FC risk factors may have an affinity to the right hemisphere. (Janszky J, Woermann FG, Barsi P et al. Neurology April 8, 2003;60:1209-1210).

The pathological basis of temporal lobe epilepsy (TLE) was studied in 22 children undergoing temporal lobectomy for refractory seizures at Hopital Ste-Justine, Universite de Montreal, Canada (Bocti C, Robitaille Y, Diadori P, et al. Neurology Jan (2 of 2) 2003;60:191-195). Significant antecedents, including complex febrile seizures, meningitis, encephalitis, and trauma, occurred in 10 (45%) patients. Mesial temporal sclerosis occurred in 12 of 15 with available hippocampal tissue, and cortical dysplasia of the temporal neocortex was found in 14 of 22 patients. These findings coexisted in 7 children. The high incidence of dual pathology may explain the early age of seizure onset.

DIAGNOSIS OF EPILEPSY FOLLOWING PAROXYSMAL EVENT

The accuracy of the initial diagnosis after one or more paroxysmal events is described as part of the Dutch Study of Epilepsy in Childhood (DSEC), a prospective hospital-based study of children with newly diagnosed possible single or multiple seizures. A panel of 3 pediatric neurologists classified events as epileptic seizures, unclear episodes, or events of definitely other origin. Children with unclear events were followed for 1 year and children with a diagnosis of seizures were followed for 2 years to assess the accuracy of the diagnosis. Single events in 224 children were classified initially as epileptic in 170(76%) and unclear in 54(24%). An epileptic diagnosis proved correct on follow-up in all 170 patients. Recurrent episodes permitted a definite epilepsy diagnosis in 4(7.4%) of the 54 children with unclear events. Multiple events in 536 children were classified initially as epilepsy in 412(77.7%), and after follow-up the diagnosis was probably incorrect in 19(4.6%). In contrast, 7(5.6%) of 124 children with multiple episodes initially diagnosed as unclear were later classified as epilepsy. A false-positive diagnosis of epilepsy was made in 4.6%, whereas a definite diagnosis of epilepsy was delayed in 5.6% of children with multiple unclear events and in 7.4% of children with a single unclear event. The sensitivity of the diagnosis of an epileptic seizure after a single paroxysmal event was 97.7% and the specificity 100%; after multiple events, the epilepsy diagnosis sensitivity was 98.3% and specificity 86%. Epileptiform abnormalities in the EEG confirm the diagnosis of epilepsy after multiple events in 90.1%, and their absence negates the diagnosis in 46.9%. (sensitivity, 70.3%; specificity, 77.2%). (Strink H, van Donselaar CA, Geerts AT et al. The accuracy of the diagnosis of paroxysmal events in chiidren. Neurology 25 March 2003;60:979-982). (Reprints: Dr H Stroink, Department of Neurology, St Elizabeth Hospital, PO Box 90151, 5000 LC Tilburg, the Netherlands).

COMMENT. The authors advise a conservative approach in children with paroxysmal events of uncertain nature. A false-negative diagnosis of epilepsy is considered less harmful for the patient than a false positive. It is of interest that in two events associated with teeth brushing and hair combing, despite an epileptiform EEG, a diagnosis of reflex epilepsy was rejected in favor of "hairdresser's syncope."