

recovery or by school achievement. One-half the patients with severe brain injury in early childhood attended normal school, but only one-fourth could work full-time as adults. The authors stress the importance of providing the brain-injured child with a firm identity.

CEREBRAL BLOOD FLOW STUDIES IN SEVERE HEAD INJURY

The results of 151 serial measurements of cerebral blood flow, arteriojugular venous oxygen difference, and cerebral metabolic rate for oxygen performed in 21 children with severe head injury are reported from the Bristol Hospital for Sick Children, UK. Cerebral hyperemia was uncommon, occurring in only 10 (7%) of the blood flow measurements. Cerebral blood flow was inversely correlated with intracranial pressure. Cerebral metabolic rate was initially normal in 81% of children, but both metabolic rate and AV oxygen difference fell significantly between the first and third days after injury. Children with head injury are most at risk of sustaining ischemic brain damage in the first few hours after injury when cerebral metabolic rate and cerebral oxygen extraction are maximal. (Sharples PM et al. Cerebral blood flow and metabolism in children with severe head injury. Part 1: relation to age, Glasgow coma score, outcome, intracranial pressure, and time after injury. J Neurol Neurosurg Psychiatry Feb 1995;58:145-152). (Respond: Dr PM Sharples, Institute of Child Health, Bristol Hospital for Sick Children, St Michael's Hill, Bristol BS2 8BJ, UK).

COMMENT. In Part 2 of the above study, the authors measured cerebrovascular resistance in 17 children with severe head injuries. Values were normal or raised in most cases. Cerebrovascular resistance was correlated with cerebral perfusion pressure, except in 4 of 5 most severely injured patients who died or survived with major handicap. The pathophysiology of traumatic encephalopathy in children is similar to that in adults. Normal autoregulatory mechanisms are preserved in most children with head injury, but pressure autoregulation may be disturbed in those with very severe injury. The adequacy of cerebral blood flow for cerebral metabolic demands should be closely monitored by continuous jugular oxygen saturation measurement in the severely injured patients. (Sharples PM, Matthews DSF, Eyre JA. Cerebral blood flow and metabolism in children with severe head injuries. Part 2: cerebrovascular resistance and its determinants. J Neurol Neurosurg Psychiatry Feb 1995;58:153-159).

A normal CT scan after mild head injury predicts a good prognosis and lack of subsequent deterioration requiring neurosurgical intervention, according to a study of 400 brain injured children reported from the University of Washington, Seattle. (Davis RL et al. The use of cranial CT scans in the triage of pediatric patients with mild head injury. Pediatrics March 1995;95:345-349).

SEIZURE DISORDERS

EARLY AED WITHDRAWAL IN NEONATES WITH SEIZURES

The risk of seizure recurrence within the first year of life was evaluated in 31 surviving neonates whose antiepileptic treatment was discontinued after one to 65 days (median 4.5 days) in a study at the Neonatal