RECURRENCE WITHIN 24 HOURS OF UNPROVOKED SEIZURES

The incidence and risk factors of acute recurrence of unprovoked seizures within 24 hours of admission to an Emergency Department (ED) were analyzed by a retrospective chart review at Schneider Children's Hospital, New York. Children taking antiepileptic drugs (AED) were excluded. Of 117 patients analyzed, 69 (59.0%) were admitted. Children more likely to be admitted were of younger age (mean, 3 years 8 months) than those discharged (mean age, 8 years), P<0.01; they had multiple rather than single seizures before arrival at the ED (P<0.001); and they had received AED in the ED (P<0.001). Children with symptomatic seizures were not admitted more frequently than those of idiopathic etiology. Fourteen (20%) of admitted patients had one or more seizure recurrences within 24 hours. Multiple seizures before arrival at the ED was a significant risk factor for acute recurrence (P<0.05). EEGs were obtained in 59 (85.5%) of 69 admissions; they were normal in 33 and abnormal in 26, epileptiform in 18. An abnormal EEG was not correlated with acute seizure recurrence within 24 hours. Treatment in the ED (lorazepam in 16 children, lorazepam and phenytoin in 4) did not lower the acute seizure recurrence rate. The authors recommend admission for observation of children presenting at the ED with an unprovoked seizure who are not on AED treatment. (Sogawa Y, Maytal J. Emergency department admission of children with unprovoked seizure: Recurrence within 24 hours. Pediatr Neurol August 2006;35:98-101). (Respond: Dr Sogawa, Montefiore Medical Center, Epilepsy Center, 111 East 210th Street, Bronx, NY 10467).

COMMENT. Unprovoked seizures in children untreated with AED, especially patients with a history of prior seizure recurrence, require close observation and follow-up. The use of a short acting AED alone in the above center would explain the failure of ED treatment to lower the acute seizure recurrence rate. In a previous prospective study of 407 children with a first unprovoked seizure, followed for a mean of 6.3 years, seizures recurred in 42%, one-half the recurrences within 6 months and almost 90% within 2 years. Risk factors for seizure recurrence included a remote symptomatic etiology, abnormal EEG, nocturnal seizure, prior febrile seizure, and Todd’s paresis. A favorable prognosis (21% recurrence risk after 5 years) was correlated with a cryptogenic etiology, a first seizure while awake, and normal EEG. (Shinnar S et al. Pediatrics 1996;98:216-225; Ped Neur Briefs Oct 1996). The control of seizures by AEDs and a favorable long-term remission are accompanied by heightened self-esteem, improved school achievement, and social acceptance by peers. An improved quality of life is justification for rational therapy, with precautions to avoid adverse side effects. (Shinnar S, Berg AT. Epilepsia 1996;37:701-708; Ped Neur Briefs Oct 1996).

MUSICOGENIC SEIZURES AND TEMPORAL LOBE FOCI

Medically intractable musicogenic epilepsy in 3 adults, with onset at age 5 years in 2 and 18 years in 1, was investigated with ictal magnetoencephalography, magnetic resonance spectroscopy, and presurgical intracranial EEG monitoring, at Vanderbilt University Medical Center, Nashville, TN. Seizures were precipitated by various forms of music, popular rhythms, church hymns, and by playing an electric keyboard. Auras consisted of a tune heard