

# PEDIATRIC NEUROLOGY BRIEFS

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### SEIZURE DISORDERS

#### **EPILEPSY DIAGNOSIS AND FEBRILE SEIZURES**

The incidence of a previous history of febrile convulsions (FC) and their relation to the diagnosis and localization of subsequent epilepsy were studied in 1005 patients presenting at the Epilepsy Clinic at Vanderbilt University, Nashville, TN. FC had occurred in 13% of patients presenting with epilepsy. The incidence of antecedent FC was significantly higher in patients with temporal lobe epilepsy (78/310, 25%), than in those with generalized epilepsy (16/146, 11%) or extratemporal, F-P-O localizations (12/216, 6%). In patients with antecedent FC, the mean age of onset of epilepsy was 9 years, compared to 18 years for those without FC. Most patients with subsequent epilepsy had complex FC (70%). Those with generalized epilepsy were more likely to have had simple FC than those with partial temporal lobe epilepsy. The mean duration of the FC was significantly longer for patients with subsequent temporal lobe epilepsy (4.1 hrs) than for those with generalized epilepsy (0.25 hr). (Hamati-Haddad A, Abou-Khalil B. Epilepsy diagnosis and localization in patients with antecedent childhood febrile convulsions. Neurology April 1998;50:917-922). (Reprints: Dr Bassel Abou-Khalil, Department of Neurology, Vanderbilt University, 2100 Pierce Avenue, Room 336, Nashville, TN 37212).

COMMENT: A history of febrile convulsions in infancy or early childhood, especially prolonged or complex FC, is a risk factor for subsequent temporal lobe and generalized epilepsy. Extratemporal partial epilepsies are not clearly related to prior febrile seizures. A possible causal relation between complex febrile seizures, temporal lobe epilepsy, and mesial temporal sclerosis is controversial and is discussed in Ped Neur Briefs April 1998;12:25. The plethora of publications on this topic is testimony to the continued interest in the significance of febrile convulsions as a potential cause of epilepsy. The present tendency among pediatricians to dismiss febrile convulsions as benign must be tempered by the evidence of risk of complications. Each child should be treated as an individual, with risk factors defined and evaluated carefully. (see Progress in Pediatric Neurology III, PNB Publ, 1997;pp 19-36).

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