

from those with meningitis. However, they find it prudent to advise reliance on all clinical and laboratory information, which would include bacteriologic results, before discharging a child without treatment after a traumatic LP.

DEMYELINATING DISORDERS

PROGNOSIS OF RELAPSING NEUROMYELITIS OPTICA

Clinical predictors of a relapsing course and subsequent survival in 80 patients with neuromyelitis optica (NMO) (57 relapsing, 23 monophasic) were developed from a study of medical records and patients at the Mayo Clinic, Scottsdale, AZ. Patients with monophasic disease were followed for a median of 14 years (range 1-45 years) with no relapse; median follow-up in the relapsing group was 60.2 months (range 4-372 months). Forty six (81%) of 57 patients in the relapsing group were women compared to 11 (48%) of 23 in the monophasic group ($p=0.003$). The median age at onset was greater (41 (range 6-72) vs 29 (range 1-54) years; $p=0.008$) and autoimmune disease was more common (19/57 vs 1/23; $p=0.007$) in the relapsing group. Female sex, older age of disease onset, milder initial impairment score, and longer time between 1st and 2nd attacks predict future relapsing disease (82% sensitivity and 74% specificity). Mortality due to relapsing NMO was correlated with a history of other autoimmune disease, higher attack frequency during the first 2 years of disease, and better motor recovery following the index myelitis event. The clinical features identified were available at diagnosis or early in the disease course, and were predictive of relapsing disease and survival. The identification of patients at high risk for severe, relapsing NMO permits early initiation of therapy to prevent relapse. (Wingerchuk DM, Weinshenker BG. Neuromyelitis optica: Clinical predictors of a relapsing course and survival. *Neurology* March (1 of 2) 2003;60:848-853). (Reprints: Dr Dean M Wingerchuk, Department of Neurology, Mayo Clinic, 13400 East Shea Blvd, Scottsdale, AZ 85259).

COMMENT. New NMO diagnostic criteria that exclude cases of typical multiple sclerosis, as proposed by the authors, are as follows: *absolute criteria* are optic neuritis, acute myelitis, and absence of disease outside the optic nerve or spinal cord; *supportive criteria* are major (negative brain MRI, >3 abnormal vertebral segments on spinal cord MRI, and CSF pleocytosis of >50 WBC/mm³ or >5 neutrophils/mm³); and minor (bilateral optic neuritis, impaired visual acuity (20/200) in at least one eye, and severe weakness in 1 or more limbs). Diagnosis requires all absolute and one major or 2 minor supportive criteria. Relapsing NMO has a poor prognosis and causes irreversible impairment. Early diagnosis by the clinical predictors identified, and differentiation of relapsing from monophasic cases of NMO, should permit early intervention and greater survival rate.

MRI and neuropathology of acute hemorrhagic leukoencephalitis (AHL) and differentiation from acute demyelinating encephalomyelitis (ADEM) are discussed in a case report of a 19-year-old man studied at the University of Buffalo, NY (Kuperan S et al. *Neurology* Feb (2 of 2) 2003;60:721). AHL is a hyperacute form of ADEM. MRI white matter lesions of AHL are larger with more edema than seen in ADEM, the basal ganglia are usually spared, and infiltrates are predominantly neutrophilic rather than lymphocytic