

Anisocoria, ataxia, dysarthria, and confusional state were predominant manifestations. Beta activity in the EEG has been described previously with attacks of basilar migraine.

**Familial hemiplegic migraine and autosomal dominant arteriopathy** with leukoencephalopathy (CADASIL) is described from St Vincent's Hospital, Dublin, Ireland. (Hutchinson M et al. Ann Neurol Nov 1995;38:817-824). Four subjects with CADASIL (cerebral autosomal dominant arteriopathy with subcortical infarcts and leukoencephalopathy) had a history of familial hemiplegic migraine dating back to childhood. The disorder typically presents in adulthood but the MRI may show evidence of leukoencephalopathy before symptoms develop. This family is the first with both hemiplegic migraine and migraine as presenting symptoms of CADASIL.

## INFECTIOUS DISEASES

### **BENIGN NEUROLOGIC COMPLICATIONS OF PERTUSSIS**

The neurologic complications of pertussis infection among 340 unvaccinated patients admitted to hospital between 1979-1994 are reported from the Pediatric Clinic of the University of Catania, Sicily. Fourteen (4.1%) developed neurologic complications: Seizures occurred in all cases, 4 with fever, and 3 with signs of acute encephalopathy, including obtundation and vomiting which lasted only 12 to 24 hours. None of the patients developed epilepsy, all attend regular schools in appropriate grades, and at 14-18 year follow-up, only one has a mild behavioral disorder as a possible sequel of encephalopathy. No serious neurologic complications or permanent sequelae were observed in this series of children hospitalized for pertussis infection. (Incorpora G et al. Neurological complications in hospitalized patients with pertussis: a 15-year Sicilian experience. Child's Nerv System June 1996;12:332-335). (Respond: Dr G Incorpora, Clinica Pediatrica, Università di Catania, Viale Andrea Doria, 6, I-95125 Catania, Italy).

COMMENT. The relatively mild and benign nature of the neurologic complications of pertussis infection reported in this study contrast with the severity and permanent sequelae of some reported cases of pertussis vaccine encephalopathy. Seizures were not associated with anoxic episodes and coughing bouts and were not complicated by epilepsy.

### **CHANGING PATTERNS OF REYE'S SYNDROME**

Trends in the clinical pattern of Reye's syndrome in the British Isles between 1982 and 1990, and their relation to the June 1986 warnings against the use of aspirin in children, were analysed at the PHLS Communicable Disease Surveillance Centre, London, and other Centres in the UK. Of 445 cases reported, 354 had confirmed diagnoses and received scores of severity ranging from non-classical "Reye-like" (low scorers) to classical Reye's syndrome (high scorers). Classical cases occurred more frequently in the 4 1/2 year period before June 1986 compared with the subsequent period of surveillance. After June 1986, non-classical cases declined by 50% and classical by 79%. Classical, high scorers had received aspirin more frequently and were older than low scorers. (Hardie RM et al. Changing clinical pattern of Reye's syndrome. Arch Dis Child May 1996;74:400-405). (Respond: Dr Susan Hall, Floor C, Stephenson Building, Children's Hospital, Western Bank, Sheffield S10 2TH, UK).

COMMENT. Reports of Reye's syndrome declined in the surveillance period between 1982 and 1990, with a greater reduction in the number of classical Reye's syndrome cases than non-classical Reye-like cases after aspirin was withheld in 1986. Cases of classical Reye's syndrome were older and were more likely to have received aspirin. The authors conclude that their findings support a subset of Reye's syndrome but not all cases etiologically associated with aspirin. An inherited metabolic disorder is more likely in the Reye-like, non classical cases.

## ANTICONVULSANT DRUGS

### **GABAPENTIN IN REFRACTORY PARTIAL SEIZURES**

The efficacy of gabapentin as an additional medication in 32 children with refractory partial seizures was studied at the Children's Hospital, Boston, MA. A greater than 50% decrease in seizure frequency was obtained in 3-4% and a 25% to 50% decrease occurred in 12%. Approximately half the patients were benefited. Doses ranged from 10 to 50 mg/kg/day, and the mean gabapentin serum concentration correlating with seizure control was 3.7 mcg/ml. Hyperactivity, irritability, and agitation, in 15 (46%) children with mental retardation and attention deficits, were the major side effects. Mild behavior changes not requiring drug withdrawal, including impulsivity, irritability, and hyperactivity, were reported in 11 additional children. Personality was improved in 3 children. (Khurana DS, Mikati MA et al. Efficacy of gabapentin therapy in children with refractory partial seizures. J Pediatr June 1996;128:829-33). (Reprints: Mohamad A Mikati MD, Department of Pediatrics, American University Hospital, c/o American University of Beirut New York Office, 850 Third Ave, 18th Floor, New York, NY 10022).

COMMENT. Gabapentin may be an effective adjunctive medication in children with refractory partial seizures. Behavioral side effects were reversible when the drug was discontinued and were most prominent in the mentally retarded.

### **MATERNAL AED TREATMENT AND NEONATAL BEHAVIOR**

The relationship between antiepileptic drug (AED) treatment during pregnancy, neurobehavior of the neonate, and the neurological outcome in later life of 40 children exposed in utero to a single AED (phenobarbital, phenytoin, valproic acid) was studied at Children's Hospital, Virchow Klinikum of the Humboldt University Berlin; Institute of Toxicology and Embryopharmacology, Free University Berlin; and Department of Neuropediatrics, Children's Hospital, University of Heidelberg, Germany. Tonic seizures during pregnancy occurred in 5 (27%) of the phenobarbital-treated women, in 5 (38%) treated with phenytoin, and in 3 (33%) of valproic-acid-treated women. AED exposed neonates had greater neurobehavioral disorders than the controls. Apathy was most pronounced in phenobarbital-exposed neonates, whereas hyperexcitability was more severe after maternal valproic acid (VPA) exposure. Phenytoin-exposed neonates, having the least neurobehavioral side effects, had low serum concentrations, whereas the concentrations of VPA in cord blood were relatively high. VPA concentrations at birth correlated with the degree of neonatal hyperexcitability and neurological dysfunction found at 6 year follow-up. (Koch S et al. Antiepileptic drug treatment in pregnancy: drug side effects in the neonate and