

## INFECTIOUS DISEASES

### **INTRACRANIAL PRESSURE IN BACTERIAL MENINGITIS**

The role of increased intracranial pressure and its effect on cerebral blood flow in the prognosis of children with bacterial meningitis is reviewed from the Division of Child Neurology, Loma Linda U Sch of Med, Loma Linda, CA. One-third have reduced cerebral flood flow (CBF) associated with cerebral edema and a poor prognosis. In patients with cerebral edema on CT or MRI and increased intracranial pressure (ICP), hyperventilation may reduce the ICP. The early use of diuretics, corticosteroids and mannitol is recommended. Ventriculostomy or ventricular tap may be necessary to decrease CSF volume in patients with increased ICP and signs of mass effect. The majority of subdural effusions require no specific treatment since spontaneous resolution will occur over time. In children with infarction, hyperventilation and diuretics may worsen the tissue injury whereas barbiturates or hypothermia may be of benefit. The authors recommend that interventional strategies must be started early and have a rapid onset of action if they are to be effective (Ashwal S et al. Bacterial meningitis in children: pathophysiology and treatment. Neurology April 1992; 42:739-748). (Reprints: Dr. Ashwal.)

**COMMENT.** This is an excellent review of the pathophysiology of bacterial meningitis and explains the continuing high morbidity despite the marked reduction in mortality resulting from newer antibiotics. Careful monitoring of intracranial pressure and use of neuroimaging in the early stages of meningitis should help in the selection of patients requiring early interventional treatments for the reduction of pressure and improvement in cerebral blood flow.

### **NEUROLOGIC COMPLICATIONS OF CAT-SCRATCH DISEASE**

An 8 year-old girl hospitalized with cat-scratch disease and recurrent generalized tonic-clonic seizures is reported from the Department of Pediatrics, Children's Hospital, The Ohio State University, Columbus, OH. The convulsant status and altered mental status lasted 4 hours and required ventilatory support. She received cefotaxime and gentamicin for 10 days and phenobarbital for 3 months. The lymph glands remained painful for several months but she ultimately made an uneventful recovery. (Tsao CY. Generalized tonic-clonic status epilepticus in a child with cat-scratch disease and encephalopathy. Clin EEG April 1992; 23:65-67). (Reprints: Chang Y. Tsao, M.D., Department of Pediatrics, Children's Hospital, 700 Children's Drive, Columbus, OH 43205).

**COMMENT.** Treatment with trimethoprim-sulfamethoxazole was superior to cephalosporins and other antibiotics in 71 children with cat-scratch disease. The nodes healed promptly and there was no suppuration or drainage. (Collipp PJ. AJDC April 1992; 146:397-399.) A unique case of severe and lasting neurobehavioural changes after the acute episode of cat scratch encephalitis is reported from the Hopital Neurologique, Lyon, France. (Revol A et al. J Neur Neurosurg and Psych Feb 1992; 55:133-135.) The neurological complications of cat-scratch disease are reviewed in Ped Neur Briefs Jan 1991; 5:8.