VASCULAR DISORDERS

SINOVENOUS THROMBOSIS: ANTICOAGULATION THERAPY

The value of anticoagulant therapy in a consecutive cohort 5 year study of 30 children with 32 episodes of sinovenous thrombosis (SVT) was assessed at the Hospital for Sick Children, Toronto, Canada. The median age was 6.2 years (range, 3 days to 18 years). Primary associated illnesses included systemic lupus erythematosus (5), renal disease (3), perinatal distress (2), congenital heart disease (1), cerebral A-V malformation (1), and neurosurgery for epilepsy (1). Ten received standard heparin, and 12 received low-molecular-weight heparin (LMWH). One case of silent intracranial bleeding occurred with standard heparin and none with LMWH. A randomized controlled trial was considered warranted. (deVeber G, Chan A, Monagle P et al. Anticoagulation therapy in pediatric patients with sinovenous thrombosis. A cohort study. Arch Neurol Dec 1998;55:1533-1537). (Reprints: Gabrielle deVeber MD, Division of Neurology, Hospital for Sick Children, 555 University Ave, Toronto, Ontario, Canada M5G 1X8).

COMMENT. The use of anticoagulant therapy, in particular low molecular weight heparin, in children with sinovenous thrombosis does not cause bleeding and may improve survival. Presentation of SVT varies with age: infants and young children present with seizures, older children with headache and vomiting.

Prothrombotic disorders and cerebral thromboembolism. Prothrombotic conditions were investigated in 92 children presenting with arterial ischemic stroke (78%) or sinovenous thrombosis (22%) at the Hospital for Sick Children, Toronto. A significant proportion (38%) of children with cerebral thromboembolism had prothrombotic conditions, especially anticardiolipin antibody (33%). (deVeber G, Monagle P, Chan A, et al. Arch Neurol Dec 1998;55:1539-1543). Newborns and older infants and children were equally affected. Infants and children with thromboembolism should be tested for prothrombotic disorders.

BRAIN TUMORS

NEUROIMAGING OUTCOME CORRELATION OF BRAIN TUMORS

Serial analysis of imaging (thallium-201 [201TI) single-photon emission CT and MRI) examinations was correlated with clinical and histological characteristics of brain tumors in 75 patients monitored for 1 day to 3.9 years (mean, 1.39 years) at the Children's Hospital, Harvard Medical School, Boston. Abnormal 201TI uptake was associated with greater mortality and morbidity: 17% of 201TI-positive patients died, whereas no deaths occurred in 201TI-negative groups. A survival period of >2 years from diagnosis occurred in only one 201TI-positive patient, in contrast to almost one half of the 201TI-negative group. Significant enhancement of lesions with paramagnetic contrast agents correlated with greater mortality, whereas no deaths occurred in those lacking abnormal enhancement. (O'Tuama LA, Poussaint TY, Anthony DC, Treves ST. Childhood brain tumor: neuroimaging correlated with disease outcome. Pediatr Neurol Oct 1998;19:259-262). (Respond: Dr O'Tuama, Brown University School of Med, Vet AMC, 830 Chalkstone Ave, Providence, RI 02908).

COMMENT. Neuroimaging ^{201}TI activity may predict brain tumor outcome.