

## AUTOIMMUNE DISORDERS

### NEUROLOGIC COMPLICATIONS OF CELIAC DISEASE

Patients with celiac disease (CD) [n=111] and controls (n=211) were questioned regarding neurologic disorders, their charts were reviewed, and they received neurologic evaluations, including brain imaging or EEG if indicated, in a study of neurologic complications of CD at Carmel Medical Center, Technion-Israel Institute of Technology, Haifa, Israel. The mean age of patients and controls was 20.1 +/- 9 years, and the ratio of male to female was 2:3. The CD was classical infantile and diagnosed at 1.8 years in 58 (52.3%), and later in onset (diagnosed at 14.8 years) in 53 (47.7%). Neurologic disorders were found in 57 (51.4%) of patients with CD, whereas only 42 (19.9%) control subjects had abnormal neurologic findings. Patients with late-onset CD had more neurologic complications than the classical CD group (54.7% vs 48.3%) but the difference was not significant. Neurologic abnormalities and their frequency compared to controls included: hypotonia, 21.6% vs 3.8% ( $p<0.01$ ); developmental delay, 15.5% vs 3.3% ( $p<0.01$ ); seizures, 7.2% vs 0.8% ( $p<0.09$ ); learning disabilities and ADHD, 20.7% vs 10.5% ( $p<0.01$ ); headache, 27.9% vs 8.1% ( $p<0.01$ ); ataxia, 5.4% vs 0% ( $p<0.01$ ); and tics, 0.9% vs 2.4% ( $p=0.67$ ). Seizure disorders were increased with CD but not significantly, and tic disorders showed no increased prevalence. The gluten-free diet benefited those CD patients with infantile hypotonia and migraine headache. (Zelnik N, Pacht A, Obeid R, Lerner A. Range of neurologic disorders in patients with celiac disease. *Pediatrics* June 2004;113:1672-1676). (Reprints: N Zelnik MD, Department of Pediatrics, Carmel Medical Center, 7 Michel St, Haifa 34362, Israel).

COMMENT. The range of neurologic disorders associated with celiac disease is wider than previously reported and includes chronic migraine headache, developmental delay, hypotonia in infants, learning disabilities and ADHD. Apart from cases of epilepsy with occipital calcifications, recurrent seizures were not significantly correlated with CD. In occipital lobe seizures related to CD, the CD may be clinically asymptomatic (Ambrosetto G et al. *Epilepsia* 1992;33:476-481; *Ped Neur Briefs* Aug 1992). The benefit derived from a gluten-free diet in CD patients with migraine is of interest, and gluten as a trigger for migraine should be added to the list of dietary items to consider for elimination in therapy for migraineurs with proven CD. (Millichap JG and Yee M. The diet factor in pediatric and adolescent migraine. *Pediatr Neurol* Jan 2004).

### **FAMILIAL HEMOPHAGOCYTIC LYMPHOHISTIOCYTOSIS WITH CEREBELLAR SWELLING AND TONSILLAR HERNIATION**

A 3 year-old male child who presented with fever and cerebellar ataxia two weeks after varicella was subsequently diagnosed with hemophagocytic lymphohistiocytosis in a report from the Hospital de Cruces, Barakaldo, Bizkaia, Spain. CSF showed a slight increase in protein and pleocytosis of 36 cells/mL, 97% lymphocytes. CT scan of the brain was normal. Fever recurred 1 week later and was associated with hepatosplenomegaly and pancytopenia. At one month after varicella was diagnosed he became comatose and