risk factor for recurrence of febrile seizures. Children with recurrences have higher temperatures than those without, supporting the theory of a febrile seizure threshold dependent on the height of the temperature.

Prediction of febrile seizures in siblings was studied prospectively in 129 children with FC at Sophia Children's Hospital, Rotterdam, The Netherlands (van Esch A, Steyerberg EW, van Duijn CM et al. Eur J Pediatr April 1998;157:340-344). The risk of FS in siblings was 10%, more than twice the population risk (4%). The overall risk of FS in first degree relatives of FS probands was 7%. The risk was increased to 16% in siblings with recurrent FS and 25% in siblings with an affected parent. A polygenic mode of inheritance seemed likely. A prediction model based on three risk factors was developed. The risk factors are: 1) FS in the parents; 2) age at first FS of proband under 1 year; and 3) FS recurrence in the proband. The risk of FS in siblings of FS probands may increase to 46% with 2 or 3 risk factors present and it falls to less than 10% if a sibling is unaffected up to 3 years of age.

CHILDHOOD EPILEPSY TREATMENT STRATEGIES

Treatment strategies employed in 494 children with various seizure types and remission frequencies were studied prospectively at multiple hospital centers in the Netherlands. In 142 (29%) treatment was initially withheld, and after 2 years 17% were still untreated, none suffering serious complications. Of 416 treated with AEDs, 88% received valproic acid or carbamazepine initially, and 40% did not respond successfully. Reasons for treatment failures included recurrent seizures (28%), and intolerable side effects (11%). Rashes occurred in 15 (4%), 14 with carbamazepine (10% of all children who received carbamazepine). The chance of achieving remission was negatively associated with the number of AED regimens tried. Alternative AEDs included phenytoin, phenobarbital, ethosuximide, and vigabatrin. If 3 regimens had failed, the chance of remission with alternative therapy was only 10%. The epilepsy was considered intractable in only 7%. A distinction was made between acceptable control, with low seizure frequency or severity, and intractable epilepsy. (Carpay HA, Arts WFM, Geerts AT et al. Epilepsy in childhood. An audit of clinical practice. Arch Neurol May 1998;55:668-673). (Reprints: Willem FM Arts MD, PhD, Department of Child Neurology, University Hospital-Sophia Children's Hospital, Dr Molewaterplein 60, 3015 GJ Rotterdam, The Netherlands).

COMMENT. The initial choice of AED therapy, mainly valproic acid or carbamazepine, fails to control childhood epilepsies in 40% of cases. Alternative therapies are necessary because of seizure recurrences or side effects, especially skin rash, a frequent complication of carbamazepine treatment. Newer AEDs such as gabapentin (Neurontin®), with a relatively low incidence of side effects, should increase the remission frequency of childhood epilepsies, especially partial seizures. In one large study of gabapentin as add-on therapy of 705 adult patients, skin rash was reported in only 0.5% compared to a 10% incidence with carbamazepine (Progress in Pediatric Neurology III, 1997; pp122-125).

BILATERAL RASMUSSEN CHRONIC ENCEPHALITIS

Two Peruvian brothers, ages 16 months and 5 years, with alternating epilepsia partialis continua are reported from the Montreal Neurological Hospital, McGill University, Canada, and Loyola University, Chicago. Seizures began at 6 months in one child and at 4 months in the other, both associated with a febrile illness. Severe psychomotor regression and cerebral atrophy developed rapidly. A brain biopsy in one child revealed chronic encephalitis with changes compatible

with Rasmussen syndrome. This familial disorder may represent a variant of the classically sporadic and unilateral Rasmussen syndrome. (Silver K, Andermann F, Meagher-Villemure K. Familial alternating epilepsia partialis continua with chronic encephalitis. Another variant of Rasmussen syndrome? Arch Neurol May 1998;55:733-736). (Respond: F. Andermann MD, Montreal Neurological Hospital, 380 University St, Montreal, Quebec, Canada H3A 2B4).

COMMENT. A familial syndrome is described involving two brothers with symptoms and pathology resembling Rasmussen syndrome but with unusual characteristics of bilateral seizure and paresis involvement, early age of onset, and rapid deterioration. A history of parental consanguinity suggests an autosomal recessive inheritance.

ACADEMIC ACHIEVEMENT IN CHILDREN WITH EPILEPSY

Academic achievement, measured by school-administered group tests, child attitudes and self-concept, and teachers rated school adaptive functioning were compared in 117 children with epilepsy and 108 with asthma, ages 8 to 12 years, and data were analyzed at the Indiana University Schools of Nursing, Education, and Medicine, Indianapolis. Children with epilepsy had significantly lower achievement scores, and boys with severe epilepsy were most at risk. Negative attitudes towards the illness and poor self-esteem, and lower school adaptive functioning scores were also related to poor academic achievement. (Austin JK, Huberty TJ, Dunn DW. Academic achievement in children with epilepsy and asthma. Dev Med & Child Neurol April 1998;40:248-255). (Respond: Joan K Austin, Indiana University School of Nursing, 1111 Middle Drive, NU492, Indianapolis, IN 46202).

COMMENT. Children with epilepsy and especially boys with severe epilepsy are at risk of academic underachievement. Deficiences of neuropsychological function, particularly language skills and attention, have been reported in children with epilepsy. Reduced parental expectations for academic achievement in children with epilepsy lead to impaired school performance. Parent, teacher, and child counseling are essential adjuncts to AED therapy in the management of epilepsy in children. Some local branches of the Epilepsy Foundation of America have volunteer board members who give short talks on epilepsy in grade schools. An increased understanding of epilepsy among school children and peers leads to a heightened self concept of patients.

ANTICONVULSANTS AND LIVER TOXICITY

LAMOTRIGINE-INDUCED ACUTE HEPATIC FAILURE

An 8-year-old boy with seizures who developed acute hepatic failure during treatment with lamotrigine is reported from the Department of Pediatrics, Columbia University, New York. The patient was first admitted because of aggressive behavior, ataxia, and tremor caused by valproic acid (VPA) treatment. VPA level was 64 mcg/ml, and blood and liver function tests were normal. Lamotrigine was substituted for the VPA and thioridazine added. Two weeks after discharge, fever, vomiting, headaches and diplopia developed. Thioridazine was discontinued. Three days later, the child entered hospital with jaundice, hepatomegaly, elevated liver enzymes, and coagulopathy. The lamotrigine level was 30 mcg/ml (N, 1 - 3). The drug was discontinued, the boy was treated with iv fluids and vitamin K 5 mg im, and he recovered within one week. The hepatic failure was believed to be caused by lamotrigine. (Arnon R, DeVivo D, Defelice AR,