

NMDAR ANTIBODIES AND NEW-ONSET EPILEPSY

The frequency and significance of antibodies to NMDAR were determined in 19 adolescents and young women, aged 15 to 45 years, with unexplained new-onset epilepsies, seen between Jan 2005 and June 2007 at the University of Bonn, Germany; Univ of Pennsylvania, Philadelphia; and John Radcliffe Hospital, Oxford, UK. Five (25%) patients had anti-NMDAR antibodies, and all 5 had a history of psychiatric symptoms, pleocytosis, seizures, and relapsing-remitting course. All recovered, either spontaneously or following corticosteroid or intravenous immunoglobulin treatment. Only 1 patient had a neoplasm (multiple neuroendocrine tumors including the ovaries). In a control series of 61 patients with other cryptogenic epilepsies and 11 surgically treated patients with epilepsy, one, a 22-year-old man, was NMDAR antibody positive and he had recovered from a severe encephalopathy. (Niehusmann P, Dalmau J, Rudlowski C, et al. Diagnostic value of N-methyl-D-aspartate receptor antibodies in women with new-onset epilepsy. **Arch Neurol** April 2009;66:458-464). (Respond: Christian G Bien MD, Department of Epileptology, University of Bonn, Sigmund-Freud-Str 25, 53105 Bonn, Germany. E-mail:christian.bien@ukb.uni-bonn.de).

COMMENT. A significant proportion of unexplained new-onset epilepsies in adolescents and young women may be caused by anti-NMDAR encephalitis. Seizures are a common symptom in patients with anti-NMDAR encephalitis, reported in 76 of 100 cases (Dalmau J et al. 2008).

SEIZURE DISORDERS

LONG-TERM OUTCOME IN CHILDHOOD-ONSET EPILEPSY

The value of early seizure frequency and etiology in the prediction of long-term seizure and mortality outcome in a population-based cohort of 102 children was determined in a study at University of Turku, Finland, and Epilepsy Research Group, Berlin, Germany. Follow-up was a median of 40 years after the first seizure before the age of 16 years. One-year remission (1YR) had occurred in 95 (93%) of the group, and 7 (7%) never experienced a 1YR, their epilepsy considered drug-resistant. Patients with weekly seizures in the first year of treatment had a 8-fold risk of developing drug resistant epilepsy ($P=0.0125$), and a 2-fold risk of never entering a terminal 1YR ($P=0.001$). Weekly seizures prior to treatment carried a slight risk of never entering terminal 1YR ($P=0.035$). Mortality during follow-up was 13%, and long-term mortality was 9-fold higher for patients with symptomatic epilepsy ($P=0.0071$). Weekly seizures prior to or during the first year of treatment did not increase mortality. Virtually all (51/52, 98%) children with low seizure frequency and non-symptomatic etiology entered 1YR during 40 years follow-up, and almost all (49/52, 94%) entered 1-year terminal remission. A combination of frequent pretreatment seizures and symptomatic etiology is predictive of intractable epilepsy. (Sillanpaa M, Schmidt D. Early seizure frequency and aetiology predict long-term medical outcome in childhood-onset