INFECTIOUS DISORDERS

ALICE IN WONDERLAND SYNDROME WITH MONONUCLEOSIS

Five children with "Alice in Wonderland" syndrome associated with infectious mononucleosis are reported from Assaf Harofeh Medical Center, Zerifin, and Sheba Medical Center, Tel Aviv University, Israel. Visual evoked potentials (VEP) were studied during and after symptoms which included episodes of visual illusions - distortion of form, size, position, movement, or color - associated with headache, nausea, and dizziness. The episodes lasted 5 to 20 minutes and occurred 6 to 23 times daily. During the disease, VEPs showed statistically high amplitudes of P100-N145 compared to the control group, similar to findings in migraine. EEGs showed occipital high-voltage sharp or slow waves in 3 patients, between episodes. After recovery, repeat studies were normal. MRI or CT were normal. A focal decrease in cerebral perfusion is postulated as the pathophysiologic abnormality. (Lahat E, Berkovitch M, Barr J, Paret G, Barzilai A. Abnormal visual evoked potentials in children with "Alice in Wonderland" syndrome due to infectious mononucleosis. J Child Neurol 1999;14:732-735). (Respond: Dr E Lahat, Head, Pediatric Neurology Unit, Assaf Harofeh Medical Center, Zerifin 70300, Israel).

COMMENT. Alice in Wonderland syndrome, or metamorphopsia, associated with abnormal visual evoked potentials, is reported in infectious mononucleosis. It is also described in patients with migraine and epilepsy, and during acute febrile states. Cerebral perfusion PET studies have demonstrated decreased perfusion in regions near the visual tract and visual cortex in 4 children with this syndrome (Kuo YT et al. Pediatr Neurol 1998;19:105-108).

Polymerase chain reaction in CNS infections. The clinical use of cerebrospinal fluid PCR in the diagnosis of infectious neurologic viral diseases is reviewed from the University of Colorado Health Sciences Center, Denver (DeBiasi RL, Tyler KL. Arch Neurol 1999;56:1215-1219). PCR and detection of minute amounts of DNA or RNA in various tissues or fluids may help to identify infectious causes of diseases of previously undetermined etiology. It may also differentiate recurrent viral infection (PCR-positive) from post-infectious immune-mediated disease (PCR-negative).

BENIGN ACUTE MYOSITIS AND INFLUENZA VIRUS

Thirty-eight children (32 boys, 6 girls) with 41 episodes of myositis between 1978 and 1997 are reported from the Royal Children's Hospital, University of Melbourne, Australia. Viral studies during 24 of the episodes were positive in 10 (42%), with influenza B isolated in 5 (50%).

A typical case was a 7-year-old boy admitted with calf pains and difficulty in walking. Fever, cough, and lethargy had preceded the muscle pain by 5 days. He walked on his toes, the calf muscles were tender, and passive ankle dorsiflexion exacerbated the pain. Muscle tone, power, tendon reflexes, and sensation were normal in all extremities. Abnormal laboratory studies included an elevated creatine kinase (CK) of 4762 U/L (normal, 40-240 U/L), sedimentation rate (ESR) of 12 mm/h (normal, <6), and leukopenia (3.0×10^9). Parainfluenza 3 was isolated from a nasopharyngeal aspirate. Pain resolved within 24 hours after admission, and recovery was complete at 6 day-follow-up.

Mean age at onset was 8.1 years. Children were ambulant in 75% of episodes, but gaits were abnormal, on toes or wide-based stiff-legged, with the