

Pediatr Adolesc Med April 1997;151:371-378). (Reprints: Anne T Berg PhD, Department of Biological Sciences, Northern Illinois University, DeKalb, IL 60115).

COMMENT. This study is one further confirmation of well established risk factors for recurrences of febrile seizures, especially age at onset, family history, and height of fever. (see Progress in Pediatric Neurology II, 1994;pp23-24; and Vol III, 1997;p29). A threshold to febrile seizures based on height of body temperature was established in animal and clinical studies performed 40 years previously at the Albert Einstein College of Medicine, NY. (Millichap JG. Studies in febrile seizures I. Height of body temperature as a measure of the febrile seizure threshold. Pediatrics Jan 1959;23:76-85).

A clinical study of 5 cases of epilepsy beginning as severe febrile seizures and seizures induced by hot water baths is reported from Ehime University, Japan. (Fukuda M, Morimoto T, Nagao H, Kida K. Brain Dev April 1997;19:212-216). Febrile seizures were controlled by clonazepam and diazepam but not by phenobarbital or valproate.

### RASMUSSEN'S SYNDROME: EEG STUDY

The early and follow-up EEG characteristics of Rasmussen's syndrome are reported in an 11-year-old girl studied at Ospedale Civile, Mantova, Italy. Delta activity localized to the left temporal region persisted in the EEG three days following an initial 15 min partial seizure characterized by staring, right arm parasthesias, and speech impairment. Neurologic exam and MRI were normal. SPECT scan showed left temporal hypoperfusion. Recurrent partial focal clonic seizures responded to steroid therapy but relapsed when treatment was discontinued after 2 months. Epilepsia partialis continua developed, and the EEG showed a spike focus complicating the continuous slow activity in the left rolandic region. A repeat MRI showed mild rolandic cortical atrophy. After 2 years, the patient was aphasic, hemiplegic, and mentally deteriorated, and seizures were refractory to antiepileptic drugs, corticosteroids, and alpha globulins. Plasmapheresis was of little benefit. (Capovilla G, Paladin F, Bernadina BD. Rasmussen's syndrome: longitudinal EEG study from the first seizure to epilepsia partialis continua. Epilepsia April 1997;38:483-488). (Reprints: Dr G Capovilla, Department of Neuropediatrics, Ospedale Civile di Mantova, Mantova, Italy).

COMMENT. The EEG may help in the early diagnosis of Rasmussen's syndrome in a child with partial seizures complicated by speech impairment and normal MRI. Focal delta activity without epileptiform spikes may precede the onset of epilepsia partialis continua by several months.

### LANDAU-KLEFFNER SYNDROME: IV g-GLOBULIN RESPONSE

An 8-year-old girl with Landau-Kleffner syndrome failed to respond to antiepileptic drugs and steroids but showed clinical and EEG improvement after intravenous g-globulin therapies at the American University of Beirut School of Medicine, Lebanon. Mumps at 5 years of age was complicated by receptive and expressive aphasia. An EEG showed generalized spike and slow waves, and a trial of valproate (VPA) was ineffective. At 6 years, the neurologic exam, apart from aphasia, the CT and MRI were normal, and the EEG showed almost continuous left-sided spike and slow wave complexes, resistant to VPA, clonazepam, and prednisone. Three courses of iv immunoglobulins, 400 mg/kg/day for 5 days, at 6-month intervals, resulted in a normal EEG and near-normal speech. CSF IgG index, previously increased, returned to normal

after the first iv infusion. (Fayad MN, Choueiri R, Mikati M. Landau-Kleffner syndrome: consistent response to repeated intravenous g-globulin doses: a case report. Epilepsia April 1997;38:489-494). (Reprints: Dr MN Fayad, AUB NY Office, 850 Third Ave (18th floor), New York, NY 10022).

COMMENT. Landau-Kleffner syndrome (LKS) has multiple etiologies, including meningitis, demyelination, arteritis, and cerebral neoplasms. Trials of AEDs and corticosteroids have been disappointing, providing at best some temporary relief. The present case report with dramatic response to immunotherapy suggests a postencephalitic autoimmune abnormality, and further studies are indicated. The late Dr Frank Morrell advocated subpial intracortical transection in selected cases of LKS. (see Progress in Pediatric Neurology III, 1997;p86).

## OCCIPITAL SEIZURES V. MIGRAINE AURA

Three children, ages 13 to 17 years, with occipital seizures resembling the visual aura of migraine are reported from St Thomas' Hospital, London, England. Case 1, a 14-year-old boy with weekly episodes of visual hallucinations beginning at age 8, first complained of concentric spherical rings of red and yellow moving from left to right visual field, without impaired consciousness, convulsion, or headache. After age 10 years, the visual hallucinations were followed by left-sided tonic deviation of the head and clonic movements of left face and arm, accompanied by loss of consciousness, post-ictal sleep and headache. Interictal EEGs and MRI were normal. Carbamazepine started at age 11 years prevented further attacks. Cases 2 and 3 also had visual hallucinations accompanied by headache and either loss of posture or convulsive movements; MRIs were normal, EEGs showed no epileptiform activity, and carbamazepine controlled attacks in one. The other patient refused treatment and attacks continued. (Panayiotopoulos CP, Sharoqi IA, Agathonikou A. Occipital seizures imitating migraine aura. J R Soc Med May 1997;90:255-257). (Respond: Dr Panayiotopoulos, Dept Clinical Neurophysiology and Epilepsies, St Thomas' Hospital, London SE1 7EH, England).

COMMENT. The interpretation of the visual hallucinations in these three children as epileptic events, and differing from migraine, is based on clinical manifestations, including the brevity of the symptom, multicolored patterns rather than black and white, onset on the same side, lack of photophobia, mild post-ictal headache, and response to antiepileptic medication. The lack of epileptiform activity on interictal EEGs is troublesome, and a positive video-EEG recording during an attack would have been more convincing. The authors stress the need to evaluate visual hallucinations both quantitatively and qualitatively to distinguish epilepsy, and especially benign childhood occipital seizures, from migraine phenomena.

## CARBAMAZEPINE-INDUCED MOTOR IMPAIRMENTS

Treatment with carbamazepine (CBZ) in therapeutic levels was associated with motor impairments in 19 children with epilepsy, studied during and 6 months after treatment was withdrawn at Huddinge University Hospital, Sweden. On a Bruininks-Oseretsky standardized test of gross and fine-motor proficiency, the drug-free evaluation showed significant improvements in response speed, fine-motor function, and total test battery scores. In another group of 12 children tested during treatment with CBZ, visual-motor control was impaired on the second test at a 6 month interval. (Braathen G, von