delayed treatment with prednisone. (Lanthier S, Lortie A, Michaud J et al. Isolated angiitis of the CNS in children. Neurology April (1 of 2) 2001;56:837-842). (Reprints: Dr Gabrielle deVeber, Division of Neurology, The Hospital for Sick Children, 555 University Avenue, Toronto, Ontario, Canada, M5G 1X8).

COMMENT. Isolated, primary angiitis of the CNS in children may affect either small or large arteries. The clinical and radiological manifestations correlate with the size of vessel involved, and the outcome differs between groups. A poor outcome is more likely in cases presenting with acute stroke and disease of large arteries, granulomatous angiitis on biopsy, and delay in instituting immunosuppressive therapy. CNS involvement by systemic infection or rheumatic disease, including lupus erythematosus, should be considered in angiitis affecting small cerebral vessels.

INFECTIOUS DISORDERS

LA CROSSE ENCEPHALITIS

The clinical manifestations and course of La Crosse encephalitis were studied in 127 school-aged children (mean age, 7.8 years; range, 6 months - 15 years) hospitalized from 1987 through 1996 at the Robert C Byrd Health Sciences Center, West Virginia University, Charleston, WVa. Serologic testing was positive for IgM and IgG antibodies to La Crosse virus. Viral cultures of CSF were negative. Headache, fever, and vomiting were the most common presenting symptoms, each occurring in 70% or more of patients. Seizures occurred in 46%, and disorientation in 42%. Aseptic meningitis was present in 13%, signs of increased intracranial pressure in 13% (3 with cerebral herniation), and hyponatremia developed in 21%, consistent with the syndrome of inappropriate antidiuretic hormone secretion. EEGs were abnormal in 59 of 90 patients with recordings; 29 had focal features with temporal lobe involvement, suggestive of herpes simplex encephalitis. Fever resolved in 70% of patients after 3 days, and the mean stay in hospital was 6 days. Risk factors for clinical deterioration and need for intervention, affecting 11% of patients, were hyponatremia, fever, vomiting, seizures, and a score of 12 or lower on the Glasgow Coma Scale on admission. All survived, but 12% had neurologic sequelae, including cognitive and behavior deficits (ADHD in 15 patients), at 10 to 18 month follow-up. (McJunkin JE, de los Reyes EC, Irazuzta JE et al. La Crosse encephalitis in children. N Engl J Med March 15, 2001;344:801-807). (Reprints: Dr McJunkin, Department of Pediatrics, West Virginia University, PO Box 9214, Morgantown, WV 26506).

COMMENT. La Crosse virus, a member of the California encephalitis serogroup, was first isolated from the brain of an affected child who died in La Crosse County, Wisconsin, and was reported in 1965. A mosquito-borne disease, and the most prevalent childhood arboviral infection in N America, is often misdiagnosed as enteroviral meningitis or herpes simplex encephalitis. The disease is highly endemic in the Midwest and in West Virginia, with a reported incidence of 20-30 cases per 100,000 children. Hyponatremia is a common complication and a risk factor for seizures and clinical deterioration. Cognitive impairment and ADHD are frequent neurobehavioral sequelae, similar to the reports following the World War 1 influenza epidemic and encephalitis of 1918. (Ebaugh F. Am J Dis Child 1923;25:89-97; see Millichap JG. Attention Deficit Hyperactivity & Learning Disorders. PNB Publ, 2001).