NEOPLASMS AND MALFORMATIONS

SURGICAL TREATMENT OF SPINAL TUMORS

A series of 20 spinal tumors in children who underwent surgery between 1995 and 2003 is reported from Gulhane Military Medical Academy, Ankara, Turkey, Time of diagnosis ranged from 1 to 16 years (mean age, 4.85 years). Initial signs were motor weakness in 60% (mainly upper motor), reflex changes 50% (hyperactive DTRs, loss of superficial reflexes, Babinski responses), sensory changes 45%, subcutaneous mass lesion 15%, and atrophy of lower limb muscles in 10%. Time between onset of signs and diagnosis ranged from 1 month to 3 years (mean, 8.5 months). Epidural tumors occurred in 8 (40%), intradural-extramedullary in 8 (40%), and intradural-intramedullary in 4 (20%) patients. Tumors were located in the lumbar or lumbosacral region in 8 (40%) patients, thoracic in 5. and cervical and cervicothoracic in 3. Complete removal of the tumor was achieved in 16 (80%). These were primitive neuroectodermal, low-grade astrocytoma, ependymoma, teratoma, schwannoma, neuroblastoma, and dermoid tumors. Subtotal surgical excision was possible in the remaining 4 (20%) patients with lipoma and sarcoma. Laminotomy was preferred in 12 (60%) patients under 3 years of age who required extensive surgical exposure, and laminectomy in 8 (40%). Nine (45%) underwent postoperative chemotherapy and radiotherapy; these were teratoma, sarcoma, and neuroectodermal. During 9 to 60 months follow-up (mean, 22 months), 3 with sarcoma and neuroblastoma died, the postsurgical course was complicated by infection and CSF leakage in 2, and 15 patients were free of tumor. (Baysefer A, Akay KM, Izei Y, et al. The clinical and surgical aspects of spinal tumors in children. Pediatr Neurol 2004:31:261-266). (Respond: Dr Yusuf Izei, Maresal Cakmak Asker Hastanesi, 25100 Yenischir-Erzurum, Turkey).

COMMENT. Tumors of the spinal canal comprise 5 to 10% of CNS tumors in children. A male preponderance is usually observed. Thirty-five percent are located epidurally. A delayed deformity of the spine may occur after surgery, most frequently in patients vounger than 15 years. No cases of spinal deformity occurred in the above series.

Spinal fibrous hamartoma in a 10 month old infant is reported from University of Hokkaido, Sapporo, Japan (Yano S, et al. Neurosurgery Sept 2004;55:E728-E731). The infant presented with paraparesis and MRI showed an intradural mass at T10-L4. At laminectomy, the tumor was partially removed, and symptoms were unchanged. At 8 months follow-up, no further growth of tumor had occurred.

ARTERIOVENOUS MALFORMATION AND PAPILLEDEMA

Two patients, ages 13 and 14, who presented with papilledema were found to have arteriovenous malformations (AVM) in a report from University College, London, UK. The first child had sustained a kick to the eyes. He had a 2-year history of intermittent headach MRI showed an unruptured AVM in the temporal lobe. The second had received steroids for juvenile arthritis. Both had increased ICP. (Fung L-W E, Ganesan V. Dev Med Child Neurol 2004;46:626-627). (Respond: Dr Ganesan, Wolfson Ctre, London WC1N 2AP).