Injury Compensation Program, Rockville, MD. Of a total of 403 claims of encephalopathy and/or seizure disorder after measles, MR, MMR, mumps, or rubella vaccination during a 23-year period, 1970-1993, 48 met inclusion criteria, with acute encephalopathy of undetermined cause 2 to 15 days after vaccination, all following measles vaccine and none with mumps or rubella vaccine. A clustering of symptoms and peak onset of encephalopathy occurred on days 8 and 9. Fever, measles-like rash, and ataxia, associated with behavior changes and CSF pleocytosis, were the most frequent initial manifestations. Seizures occurred in 34, and rapidly progressed to coma in 29. Eight children died, and all survivors had chronic encephalopathy. The authors conclude that a causal relationship probably exists between measles vaccine and encephalopathy. (Weibel RE, Caserta V, Benor DE, Evans G. Acute encephalopathy followed by permanent brain injury or death associated with further attenuated measles vaccines: A review of claims submitted to the National Vaccine Injury Compensation Program. Pediatrics March 1998;101:383-387). (Reprints: Robert E Weibel MD, National Vaccine Injury Compensation Program, Health Resources and Services Administration, Parklawn Building, Room 8A-46, 5600 Fishers Lane, Rockville, MD 20857).

COMMENT. A causal relationship between measles vaccination and severe and sometimes fatal encephalopathy, although rare, is cause for concern. Of 403 claims of vaccine-related encephalopathic complications, only 11% were accepted because of an arbitrary selection period of 15 days. It would be of interest to compare the numbers of cases occurring within 30 days, the selection period used in a previous report. Details of the symptoms described as 'behavior changes' in survivors would also be of interest.

The incidence of post-infectious encephalitis complicating natural measles is estimated at 1 in 1000 cases, with a mortality of 10 to 20% and permanent CNS damage in the survivors. Thalamic syndrome and measles, and SSPE are reviewed in Ped Neur Briefs Jan 1998. The incidence of measles in the US increased in 1989-1991, especially in pre-school children with low immunization rates. With improved vaccination policies, indigenous measles since 1992 has been low, but the incidence of imported cases among immigrants or travelers returning to the US from under-developed countries has increased. A total of 1182 imported cases were reported by the CDC, 1983-1997. (Millichap, John J. Travel-related spread of disease. NWU Thesis, 1998). The importance of measles vaccination is obvious from these statistics, but the need for safer vaccines is also apparent.

HEADACHE DISORDERS

ACETAMINOPHEN, ASPIRIN, AND CAFFEINE FOR MIGRAINE

The effectiveness of two tablets of the nonprescription combination of acetaminophen, aspirin, and caffeine in alleviating migraine headache pain was evaluated in 1357 patients (mean age, 36 years) from several centers, enrolled in three double-blind, single-dose, placebo-controlled studies. Pain intensity was significantly reduced within 1 to 6 hours after receiving the combination when compared with the effect of placebo. Within 2 hours, pain was reduced to mild or none in 60% of drug-treated patients compared to 30% of controls; and at 6 hours, 50% were pain free compared to 23% of controls. Associated symptoms, nausea, photophobia, phonophobia, and functional disability, were also significantly improved. Adverse experiences, occurring in 13% of drug-treated compared to 7% of placebo controls, included nausea (5%), nervousness (4%), dizziness (3%), and gastrointestinal symptoms (3%). (Lipton RB, Stewart WF, Ryan RE Jr, et al. Efficacy and safety of acetaminophen, aspirin, and caffeine in alleviating migraine

headache pain. Arch Neurol Feb 1998;55:210-217). (Reprints: Richard B Lipton MD, Department of Neurology, Montefiore Medical Center, 111 E 210th St, Bronx, NY 10467).

COMMENT. The nonprescription combination of acetaminophen, aspirin, and caffeine is a safe, cost-effective, treatment for adults with migraine, and this alternative therapy should be indicated also in children and adolescents.

ATTENTION DEFICIT DISORDERS

METHYLPHENIDATE FOR ADHD IN CHILDREN AND ADOLESCENTS

The therapeutic effectiveness of methylphenidate (MPH) (0.3 mg/kg) in attention-deficit hyperactivity disorder (ADHD) was compared during childhood (ages 8 to 11 years) and adolescence (ages 12 to 14.5 years) in a retrospective follow-up study of 16 patients who had completed double-blind, placebo-controlled, crossover trials during two separate summer treatment programs at the Western Psychiatric Institute, University of Pittsburgh Medical Center, PA. Of 12 dependent variables, including objective measures of academic performance and social behavior, and counselor and teacher ratings, only 3 showed significant changes in the effect size of MPH from childhood to adolescence. Stimulant medication was equally effective in ADHD during childhood and adolescence, if environmental factors and activities remained constant. (Smith BH, Pelham WE, Gnagy E, Yudell RS. Equivalent effects of stimulant treatment for attention-deficit hyperactivity disorder during childhood and adolescence. J Am Acad Child Adolesc Psychiatry March 1998;378:314-321). (Reprints: Dr Bradley H Smith, Research Institute on Addictions, 1021 Main Street, Buffalo, NY 14203).

COMMENT. Stimulant therapy for ADHD is equally effective for children and adolescents. The dose of methylphenidate should not automatically be increased in accordance with age and weight gains. ADHD patients who develop worsening of symptoms in high school should receive psychosocial counselling before considering an increase in dose of stimulant.

Diagnostic continuity between child and adolescent ADHD was documented in a study of a longitudinal clinical sample at the Pediatric Psychopharmacology Unit, Massachusetts General Hospital, Boston. (Biederman J, Faraone SV, Taylor A, et al. J Am Acad Child Adolesc Psychiatry March 1998;37:305-313). Patterns of psychosocial adversity and comorbidity with conduct, mood, and anxiety disorders were almost identical. Substance abuse differed in the two age groups, but was independent of ADHD.

Approach to treatment of ADHD in adolescents with substance use disorders and conduct disorder was reviewed from the Addiction Research and Treatment Services Program, University of Colorado School of Medicine, Denver. (Riggs PD. J Am Acad Child Adolesc Psychiatry March 1998;37:331-332). In this center, adolescents with ADHD and comorbid substance abuse and conduct disorders are treated with pemoline or buproprion, which have a lower abuse potential than psychostimulants such as dextroamphetamine and methylphenidate. Tricyclic antidepressants are considered too dangerous for use in impulsive youths, with risk of illicit drug interaction and high incidence of death with overdose. A multimodal treatment approach and urine toxicology monitoring are recommended.

Conduct disorder in children in the UK is reviewed from the Department of Child and Adolescent Psychiatry, Institute of Psychiatry, London. (Scott S. BMJ 17 Jan 1998;316:202-206. Aggressive behavior occurs in 10% of