COMMENT. Intensive postoperative chemotherapy that includes intraventricular methotrexate provides long remissions in children with medulloblastoma, and results are especially promising for patients without initial metastases. Except in cases of relapse, radiotherapy with its adverse side effects may be avoided in the very young patient with medulloblastoma. (DeAngelis LM. Chemotherapy for brain tumors—a new beginning. N Engl J Med 2005;352:1036-1037).

VASCULAR DISORDERS

RISK FACTORS FOR CEREBRAL VENOUS SINUS THROMBOSIS

The various clinical and neuroradiological presentations, frequency of associated prothrombotic risk factors, and predictors of outcome were studied in 42 consecutive children (ages 3 weeks to 13 years) with cerebral venous sinus thrombosis (CVST) seen at 5 European pediatric neurology centers and from stroke registries. The majority (83%) presented acutely with seizures, focal signs and symptoms of raised intracranial pressure. Twelve (28%) were in coma. CVST was demonstrated on MR venography. Pre-existing chronic illness in 17 patients included 4 with surgical procedures (cardiac, ventriculoperitoneal shunt, brain tumor resection, and colectomy for colitis), 8 with recent infections, 4 with dehydration, and 2 with lupus. Recent infection and dehydration were triggers for CVST in 25 previously well children. Anemia (Hgb <2 SD below the mean for age) was present in 22 (52%); 5 were hemolytic, including 2 with sickle cell disease and one with thalassemia. Iron deficiency in 50% of patients was found in 17 with anemia and in 4 with microcytosis and normal Hgb. A risk factor for thrombophilia was diagnosed in 18 of 29 (62%) screened, most commonly high factor VIII. Iron deficiency, parietal infarction and lack of caudate involvement independently predicted CVST rather than arterial stroke. Follow-up ranged from 0.5 to 10 years. Five patients died, and 26 had sequelae, including pseudotumor in 12, cognitive and/or behavioral disorders in 14, and associated with epilepsy in 3 and hemiparesis in 2. Independent predictors of a good cognitive outcome were older age group, use of anticoagulation therapy (18 patients), and lateral and/or sigmoid sinus involvement. Of 19 patients with follow-up MR venography, 3 had persistent occlusion, associated with anemia. (Sebire G. Tabarki B. Saunders DE et al. Cerebral venous sinus thrombosis in children: risk factors, presentation, diagnosis and outcome. Brain March 2005;128:477-4898). (Respond: Dr FJ Kirkham, The Wolfson Centre, Mecklenburgh Square, London WC1N 2AP, UK).

COMMENT. Cerebral venous thrombosis should be excluded by MR venography in children with acute neurological symptoms, especially in patients presenting with headache who are anemic, have iron deficiency, or are suffering from recent infection and dehydration. The authors recommend early anticoagulation therapy except in comatose patients. Pseudotumor cerebri is a common sequel of CVST and may be underdiagnosed in young children.

CVST was reported in 3 girls with headache and systemic lupus crythematosus (Uziel Y et al. J Pediatr 1995;126:722-727). After low-dose oral anticoagulation and treatment for lupus, none had further thrombotic events in 10-18 month follow-up.