

SURGERY FOR EXTRATEMPORAL PARTIAL EPILEPSY

The results of surgery for extratemporal partial epilepsy that began in childhood are reported from the Department of Surgery, Stanford University Medical School; Department of Neurology, University of Rochester; University of Colorado Health Sciences Center; and the Children's Hospital, Boston MA. Of 35 patients who underwent 39 operations, 63% were either seizure-free or had a significant reduction in frequency of seizures. The locations of the cortical resections were frontal, parietal, occipital, or multilobar. Tumors accounted for 31%, malformation 17%, atrophy 14%, encephalitis 5.7%, Sturge-Weber syndrome, 2.9%, and vascular malformation 8.6%. The lesion was a nonspecific gliosis in 20%. Patients for surgery were selected by clinical criteria, neural imaging, and EEG with long-term monitoring. Invasive preoperative investigations such as depth electrodes were not employed. The authors advocate early operation in children with intractable epilepsy even when the seizure focus is not involving the temporal lobe. (Adler J et al. Results of surgery for extratemporal partial epilepsy that began in childhood. Arch Neurol Feb 1991; 48:133-140).

COMMENT. In retrospect the authors believed that surgery was delayed in most patients much longer than necessary and that years of needless suffering from epilepsy and the adverse effects of antiepileptic medications might have been avoided by surgery before adolescence. Patients with vascular malformations often had the longest delay between onset of seizures and surgery and these would have benefitted greatly from earlier intervention.

CAPILLARY PROLACTIN AND SEIZURE DIAGNOSIS

The validity of prolactin measurements using capillary blood in the diagnosis of epilepsy was tested in the Departments of Neurology, Neurosurgery, and Pathology, The Johns Hopkins University School of Medicine, Baltimore, MD. Venous and capillary prolactin levels were determined 10 to 20 minutes after seizure-like episodes in 20 patients studied in an epilepsy monitoring unit. All patients had documentation of their seizure type by simultaneous video-EEG monitoring. Using the low criterion of elevation (18 ng/ml), capillary prolactin values were predictive of seizures versus pseudoseizures in 9 (100%) of 9 patients with generalized tonic-clonic patterns, in 5 (71%) of 7 patients with complex partial seizures, and 4 (100%) of 4 patients with pseudoseizures. Venous and capillary prolactin values correlated and were unaffected by leaving filter paper samples at room temperature for up to one week. (Fisher RS et al. Capillary prolactin measurement for diagnosis of seizures. Ann Neurol Feb 1991; 29:187-190).

COMMENT. Capillary blood collection for prolactin measurement may assist in the diagnosis of epilepsy in an outpatient clinic. Prolactin serum levels are elevated in children after tonic-clonic and complex partial seizures but determinations must be interpreted with reference to the complete clinical findings.