

Medical School, Lebanon, NH. The dominant clinical findings were fever (88%) and irritability (78%). Meningeal irritation occurred in only 8.7%, and 8 (2.9%) infants had a single generalized seizure. Among 52 with neurologic abnormalities, 17 had a full fontanelle, 6 had complex seizures, 2 a large head circumference, and 2 diminished consciousness. Infants older than 3 months had more complications than younger infants. The type of enterovirus (Coxsackie or echo) and CSF indices were not correlated with risk of complications. Infants with CNS complications showed no sequelae on follow-up neurodevelopmental tests. (Rorabaugh ML et al. Aseptic meningitis in infants younger than 2 years of age: Acute illness and neurologic complications. Pediatrics Aug 1993;92:206-211). (Reprints: John F Modlin MD, Dept of Pediatrics, Dartmouth-Hitchcock Medical Center, Lebanon, NH 03754).

**COMMENT.** Acute "encephalitic" complications occurring in approximately 10% of young infants with aseptic meningitis are not associated with long-term neurologic or cognitive deficits.

Straussberg R and associates, at the Hasharon Hospital, Petach Tikvah, Israel, report two young children with posterior fossa tumors who presented with aseptic meningoencephalitis (Clin Pediatr Sept 1993; 552-4). Somnolence, stupor, and extreme nuchal rigidity were the major manifestations on admission. CSF showed pleocytosis and cultures were sterile. Surgical removal of the tumors revealed a fourth ventricle choroid plexus papilloma and a medulloblastoma. Head CT might avoid the dangers attending lumbar puncture in children with clinical manifestations that are common to both meningitis and posterior fossa tumor.

## SEIZURE DISORDERS

### **SEIZURES AND THYROTOXICOSIS**

Two thyrotoxic children, ages 10 and 11 years, who presented with seizures and coma are reported from the Departments of Pediatrics, Bolzano Hospital and the University of Pavia, Italy. Patient 1 was admitted with vomiting, headache, and stupor. He had dilated pupils, nuchal rigidity, and tachycardia. A goiter was palpable. A generalized seizure lasting 20 min was repeated despite diazepam intravenously. Serum thyroid hormone levels were markedly elevated. Patient 2 had a thyrotoxic crisis complicated by status epilepticus and coma. Both patients had abnormal EEGs, with slow activity in temporal regions and high voltage fast activity in frontal areas. (Radetti G et al. Thyrotoxicosis presenting with seizures and coma in two children. AJDC Sept 1993;147:925-7). (Reprints: Dr Radetti, Dept of Pediatrics, Regional Hospital of Bolzano, via I. Boehler no 5, 39100 Bolzano, Italy).

COMMENT. The authors cite only one other child with these symptoms reported in the literature, and 10 adult cases. Patients with seizures and coma of undetermined cause should be tested for hyperthyroidism.

## TREATMENT OF NEONATAL SEIZURES

Controversies in treatment of neonatal seizures are addressed by neurologists from Stanford and Yale Universities. Seizures likely to be associated with electrographic seizure activity (eg focal clonic or multifocal clonic seizures) should be treated with antiepileptic drugs (AEDs). Bilateral tonic posturing, unaccompanied by EEG seizure activity, would not be benefited by AEDs. The presence of seizures should be determined electrographically before treatment is begun. For symptomatic seizures, AEDs are administered until clinical seizures, but not necessarily all EEG seizures, are controlled. The nature and severity of the underlying cerebral lesions are the major determinants of outcome. Conventional treatment, usually with phenobarbital, is not very effective; control is obtained in only one-third of patients. The goals are to restore a normal metabolic state, control hypertension and tachycardia, and reduce the increase in glucose utilization. (Hahn JS, Young RSK. Controversies in treatment of neonatal seizures. Pediatr Neurol July/Aug 1993;9:330-332).

COMMENT. Seizures caused by hypoxic-ischemic encephalopathy and intracranial hemorrhage are the most refractory to treatment with AEDs. Seizures due to metabolic abnormalities are usually transitory and require early recognition and specific management. *Water intoxication* as a potential etiology of seizures in young infants, a previously rare condition, is increasing to epidemic proportions in US inner cities (Keating JP, Dodge PR; and Furth S, Oski FA. AJDC Sept 1993;147:932-3). The maternal motivation for offering water remains uncertain. Improper dilution of formula and feeding large amounts of free water or glucose water, especially at times of diarrhea, are common practices, and occasionally result from improper medical advice. Infants with seizures refractory to AEDs should be tested for hyponatremia.

## CARBAMAZEPINE CARDIOTOXICITY

A 13-month-old boy with complex partial seizures complicating tuberous sclerosis developed a cardiac conduction abnormality and heart block during treatment with carbamazepine in a report from the University of Massachusetts Medical School, Worcester, MA. The CBZ serum level was 6 mcg/ml and CBZ-10,11-epoxide level, 1 mcg/ml. After CBZ was discontinued a repeat EKG was normal. The echocardiogram, at first thought to show a small rhabdomyoma, was normal on repeat study 2 years later. (Weig SG, Pollack P. Carbamazepine-induced heart block in a child with tuberous sclerosis and