RANDOMIZED CONTROLLED STUDY OF SURGERY FOR EPILEPSY

Eighty patients with temporal lobe epilepsy were assigned at random to surgery (40 patients) or antiepileptic drug (AED) treatment only for one year (40 patients), and results were assessed by epileptologists without knowledge of treatment regimen, at the University of Western Ontario, London Health Sciences Centre, London, Ontario, Canada. Eligible patients were at least 16 years old (mean age at seizure onset 14.3 +/-11.7 years; at randomization, 35.5+/-9.4). In the surgical group during the year before randomization, the average monthly frequency of seizures was 5.1, number of AEDs was 6, percent with status epilepticus was 15; mesial temporal sclerosis was diagnosed by MRI in 70%, and low-grade tumor, cortical dysplasia, or vascular malformation in 15%. The medical group showed similar characteristics. Operation was left-sided more than right in the proportion of 2:1.

At one year after surgery or AED therapy only, 58% of the surgical group were free of seizures that impair awareness, whereas 8% of the medical only group were seizure-free (P<0.001). Post-surgical patients had continued treatment with AEDs, 22% requiring a change or increase in dose. Adverse effects of surgery in 4 patients included a small thalamic infarct, wound infection, and decline in verbal memory; there were no deaths. Visual-field defects occurred in 22 (55%) of the surgical group. Depression occurred in 18% and 20% of the surgical and medical groups, respectively. One medical patient died (sudden unexplained). Quality of life was better in the surgical compared to the medical group, but it improved over time in both groups. The proportion of patients employed or attending school at one year was not significantly different in surgical and medical groups (56.4% vs 38.5%; P=0.11). (Wiebe S, Blume WT, Girvin JP et al, and Surgery for Temporal Lobe Epilepsy Study Group. N Engl J Med August 2, 2001;345:311-318). (Reprints: Dr Samuel Wiebe, London Health Sciences Centre, University Campus, 339 Windermere Rd, London, ON N6A 5A5, Canada).

COMMENT. In this series of adult patients with temporal-lobe epilepsy, the authors consider surgery to provide superior results to prolonged antiepileptic drugs alone. Although these results are promising and impressive at a 1 year follow-up, surgery has not provided the elusive "cure" for epilepsy. It bears emphasis that all surgical patients continued their anticonvulsant therapy following surgery, and that the percentage gainfully employed or at school had not changed significantly (45% vs 56%) and was not significantly different from the medical group (39%). The optimal age for surgery was not addressed, a factor considered important in pediatric epilepsy centers and also emphasized in an editorial (Engel J Jr. N Engl J Med 2001;345:365-366). Early intervention in selected pediatric epilepsy cases may prevent the deterioration in intellect and social functioning that frequently attends refractory seizures requiring increasing doses of potentially toxic AEDs. In the following article, it is interesting that poor seizure control was not correlated with an increased risk of psychopathology and psychiatric symptoms.

PSYCHOPATHOLOGY AND EPILEPSY

The psychopathology of childhood epilepsy was examined by comparing symptoms in 48 children with complex partial seizures (CPS), 39 with primary generalized epilepsy with absence (PGE), and 59 nonepileptic children, aged 5 to 16 years. referred by pediatric neurologists to the UCLA Department of Psychiatry and Neuropsychiatric Institute, Los Angeles, CA. Responses on a Child Behavior Checklist (CBCL) completed by parents and the Schedule for Affective Disorders and Schizophrenia (K-SADS) administered to parent and child were compared. The