neurological deficits, and disorders of language, vision and cognition occur in 20-60% of perinatal stroke cases. Neuroimaging lesion size and location are helpful in prediction of outcome. Basal ganglia involvement correlates with poor prognosis. (Kirton A, deVeber G. Advances in perinatal ischemic stroke. **Pediatr Neurol** March 2009;40:205-214). (Respond: Dr Kirton, Division of Neurology, Alberta Children's Hospital, 2888 Shaganappi Trail NW, Calgary AB T3B 6A8, Canada. E-mail: <a href="mailto:adam.kirton@calgaryhealthregion.ca">adam.kirton@calgaryhealthregion.ca</a>).

COMMENT. The distinction between specific causative factors and coincidental associations is a challenge, particularly with prenatal factors in the etiology of perinatal ischemic stroke. Advances in neuroimaging (functional MRI, diffusion tensor imaging, and transcranial magnetic stimulation) have improved prediction of outcome and should increase understanding of brain reorganization and plasticity.

Risk of epilepsy after perinatal stroke was studied by retrospective review of 64 children followed after 6 months of age at Indiana University School of Medicine (Garg BP et al. J Pediatr 2007;151:409-413; Ped Neur Briefs Oct 2007;21:79). Neonatal seizures were recorded in the NICU in 75% of cases. Epilepsy had developed in 67% between age 6 months and follow-up at a mean age of 43 months. Infarct on prenatal ultrasound and family history of seizures were significantly associated with development of epilepsy following perinatal stroke.

## TRAUMATIC DISORDERS

## SPINAL SUBDURAL HEMATOMA AND NON-ACCIDENTAL HEAD INJURY

The incidence of spinal pathology in 18 children with non-accidental head injury was determined in a study at Nottingham University Hospitals, UK. Between 2000 and 2007 children with non-accidental head injury had MRI of brain and whole spine; the spine was examined routinely in all suspected cases after 2005. Spinal subdural hematoma occurred in 8 (44%) cases. It was clinically occult in all cases, usually thoracic or lumbar in location, and large in 6. All had supratentorial and infratentorial intracranial subdural hematomas. Three of the 8 patients with supratentorial subdurals had skull fractures. Follow-up MRI of the spine within 1 to 3 months in 6 of the 8 cases showed reduction in size of the spinal subdural in 5 and complete resolution in 1. (Koumellis P, McConachie NS, Jaspan T. Spinal subdural hematomas in children with non-accidental head injury. **Arch Dis Child** March 2009;94:216-219). (Respond: Dr T Jaspan, Radiology Department, B Floor, Queen's Medical Centre, Derby Road, Nottingham NG7 2UH, UK. E-mail: tim.jaspan@nuh.nhs.uk).

COMMENT. A high incidence of occult spinal subdural hematoma is reported in children with non-accidental head injury and brain subdurals. Patients with suspected non-accidental head injury should receive MRI of brain and whole spine in all cases.