Controlled prospective studies are needed to define risks for serious intracranial disease with recurrent headaches, to define the role of laboratory tests, and the value of neuroimaging in patients with normal neurologic exam. The AAN and CNS attach a disclaimer recognizing that each patient is an individual with different circumstances and specific diagnostic indications. (Lewis DW, Ashwal S, Dahl G et al;. Practice parameter: Evaluation of children and adolescents with recurrent headaches. Report of the Quality Standards Subcommittee of the American Academy of Neurology and the Practice Committee of the Child Neurology Society. Neurology August (2 of 2) 2002;59:490-498). (Reprints: American Academy of Neurology, 1080 Montreal Avenue, St Paul, MN 55116).

COMMENT. The committee concluded that the diagnosis of recurrent headaches is made on a clinical basis and not by routine tests. Diagnostic studies such as neuroimaging are not recommended in the absence of associated risk factors and an abnormal neurologic examination.

The committee wisely attached a disclaimer regarding these recommendations which should not be accepted as all inclusive. For example, in deciding on the necessity for neuroimaging, the luxury of follow-up evaluation and observation over time may not be available to the neurologist who examines a patient in consultation. Deferral of neuroimaging may not always be practical or judicious. (Millichap JG. Progress in Pediatric Neurology III, 1997;p186). In particular, headaches in children younger than 4 years may pose a diagnostic problem. Straussberg R, Amir J (Arch Neurol 1993;50:130) report 5 young children with headache as the first symptom of intracranial tumor, and a normal initial neurologic examination, including the fundi. These authors stress the need for neuroimaging studies in young children with recent-onset recurrent headaches, even when the neurologic exam is normal.

An EEG study in 100 consecutive children with recurrent headaches, migrainous and nonmigrainous, apparently not qualifying for inclusion in the Committee selection criteria, found epileptiform EEGs in 18% of the total group and with the same incidence in the migraine group. The EEG did not distinguish migraine from nonmigraine patients. (Millichap JG. Child's Brain 1978;4:95-105). A trial of phenytoin in 30 children with migraine in this study demonstrated a beneficial response to the anticonvulsant in 77%. In 13 with abnormal and 17 with normal EEGs, the beneficial response rates were 61% and 88%, respectively. Response to phenytoin was not significantly correlated with an abnormal EEG. Alternative anticonvulsants are now recommended in the prophylactic treatment of migraine, independent of EEG findings or asssociated seizures.

MOVEMENT DISORDERS

TICS AND ASSOCIATED BEHAVIORAL DISORDERS

The prevalence of tic disorders and comorbid psychopathologies was determined in a community-based study of 1596 school children (age 9 to 17 years) conducted at the University of Rochester School of Medicine and Dentistry, NY. Using a standard psychiatric interview and standardized rating scales to diagnose behavioral disorders, 339 patients with tics were identified. Psychopathologies occurring more commonly ($p<0.05$) in children with tics included OCD, ADHD, separation anxiety, overanxious disorder, simple phobia, social phobia, agoraphobia, mania, major depression, and ODD. ADHD occurred in 38.4% of children with tics and 19.5% without tics ($p<0.0001$). Prevalence of OCD was 10.9% with, and 7.4% without tics ($p=0.04$); ODD 17.4% with, and 9.7% without tics

($p<0.0001$). By comparing the prevalence of neuropsychiatric disorders between children with and without tics, it was determined that these associations were not due to ascertainment bias or reactive asssociation but more likely, a shared neurobiologic mechanism, sometimes genetically determined. (Kurlan R, Como PG, Miller B et al. The behavioral spectrum of tic disorders. A community-based study. Neurology August (1 of 2) 2002;59:414-420). (Reprints: Roger Kurlan MD, University of Rochester School of Medicine and Dentistry, Department of Neurology, 601 Elmwood Avenue, Rochester, NY 14642).

COMMENT. The common association of tic disorders, including Tourette syndrome, and ADHD and OCD is most probably due to a shared neurobiologic mechanism.

Fluctuations in frequency and intensity of tic and associated behavioral disorders were determined in 553 children (kindergarten through 6th grade) observed monthly from November 1999 to June 2000 at the National Institute of Mental Health, Bethesda, MD. (Snider LA, Seligman LD, Ketchen BR et al. Tics and problem behaviors in schoolchildren: Prevalence, characterization, and associations. Pediatrics August 2002;110:331-336). Monthly point prevalence of motor tics ranged from 3.2% to 9.6% (overall frequency 24.4%). Monthly point prevalence of behavioral problems ranged from 2.6% to 11.0% (overall frequency 25.7%). Incidence of motor tics and problem behaviors was 3 times higher during winter months. Tics in most children were transient, and observed on only one occasion. These usually involved eye blinks and facial tics. Behavioral comorbidity was associated with more persistent and involved tic symptoms.

INFECTIOUS DISORDERS

DIAGNOSTIC CRITERIA OF ACUTE TRANSVERSE MYELITIS

Inclusion and exclusion criteria for the diagnosis of acute transverse myelitis (ATM), as a basis for multicenter clinical trials, are proposed by a Transverse Myelitis Consortium Working Group. Idiopathic ATM is distinguished from ATM secondary to known underlying disease. *Inclusion diagnostic criteria* are the following: bilateral signs and/or symptoms of spinal sensory, motor, or autonomic (sphincter) dysfunction; defined sensory level; MRI negative for extra-axial compression; CSF pleocytosis, elevated IgG index, or abnormal gadolinium enhancement indicative of spinal inflammation; progressive symptoms with nadir at 4 h to 21 d following onset. *Exclusion criteria* include : prior spinal irradiation; anterior spinal artery thrombosis; AV malformation; connective tissue disease (sarcoidosis, Behcet's, SLE etc); CNS syphilis, Lyme disease, HIV, HSV, EBV, CMV, or other viral disease; MRI evidence of MS or ADEM; history of optic neuritis and Devic's disease. A potential work-up for suspected ATM is outlined. Identification of known etiologies can lead to specific treatments whereas idiopathic ATM, that constitutes about 16% of cases, has no established therapy. (Transverse Myelitis Consortium Working Group. Proposed diagnostic criteria and nosology of acute transverse myelitis. Neurology August (2 of 2) 2002;59:499-505). (Reprints: Dr Douglas Kerr, Department of Neurology, Johns Hopkins Hospital, Pathology 627C, 600 N Wolfe St, Baltimore, MD 21287).

COMMENT. With the current interest in revival of smallpox vaccination, this proposal for diagnosis of acute transverse myelitis is timely. More than 200 cases of postvaccinial encephalomyelitis were reported in England in 1922-3, a complication of smallpox and rabies vaccination (Rivers TM, 1929). The present