SEIZURE DISORDERS

AUTOIMMUNE EPILEPSY GUIDELINES FOR DIAGNOSIS

Investigators at the Children's Hospital at Westmead, University of Sydney, Australia, and John Radcliffe Hospital, Oxford, UK, describe 13 children (11 female; mean age 6 years, range 1-13 years) seen over a period of 3.5 years with suspected autoimmune epilepsy. Using modified adult guidelines (Zuliani L, et al. **J Neurol Neurosurg Psychiatry** 2012 Jun;83(6):638-45), patients were classified as having definite autoimmune epilepsy in 5, probable in 1, possible in 3, unlikely in 2, and unknown in 2 patients, according to the neuronal surface or GAD antibodies, and response to immune therapy. Classical NMDAR encephalitis was diagnosed in 3 patients, VGKC in 2, limbic encephalitis with negative antibodies in 2, epilepsy with other autoimmune diseases in 3 (1 with GAD antibodies), fever-induced refractory epileptic encephalopathy in school-aged children (FIRES) in 2, and epileptic encephalopathy associated with VGKC antibodies in 1. Seven with suspected autoimmune epilepsy were positive for neuronal surface antibodies (NMDAR, VGKC-complex, and GAD). Immunotherapy used in 9 cases had a positive response in patients with positive neuronal surface antibodies (5/5) and less commonly in those with negative antibodies (2/4). (Suleiman J, Brillot F, Lang B, Vincent A, Dale RC. Autoimmune epilepsy in children: Case series and proposed guidelines for identification. **Epilepsia** 2013 Jun;54(6):1036-45). (Response: Dr Russell C Dale. E-mail: Russell.dale@health.nsw.gov.au).

COMMENT. Of children with suspected autoimmune epilepsy, those with neuronal surface antibodies and GAD antibodies frequently respond to immunotherapy. Guidelines may be useful in the diagnosis of seizures of autoimmune etiology. CNS disorders, some without associated tumors, may be antibody mediated and may benefit from immunomodulatory therapies.

Prevalence of autoantibodies in patients with epilepsy. In two large cohorts of adult patients with new untreated and established epilepsy screened for the multiple autoantibodies tested positive in 11% (VGKC in 5%), glycine receptors (3%), GAD (1.7%), and NMDA (1.7%). The prevalence of antibodies was the same in patients with established or newly diagnosed epilepsy. There was a significantly higher prevalence of positive antibody titers in patients with focal epilepsy of unknown cause than in those with structural/metabolic focal epilepsy (14.8% vs 6.3%; $p<0.02$) (Brenner T, Sills GJ, Hart Y, et al. **Epilepsia** 2013 Jun;54(6):1028-35). VGKC complex antibodies in pediatric severe acute encephalitis are uncommon with only one (2.2%) of 46 children affected, a 4-year-old girl presenting with influenza A infection in Taiwan (Lin J-J, et al. **Brain Dev** 2013 Aug;35(7):630-635).

PROLONGED FEBRILE SEIZURES AND THEIR MANAGEMENT

Investigators at Tel-Aviv Sourasky Medical Center, and three other medical centers in Israel, obtained data, prospectively, on all children presenting in the emergency departments from January 2008 to March 2010 with prolonged febrile seizures. Information related to seizure semiology, treatment, and outcome was collected and