

Oct 1996;38:873-880). Genetic heterogeneity with autosomal recessive and dominant variants was suggested by familial cases, casting doubt on the perinatal hypoxic-ischemic etiology of this form of CP.

SEIZURE DISORDERS

HERPESVIRUS 6 INFECTION AND FEBRILE SEIZURES

The link between human herpesvirus-6 (HHV-6) and other viruses and febrile convulsions (FC) in 65 children (mean age 18 months) with a first episode of simple FC (Group 1) compared to 24 children (mean age 19 months) with a febrile syndrome without FC (Group 2), was examined at the University of Modena, and the Civil Hospital of Sassuolo, Italy. HHV-6 was found in 23/65 of group 1 patients and 12/24 of group 2; adenoviruses in 9/65 of group 1 and in 0/24 of group 2. Of 35% FC cases testing positive for HHV-6, only 17% had the typical exanthema. In the HHV-6 infected group, children who developed FC had lower total immunoglobulins, especially IgM. Children with FC were more likely to have a family history of FC and circulating granulocytes. Of 57 patients followed for 2 years, 9 (15%) had a second FC, and HHV-6 reactivations were three times more frequent in this group. (Bertolani MF, Portolani M, Marotti F et al. A study of childhood febrile convulsions with particular reference to HHV-6 infection: pathogenic considerations. *Child's Nerv Syst* Sept 1996;12:534-539). (Respond: Dr Maria F Bertolani, Section of Pediatrics, University of Modena, Largo del Pozzo, 71, I-41100 Modena, Italy).

COMMENT. The authors speculate that several viruses, especially HHV-6, may be implicated in causation of febrile convulsions in two thirds of cases, and may be reactivated to induce recurrences. The heredity factor is also important, involving a reduced immune response to viral infection in susceptible children. Those who develop FC with HHV-6 infection have a marked granulocytosis and reduced immunoglobulins, IgA and IgM. The influence of enhanced cytokine production in FC is unproven.

Febrile seizures caused by fever induced by HHV-6 infection and roseola are not always simple in type. They are frequently prolonged, recurrent, and complex, and sometimes a manifestation of encephalitis or encephalopathy. For additional reports of HHV-6 infection and febrile seizures, see Ped Neur Briefs Sept 1994, and Progress in Pediatric Neurology II, 1994:410-411.

Iron deficiency anemia and febrile convulsions are linked in a study from the University of Naples, Italy. (Pisacane A, Sansone R, Impagliazzo N et al. *BMJ* 10 Aug 1996;313:343). Anemia (Hgb <105 g/l, serum iron <5.4 mcmol/l) occurred in 30% of FC cases compared to 10% in the non-FC control population. Iron deficiency anemia has also been associated with a case of reversible focal neurologic deficits, and with breath-holding spells. (Progress in Pediatric Neurology I, 1991:397-398).

EARLY TREATMENT OF SEIZURE PREVENTS RECURRENCE

The rate of occurrence of a second seizure after a single unprovoked generalized tonic-clonic seizure was compared in 45 patients who received immediate anticonvulsant therapy and 42 untreated patients followed for 36 months at the Edith Wolfson Medical Center, Holon, and the Sackler Faculty of Medicine, Tel Aviv, Israel. A second epileptic attack occurred in 29 (71%) of the untreated group and in 10 (22%) of the treated group. The risk rates for