

age and acute symptomatic seizures. Increased length of hospitalization and acute symptomatic seizures were predictors of functional disability in 23% of patients with nonfatal episodes. (Claassen J, Lokin JK, Fitzsimmons BFM et al. Predictors of functional disability and mortality after status epilepticus. Neurology January (1 of 2) 2002;58:139-142).

Regarding long-term outcome, the occurrence of status with recovery had no adverse effects in a cohort of 342 children, when followed prospectively for a mean of 72 months (Shinnar S et al. Dev Med Child Neurol 1995 (suppl 72);37:116 (abstract)). It appears that mortality with status is related particularly to the cause of the status and the association of an acute illness such as encephalitis or encephalopathy, and sometimes to inadequate therapy. Although the majority of single, generalized tonic-clonic seizures are self-limiting and no more than 2 to 4 minutes duration, a seizure lasting 5 minutes or more may progress to status and should be treated aggressively. The prevention of status and the effective treatment of status are dependent on the avoidance of delay in initiating anticonvulsant therapy, and the adherence to a well-defined protocol outlined for emergency room physicians to follow. (Leppik IE, 2000; see Progress in Pediatric Neurology III, PNB Publ, 1997;102).

VIDEO-EEG IN DIAGNOSIS OF EPILEPSY IN RETARDED CHILDREN

Video-EEG monitoring was used to distinguish epileptic and non-epileptic events in 193 children, mean age 9.6 years, who presented with paroxysmal symptoms of uncertain etiology at Children's Hospital, Los Angeles, CA. Diagnosis was established in 130 (67%). Seventy (36%) were mentally retarded (MR). Epileptic seizures were identified in 67 (51%), non-epileptic events in 54 (41%), and both epileptic and non-epileptic events in 9 (7%) children. Children with MR had predominantly epileptic seizures on long studies and non-epileptic events on short studies. A diagnosis was established in 82% following long studies and in 62% with short studies. The most common seizure type was complex partial, and non-epileptic symptoms were behavioral, psychogenic, and physiological events. Children with MR were more likely than children without MR to have events during the studies, but the frequencies of epileptic and non-epileptic events were similar in the two groups. Management was modified following diagnostic studies. (Thirumalai S, Abou-Khalil B, Fakhoury T, Suresh G. Video-EEG in the diagnosis of paroxysmal events in children with mental retardation and in children with normal intelligence. Dev Med Child Neurol Nov 2001;43:731-734). (Respond: Dr Shanti Thirumalai, Children's Hospital, 4650 Sunset Blvd, Mail Stop 82, Los Angeles, CA 90027).

COMMENT. Improved diagnosis and more appropriate management following video-EEG in children with paroxysmal events should prompt more general use of this test, especially in children with mental retardation.

Eight infants with early-infantile epileptic encephalopathy (Ohtahara syndrome) had seizures that correlated with the ictal burst of the suppression-burst pattern recorded by video-EEG, in a report from the Bambino Gesù Children's Hospital, Rome, Italy (Fusco L et al. Brain Dev 2001;23:708-714).

CARNITINE LEVEL CHANGES WITH THE KETOGENIC DIET

The effects of the ketogenic diet (KD) on carnitine levels were determined in 38 consecutive patients with epilepsy treated at Rush-Presbyterian-St Luke's Medical Center, Chicago, IL. Carnitine levels were determined at 0, 1, 6, 12, and 24 months of diet treatment. Reduced total plasma carnitine (TC) at diet initiation was related to multiple antiepileptic drugs (AED), but only 3 had TC deficiency (range,