

ENCEPHALOPATHIES

GLUTAMIC ACID DECARBOXYLASE AUTOANTIBODIES-RELATED ENCEPHALITIS

Researchers at University Hospital of Geneva, Switzerland, report a case of glutamic acid decarboxylase autoantibodies (GADA)-related encephalitis in a 6-year-old girl and review the literature. She developed refractory seizures at age 25 months followed by mental regression and type 1 diabetes mellitus, in association with elevated plasma and CSF GADAs. A dramatic decrease in serum GADA levels was observed 2 weeks after plasmapheresis and was maintained by oral prednisone and 2 plasmapheresis sessions per week. At 8 years, her gait was normal and she could understand and speak short sentences, but seizures were only partially controlled. Only two previous reports were published, in 2002 and 2009. One child recovered completely within 3 months of disease onset, despite persistently high values of plasma GADA. (Korff CM, Parvex P, Cimasoni L, et al. Encephalitis associated with glutamic acid decarboxylase autoantibodies in a child. *Arch Neurol* Aug 2011;68(8):1065-1068). (Respond: Christian M Korff MD, Pediatric Neurology, Child and Adolescent Department, University Hospital of Geneva, 6 Rue Willy-Donze, CH-1211 Geneva 14, Switzerland. E-mail: christian.korff@hcuge.ch).

COMMENT. The concept of epilepsy caused by autoantibodies to specific neuronal membrane proteins is a growing area of interest in epilepsy research. (Vincent A et al. *Curr Opin Neurol* 2010;23(2):144-150). Voltage-gated potassium channels, N-methyl-D-aspartate receptors, and glutamic acid decarboxylase are involved in some cases of limbic encephalitis. Patients whose seizures do not respond to conventional anticonvulsants should be tested for autoantibodies and considered for a trial of immunotherapy.

INFECTIOUS DISEASES

***MYCOPLASMA PNEUMONIAE* POST-ENCEPHALITIC EPILEPSY**

Researchers at Chang Gung Children's and Memorial Hospitals, Taoyuan, Taiwan, investigated the clinical manifestations, laboratory, EEG, and neuroimaging features of *M pneumoniae*-related encephalitis and its prognosis. Ninety-nine patients seen between Jan 2001 and June 2010 were all positive by serology, and 47 (47.5%) developed postencephalitic epilepsy. Onset ranged from 9 months to 14 years (mean age 6.8 years). Seizures occurred in the acute phase in 53 (53.5%), most commonly focal with secondary generalization (40%). Status epilepticus occurred in 25%, refractory in 15%. Initial symptoms were fever, altered consciousness, and personality or behavior change. Elevated CSF protein was a risk factor for postencephalitic epilepsy. Initial EEG was most commonly focal/diffuse cortical dysfunction (37%) and focal epileptiform discharge (26%). Focal epileptiform EEG in the acute phase increased the risk of developing postencephalitic epilepsy 5-fold. Follow-up ranged from 6-131 months. Significant risk