

INFECTIOUS DISORDERS

ENTEROVIRAL MENINGITIS WITHOUT CSF PLEOCYTOSIS

Researchers at Seoul National University and other centers in Korea examined the clinical characteristics of enteroviral meningitis in 390 infants and children; 16-18% were without CSF pleocytosis. Enteroviral meningitis was diagnosed by nested RT-PCR assay in 277 cases and by GeneXpert assay in 113. CSF culture performed in 273 patients (70% of total) was positive in 104 cases (38% of those tested). Of the 390 with enteroviral meningitis, 71 (18%) did not have pleocytosis. The proportion without pleocytosis among neonates aged 0-27 days was 77%; in infants 28-55 days it was 44%; 56 days to 1 year, 30%; toddlers 2-4 years, 10%; and children 5-18 years, 6%. The proportion of patients without pleocytosis decreased significantly with age ($p < 0.001$). Absence of CSF pleocytosis was associated with younger age, lower peripheral white blood cell count, and shorter interval between onset and lumbar puncture. (Yun KW, Choi EH, Cheon DS, et al. Enteroviral meningitis without pleocytosis in children. *Arch Dis Child* 2012 Oct;97(10):874-8). (Respond: Professor Eun Hwa Choi, Department of Pediatrics, Seoul National University College of Medicine, 101 Daehak-ro, Jongno-gu, Seoul 110-769, Korea. E-mail: eunchoi@snu.ac.kr).

COMMENT. CSF enterovirus PCR testing is recommended to evaluate suspected enteroviral meningitis, especially in young infants, even though pleocytosis is absent. The authors hypothesize that if the time from onset of meningitis to LP is short, the immunological response that recruits WBCs to CSF may not be complete, with absence of the expected pleocytosis.

TREATMENT COMPLICATIONS OF LYME MENINGITIS

Researchers at Alfred I duPont Hospital for Children, Wilmington, DE, and other Centers in Lyme endemic areas determined the frequency and type of all treatment complications at return visits within 30 days of an initial Lyme meningitis diagnosis. Of 149 children, median age of 10 years, with available follow-up records, 39 (26%) had 1 or more complications, and 21 (14%) required a change in antibiotic therapy. Ten percent had an adverse drug reaction. Of 144 with a peripherally inserted central catheter (PICC), 25 (17%) had at least 1 associated complication. (Thompson AD, Cohn KA, Shah SS, et al. Treatment complications in children with Lyme meningitis. *Pediatr Infect Dis J* 2012 Oct;31(10):1032-1035). (Respond: Amy D Thompson MD, Division of Emergency Medicine, Alfred I duPont Hospital for Children, Wilmington, DE. E-mail: amythomp@nemours.org).

COMMENT. Outpatient treatment with parenteral ceftriaxone (or penicillin) for 14-28 days is recommended for Lyme meningitis (AAP. **Red Book**. 2006; 27th ed. Elk Grove Village, IL). Given the high risk of complications with PICC, Thompson and associates recommend trials of alternate treatment regimens, including oral doxycycline.