
Abnormalities of CNS maturation and function revealed by longitudinal auditory evoked responses and EEGs were found to characterize non-delinquent ADHD subjects, while delinquent hyperactive subjects showed normal CNS maturation. ADHD boys with neurologic abnormalities had a better outcome than those with normal CNS function who later exhibited delinquent behavior secondary to environmental social factors, (Satterfield JH et al. Electroenceph Clin Neurophysiol 1987;67:531; see PPN I, pp159-160).

HEAD TRAUMA

ENLARGING SKULL FRACTURES

The diagnosis, management, and treatment of large unhealed skull fractures are reported in 10 children, aged 2 weeks to 27 months, seen at the Children's National Medical Center, Washington, DC in a 4 year period. The parietal bone was involved, and an underlying cortical contusion was associated with a contralateral hemiparesis. Five (50%) had post-traumatic seizures, and 4 (40%) had mild hydrocephalus and porencephaly. The fractures enlarged in 8 preoperatively. At surgical repair, 1-11 months after injury, the lacerated dura was retracted beneath the fracture edge and grafted, and a cranioplasty or transposition of adjacent bone with normal dura was performed. A shunt was placed in those with hydrocephalus. None had formed a leptomeningeal cyst at the site of the fracture. Enlargement of the fracture was not caused by erosion but by expansion of the skull to accommodate growing brain or increased pressure. The diagnosis was made clinically, without need for serial skull X-rays. (Johnson DL, Helman T. Enlarging skull fractures in children. Child's Nerv Syst May 1995:11:265-268). (Respond: Dr DL Johnson, Division of Neurosurgery, Milton S Hershey Medical Center, PO Box 850, Hershey, PA 17033).

COMMENT. Laceration and retraction of the dura, the tissue needed for osteoplastic repair, are the reasons for the failure of the fracture to heal. The fracture widens as the skull expands with growth or the result of pressure of the uncontained brain, apparently not because of cyst formation, the most widely accepted theory.

Mortality from head injury. In Geneva, Switzerland, the mortality from head injuries in children has decreased progressively during the last quarter century from 10.4/100,000 to 3.5/100,000 annually, according to a study at the University Hospital (Berney J et al. Head injuries in children: a chronicle of a quarter of a century. Child's Nerv Syst May 1995;11:256-264). Better organization and management and a drop in severe cases due to less traffic accidents accounted for the improved statistics. The number of children handicapped by head injury was unchanged, however, indicating a need for prevention.