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INFECTIOUS DISORDERS

LYME MENINGITIS CHARACTERISTICS cf VIRAL MENINGITIS

The clinical and laboratory findings in 12 patients (ages 3-18 yrs) with Lyme meningitis (LM) were compared with 10 (ages 2-15) diagnosed with viral meningitis (VM), in a retrospective analysis of records of children admitted to Alfred I duPont Hospital for Children, Wilmington, DE, between 1990 and 1996. A diagnosis of LM required a CSF pleocytosis with positive Lyme serology and/or erythema migrans. VM cases had a CSF pleocytosis and a positive viral culture. Erythema migrans (58%), papilledema (25%), facial weakness (33%), cranial neuropathy (42%), and history of tick bite (25%) were characteristics of LM and were absent in the VM cases. Headache, neck pain, and malaise were present in both groups, but symptoms persisted longer in the LM cases. Temperature at onset was significantly lower in LM cf VM cases (36C cf 38C). CSF pleocytosis was lower in LM than in VM cases (mean values, 80 cf 301 per mm3), but the percentage of mononuclear cells was higher (91 cf 56). CSF glucose was significantly lower in LM than in VM (mean, 54 cf 63 mg/dL), but protein elevations were not significantly different (52 cf 43). Clinical and laboratory findings should permit early differentiation of LM from VM. (Eppes SC, Nelson DK, Lewis LL, Klein JD. Characterization of Lyme meningitis and comparison with viral meningitis in children. Pediatrics May 1999; 103: 957-960). (Reprints: Stephen C Eppes MD, Division of Infectious Diseases, Alfred I duPont Hospital for Children, PO Box 269, Wilmington, DE 19899).

COMMENT. The pathognomonic erythema migrans (EM) is present in more than half the cases of Lyme meningitis (LM) in children, and allows early diagnosis before completion of serology antibody testing for *B burgdorferi*. In patients presenting with aseptic meningitis without EM, characteristic criteria for LM include facial palsy and papilledema. Although early initiation of parenteral antibiotic therapy is advocated, the clinical diagnosis of LM should be corroborated by antibody and/or polymerase chain reaction testing.

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