

are allowed to develop with increasing age, the likelihood of postoperative improvement is only 25-50%. Ultrasound may be used to diagnose tethered cords but magnetic resonance is usually required for better visualization. In addition to the association with cutaneous hemangioma, tethered cord occurs with subcutaneous lipoma, a hairy tuft, a prominent dimple, or a midline sinus tract or skin defect.

TRAPPED VENTRICLE AND SHUNTED HYDROCEPHALUS

Occluded fourth ventricle (trapped ventricle) is reported in eight of 47 children (17%) receiving repeated shunt revisions for hydrocephalus at the Stritch School of Medicine, Loyola University of Chicago, Maywood, IL. The hydrocephalus was caused by intraventricular hemorrhage but the fourth ventricular enlargement developed only after shunting. Massive dilatation of the ventricle occurred in four, three developed a progressive spastic quadriplegia, and two had increased intracranial pressure with lethargy and vomiting. Two children underwent a fourth ventricular shunt; one became more alert and less quadriplegic, and the other showed gradual improvement in motor function. (Coker SB and Anderson, CL. Occluded fourth ventricle after multiple shunt revisions for hydrocephalus. *Pediatrics* June 1989; 83:981-985).

COMMENT. Trapped ventricle following repeated shunting may be manifested by headache, lethargy, vomiting, ataxia, spastic quadriplegia, cranial nerve palsies and head tilt. This complication appears to be common among children with intraventricular hemorrhage who have received ventricular peritoneal shunting. Progressive fourth ventricular enlargement may be silent and diagnosis requires post shunt neural imaging and brain stem auditory evoked responses. Shunting of the fourth ventricle results in clinical improvement.

TOXIC DISORDERS

HYPERBILIRUBINEMIA AND NEURODEVELOPMENTAL OUTCOME

The results of the Collaborative Project on Preterm and Small for Gestational Age Infants in the Netherlands, 1983, in regard to hyperbilirubinemia and neurodevelopmental outcome at two years of age are reported from the Division of Neonatology, Department of Pediatrics, University Hospital, Leiden, the Netherlands.

Children with minor and major handicaps had significantly greater maximal serum total bilirubin concentrations than children with a normal neurodevelopmental outcome ($P = 0.02$). An increase in prevalence of handicaps was found for each 50 mmol/L (2.9 mg/dL) increase of maximal serum total bilirubin concentration. The neurological abnormalities included cerebral palsy, seizures, hearing defects as well as retinopathy of prematurity. The risk of a handicap increased by 30% for each 2.9 mg/dL increase of maximal serum total bilirubin concentration ($P = 0.02$) suggesting a causal relationship. (van de Bor M et al. Hyperbilirubinemia