

>40 mm Hg, CPP <40 mm HG), 2 died with transtentorial herniation and cardiorespiratory arrest, 2 had severe neurological sequelae. The remainder with mild (<20 mm Hg) or intermediate intracranial hypertension (<40 mm Hg) survived without severe sequelae. Mannitol was of value only in children with intermediate intracranial hypertension and ICP <40 mm Hg. Corticosteroids are detrimental in adults with cerebral malaria and have not been used in children. Osmotherapy is not recommended by the WHO. (Newton CRJC, Crawley J, Sowumni A et al. Intracranial hypertension in Africans with cerebral malaria. Arch Dis Child March 1997;76:219-226). (Respond: Dr CRJC Newton, Neurosciences Unit, The Wolfson Centre, Mecklenburgh Square, London WC1N 2AP, UK).

COMMENT. The authors cite possible causes of intracranial hypertension in cerebral malaria, including increase in cerebral blood volume (CBV), cerebral edema, and hydrocephalus. Increased CBV seemed most likely from CT and MRI studies. Clinical signs of ICP, pupil dilatation and decerebrate posturing, are unreliable in estimating severity of intracranial hypertension, and the benefits of ICP monitoring need controlled evaluation. My colleague, Dr Charles Swisher, who treated malaria in the Service in Vietnam, referred to the interference with the vascular supply to the central nervous system in cerebral malaria, due to sludging and thrombosis caused by intravascular parasites, and consequent ischemia and anoxemia. Hyperpyrexia and convulsions are common symptoms. (Hunter GW III, Frye WW, Swartzwelder JC. A Manual of Tropical Medicine, 3rd ed, Philadelphia, WB Saunders, 1961).

SEIZURES AND RELATED DISORDERS

IMMUNIZATION-INDUCED SYNCOPAL ATTACKS

The clinical features and morbidity of a total of 697 cases of syncope after vaccination reported to the national Vaccine Adverse Reporting System were analyzed at the Center for Biologics Evaluation and Research, Food and Drug Administration, Rockville, Md. The vaccines implicated included measles-mumps-rubella (33%), oral polio (15%), tetanus-diphtheria, adult (15%), D.T.P. (12%), hepatitis B (10%), influenza (4%), H influenza B (3%), D.T., pediatric (2%), D.T. acellular pertussis (2%), and typhoid (1%). Of 511 syncopes occurring within 1 hour of vaccination, 63% were within 5 min and 98% within 30 min. Approximately 25% of attacks were complicated by tonic or clonic movements, and 10% of the total required hospitalization. Head injuries with skull fracture, intracranial bleeding, or cerebral contusion resulted from syncope-induced falls in 6 individuals, 12 to 28 years of age, and 3 required surgery, with neurologic deficits in 2. (Braun MM, Patriarca PA, Ellenberg SS. Syncope after immunization. Arch Pediatr Adolesc Med March 1997;151:255-259). (Respond: M Miles Braun MD, HFM-220, Food and Drug Administration, 1401 Rockville Pike, Rockville, MD 20852).

COMMENT. Vaccinators should advise patients to sit for at least 15 minutes after immunization, and particularly following MMP vaccine. Those complaining of light-headedness should be checked for hypotension and bradycardia. A 25% incidence of convulsive movements reported in association with these post-immunization vasovagal attacks is of interest. Seizures in association with syncope following blood donation are not uncommon, and are rarely found to represent an epileptic event. Auras associated with syncope have some similarity to those preceding epileptic seizures, but in contrast to epilepsy, syncopal auras lack localizing significance and may be less complex.

Aura phenomena during syncope were studied in 60 patients, mainly adults, with cardiac and 40 with vasovagal syncopes at the University Clinic, Innsbruck, Austria (Benke Th, Hochleitner M, Bauer G. Eur Neurol Jan 1997). Auras in 93% were mostly epigastric, vertiginous, visual, or somatosensory experiences, more detailed in the vasovagal group. Syncope-related auras were distinguished from epileptic phenomena by their lack of symptoms such as tastes, smells, and *deja vu*.

EPILEPSY AND AUTISM

The relationship of epilepsy and epileptiform EEG abnormalities to language and behavioral regression in children with pervasive developmental disorders or autism was studied in 585 patients at the Miami Children's Hospital, Florida. Regression had occurred in 30%, and 11% had a history of epilepsy. EEGs were epileptiform in 59% of 66 epileptic, and 8% of 335 nonepileptic children. Regression occurred equally in nonepileptic and epileptic children; and was associated with an epileptiform EEG in 14% of those without epilepsy. Language regression was correlated 1) with an epileptiform EEG in children without epilepsy, and 2) with more severe cognitive dysfunction. (Tuchman RF, Rapin I. Regression in pervasive developmental disorders: seizures and epileptiform electroencephalogram correlates. Pediatrics April 1997;99:560-566). (Reprints: Roberto F Tuchman MD, Department of Neurology, Miami Children's Hospital, Solomon Klein Pavilion, 3200 SW 60 Court, Suite 302, Miami, FL 33155).

COMMENT. The occurrence of language regression in children with autism is not closely associated with a history of epilepsy but does show a link with epileptiform EEGs in those without clinical epilepsy. The prevalence of epilepsy in young children with autism is relatively low (11%) but may reach more than 30% in adult life. Sleep EEGs are important to uncover epileptiform discharges in autistic children without epilepsy; language and social skills may improve after treatment with valproic acid. (see Progress in Pediatric Neurology III, PNB Publ, 1997; Ped Neur Briefs March 1994;8:20).

LEARNING DISABILITIES

THE ANATOMY OF MUSIC PERCEPTION

The cerebral functional anatomy of music appreciation in six young healthy, musically naive, right handed French subjects was determined, using a high resolution PET scanner and oxygen-15 labelled water, at the University of Caen, France, and the Wellcome Department of Cognitive Neurology, Institute of Neurology, London, UK. Four activation tasks on the same auditory material, consisting of 30 sequences of notes on tape, were used: 1) identification/familiarity with tunes; 2) attention to pitch task; 3) timbre task; 4) rhythm task. Based on the neuropsychological literature concerning music perception in brain-damaged subjects, the timbre and pitch tasks were expected to activate the right hemisphere, and rhythm and familiarity tasks to involve the left hemisphere. In agreement with the literature, *familiarity* and recognition of tunes, and the *rhythm* task caused activation mainly in the left hemisphere; the *timbre* task activated the right hemisphere. In contrast to previous studies, *pitch* processing caused activation in the left hemisphere, specifically the left cuneus/precuneus, in proximity to primary visual areas, and reflecting a visual mental imagery. (Platel H, Price C, Baron J-C, Wise R,