the case of a 17-year-old girl with migraine without aura who developed an intermittent “Alice in Wonderland Syndrome” associated with prophylactic treatment of migraine headaches with topiramate. She presented with a 7-year history of migraine and headaches occurring on 5-10 days/month. Neurological examination and MRI were unremarkable. Topiramate 50 mg each night was associated with depressive aggressive symptoms and mood swings. Also, she developed paresthesias of finger tips, toes and lips, and alopecia. With continued headaches 3-4 days/month, the dose of topiramate was increased to 75 mg/nightly. When sleep was delayed, she described intermittent nocturnal distortions of her body image: her head and one hand grew bigger, while her body and other hand shrank in size. Within 2 weeks of decreasing the dose of topiramate to 50 mg/night, these nocturnal phenomena ceased. EEG between attacks was normal. A rechallenge with 75 mg daily dose was associated with recurrence of body distortions within 2 weeks. The distortions stopped within 1 week after reduction of dose to 50 mg/day, and none was reported at 5-month follow-up. Other potential pathophysiologies, including migraine aura and complex partial seizure, were considered unlikely. (Juergens TP, Ihle K, Stork J-H, May A. “Alice in Wonderland syndrome” associated with topiramate for migraine prevention. **J Neurol Neurosurg Psychiatry** Feb 2011;82:228-