

SEIZURE DISORDERS

STATUS EPILEPTICUS: ETIOLOGY AND OUTCOME

Etiology, treatment efficacy, and outcome were studied retrospectively in 65 children treated for status epilepticus at Tampere University Hospital, Finland. Symptomatic causes were present in 40%, and fever was associated in 37%. Neurologic sequelae occurred in 15% and epilepsy in 23%. Mean follow-up was 3.6 years. Status epilepticus lasting 120 minutes caused major long-term neurologic morbidity. Short barbiturate anesthesia aborted status in less than 2 hours in 75% of cases. (Eriksson KJ, Koivikko MJ. Status epilepticus in children: aetiology, treatment, and outcome. Dev Med Child Neurol Oct 1997;39:652-658). (Respond: Dr KJ Eriksson, Department of Paediatrics, Tampere University Hospital, PO Box 2000, Tampere, FIN-33521 Finland).

COMMENT. These authors advocate the early and prompt use of barbiturate anesthesia in status epilepticus if first-line drugs are ineffective.

ELECTROCONVULSIVE THERAPY FOR INTRACTABLE SEIZURES

Two children aged 13 and 10 years with intractable epilepsy were treated with electroconvulsive therapy (ECT) for seizure control at the Children's Hospital, Charleston, SC. A change in pattern but incomplete control of spontaneous seizures followed alternate-day ECT, and a series of 3 ECT seizures during a single session of anesthesia stopped spontaneous seizures and reduced the frequency of tonic seizures. ECT raised the ECT seizure threshold, was effective in ending nonconvulsive status, but benefits were transient and the value questionable. (Griesemer DA, Kellner CH, Beale MD, Smith GM. Electroconvulsive therapy for treatment of intractable seizures. Initial findings in two children. Neurology Nov 1997;49:1389-1392). (Reprints: Dr D A Griesemer, Children's Hospital 508, MUSC, 171 Ashley Ave, Charleston, SC 29425).

COMMENT. Repeated electroshock seizures in laboratory animals results in an increase in the electroshock threshold and the necessity for a stronger current to induce a seizure. The rather barbaric nature of ECT and fear of causing further brain damage have probably deterred pediatric neurologists from using this method of treatment in children with refractory epilepsy, but the American Psychiatric Association condones its use in adults and psychiatrists have reported its efficacy since the 1940s. I am in agreement with the present authors who question whether ECT offers a reasonable option for treating intractable epilepsy in children, and other forms of medical or surgical therapy would seem preferable.

LAMOTRIGINE - INDUCED INTRAVASCULAR COAGULATION

Two children, ages 3 and 11, who developed multiorgan dysfunction and disseminated intravascular coagulation (DIC) 9 days after the addition of lamotrigine to valproic acid anticonvulsant therapy are reported from the Hospital for Sick Children, Toronto, Canada. Both children developed a flu-like illness with fever, urticarial/maculopapular rash, hepatic and renal dysfunction, hypoalbuminemia, DIC, and one had rhabdomyolysis while being seizure-free. (Chattergoon DS, McGuigan MA, Koren G, Hwang P, Ito S. Multiorgan dysfunction and disseminated intravascular coagulation in children receiving lamotrigine and valproic acid. Neurology Nov 1997;19:1442-1444).