

myoclonus epilepsy in which Lafora bodies are absent was exacerbated by phenytoin and benefitted by sodium valproate. (Eldridge R. et al. Lancet 1983; 2: 838).

INTRACRANIAL NEOPLASMS AND ANEURYSMS

EPILEPSY, TEMPORAL LOBE SCLEROSIS AND TUMORS

Sixteen of 48 children undergoing temporal lobectomy for temporal lobe epilepsy at the Hospital for Sick Children, Toronto, Ontario, were found to have tumors (12 patients), vascular malformations (3), and arachnoid cyst (1). Nine of these patients had concomitant mesial temporal sclerosis. In 11 of 18 operations (61%), it was necessary to extend the original cortical excision because of persistent epileptiform activity. The duration of seizures in the 16 patients varied between 1 and 13 years (average 6 yrs). Memory was impaired in 31% of patients, 39% had behavior problems, and 39% had deteriorating school performance.

Temporal lobectomy was performed on the right side in 8 cases and on the left side in 8. Four patients had an increased neurological deficit postoperatively and all had contralateral superior quadrantanopic defects. Of 15 patients followed for more than 1 year, 9 are seizure free (only 4 on medication), and 7 had more than 50% reduction in seizure frequency. (Drake J et al. Neurosurgery 1987; 21: 792-797).

COMMENT. The authors emphasize that simple excision of the tumor may not eradicate the seizures. The common occurrence of mesial temporal sclerosis in association with mass lesions requires extension of the resection to include removal of the hippocampus as well as the cortex adjacent to the tumor. It is suggested that hippocampal changes are secondary to repetitive seizure activity.

The late detection of cerebral gliomas as a cause of childhood epilepsy has been noted by other investigators. Diagnosis of supratentorial tumors was delayed for an average of 2 years after the initial seizure and 8 of 31 patients continued to have seizures for periods between 3 and 8 years before a tumor was demonstrated in a study of 291 cases at the Mayo Clinic. Seizures occurred in 17% of the total group — in 25% of patients with supratentorial tumors and in 12% of those with infratentorial tumors. They were the initial symptoms in 15% of patients with supratentorial tumors. Seizures were more common in patients with slowly growing astrocytomas, grades 1 and 2, than in those with more rapidly expanding astrocytomas, grades 3 or 4. (Pediatrics 1962; 29: 978).

The MRI should permit earlier diagnosis of the temporal lobe glioma as a cause of childhood epilepsy. MRI is superior in defining the extent of gliomas grade 1 and 11 that may be poorly delineated by CT, and MRI should be a complementary examination in

suspected tumor cases (Korman M et al. Acta Radiologica 1987; 28: 369). The prompt surgical excision of the tumor before seizures become medically unresponsive may prevent the development of the mesial temporal sclerosis and dual pathology stressed in the present report.

INTRACRANIAL ARTERIAL ANEURYSMS

Neurosurgeons from the Universita degli Studi di Roma "La Sapienza," Rome, Italy, report a 4-year-old girl with a cerebral saccular aneurysm and analyze 71 cases under 5 years of age in the literature. The patient presented with headache, vomiting and immediate coma with opisthotonus and trismus. A CT scan revealed a round, hyperdense area near the midbrain, and an angiogram demonstrated an aneurysm on the left posterior cerebral artery. Recovery of consciousness and regression of nuchal rigidity took 3-4 days. At operation 12 days after the bleed, the artery was clipped above and below the aneurysm. A post-operative right facial-brachial paresis had resolved after 1 year but the hemianopia persisted.

Saccular aneurysms are rare in childhood, accounting for only 1-2% of cases. Most occur in the first year of life and affect the middle and anterior cerebral arteries in 40% and 12% of cases, respectively. Surgery appears to be tolerated better in early childhood than in adults, with operative mortalities after 1970 of 2.3% and 7.8% respectively. (Ferrante L et al. Intracranial arterial aneurysms in early childhood. Surg Neurol 1988; 29: 39-56).

COMMENT. Early versus delayed operation for ruptured intracranial aneurysm is controversial. An International Comparative Study on Timing of Aneurysm Surgery in 3000 cases is expected to answer this question (Kassell NF, Torner JC. Stroke 1984; 15: 566). The favorable outcome in this 4-year-old child would support a delay in operation until after recovery from the acute hemorrhage. The early age of presentation of the saccular aneurysm in children contrasts with an average age of 10 years for children with arteriovenous malformations (Ventureyra ECG, Herder S. Child's Nerv Syst 1987; 3: 12 -- see Ped Neuro Briefs 1987; 1: 8).

PAROXYSMAL DISORDERS

FLUNARIZINE IN ALTERNATING HEMIPLEGIA

The effects of flunarizine, a calcium-entry blocker, in alternating hemiplegia are reported in the first 12 children included in an international study coordinated from the Dept Pediatrics, University Hospital Gasthuisberg, B-3000 Leuven, Belgium. Cases from France, Italy, Portugal, Spain and Scotland meeting the following diagnostic criteria were included: onset before 18 months, repeated attacks at least 2 per month involving both sides of the body, associated oculomotor abnormalities and autonomic disturbances, and