CEREBRAL TUMORS

BRAIN TUMORS IN INFANTS

The clinical manifestations, histological typing, location and results of surgical and oncological treatment in 76 children with intracranial tumors presenting during the first 2 years of life are reported from the Hopital Neurologique et Neurochirurgical Pierre Wertheimer, Service de Neurochirurgie Infantile, BP Lyon Montchat, Lyon, France. Patients were analyzed in groups according to age (29 under 1 yr and 47 between 1-2 yrs) and malignancy. A slight male preponderance was observed in children up to 1 yr, while an equal sex distribution was found in the older group. Supratentorial tumors were most prevalent during the 1st year, and the posterior fossa location was most frequent after 1 year. Increased intracranial pressure and hydrocephalus were the chief clinical manifestations; medulloblastoma and ependymoma were most frequent in the highly malignant group and astocytoma in the low-malignant group.

The overall survival rate was 46% following operation; 22% recovered completely and have survived 8 mos to 14 yrs, and 13% have a mild neurological deficit. In those with medulloblastoma or ependymoma requiring radiotherapy, only 20% had favorable neuropsychological results. No patient with a highly malignant tumor operated on during the first year of life survived later. Brain irradiation in this age group leads to a severely handicapped child and chemotherapy is preferred for highly malignant tumors, especially when surgical excision is incomplete. Radical surgery is proposed as the ideal treatment. (Lapras C et al. Brain tumors in infants: a study of 76 patients operated upon. Child's Nerv Syst April 1988;4:100-103).

COMMENT. In 17 children with intracranial neoplasms presenting within the first 2 months of life, alterations in behavior, anorexia, vomiting, irritability, or unusual quietness were the most common symptoms and 10 had macrocrania and hydrocephalus (Jooma R et al. Surg Neurol 1984;21:165). The operative mortality was 40% and the total case mortality was 80%. These authors from the Hosp for Sick Children, Great Ormond St, London, felt that an aggressive approach to most of the cases in this age group was not warranted at present, and the radiation dose is limited by the increased sensitivity of the immature brain.

A first report of medulloblastoma in an 8-yr-old patient with Coffin-Siris syndrome (Rogers L et al. Child's Nerv Syst 1988;4:41), was diagnosed during an evaluation for neurogenic causes of apnea and feeding difficulties. This syndrome is a rare congenital disorder characterized by mental retardation, deficient postnatal growth, joint laxity, and brachydactyly of the 5th digit with absence of the nail bed. Several cases of Dandy Walker cysts and a case of brain-stem heterotopia have been described previously as complications of the syndrome.

NUTRITIONAL DISORDERS

FOOD ADDITIVES AND HYPERACTIVITY

Of 220 children referred to the Dept of Paediatrics, Royal Children's Hospital, Parkville, Victoria, Australia, because of suspected