

TEMPORAL LOBE EPILEPSY IN PATIENTS OLDER THAN 50 YEARS

Surgery for Temporal Lobe Epilepsy in Older Patients

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OBJECTIVE: The goal of this study was to evaluate the efficacy of surgery for temporal lobe epilepsy (TLE) in older (older than 50 years) patients.

METHODS: The authors conducted a review of all patients aged 50 years or older with TLE surgically treated at the Montreal Neurological Institute and Hospital since 1981 by one surgeon (A.O.). Only patients without a mass lesion were included. Outcome parameters were compared with those of younger individuals with TLE, who were stratified by age at operation.

RESULTS: In patients aged 50 years and older, the onset of complex partial seizures occurred 5 to 53 years (mean, 35 years) before the time of surgery. Postoperatively, over a mean follow-up period of 64 months, 15 (83%) patients obtained a meaningful improvement, becoming either free from seizures or experiencing only a rare seizure. Most surgery outcomes were similar in both older and younger individuals, except for a trend to more freedom from seizures and increased likelihood of returning to work or usual activities in the younger patients. Note that a patient's long-standing seizure disorder did not negatively affect the ability to achieve freedom from seizures after surgery.

CONCLUSIONS: Surgery for TLE appears to be effective for older individuals, comparing favorably with results in younger age groups, and carries a small risk of postoperative complications.

risks and benefits of various treatments. Anteromedial temporal lobe resection is a generally established treatment for medically refractory temporal lobe epilepsy. The goal of this report is to evaluate outcomes in older patients undergoing this procedure and to assess the impact that epilepsy duration has on postoperative seizure freedom.

Boling et al. retrospectively analyzed the consecutive experience at the Montreal Neurological Institute, dating back to 1981, with patients aged 50 years or older with temporal lobe epilepsy not due to tumor or mass lesion who had undergone anteromedial temporal lobe resection or selective amygdalohippocampectomy. The effectiveness and complication rate of surgical treatment in this group were compared with those of younger patients. The comparison population consisted of four 50-patient groups, stratified by age at the time of surgery into those aged 10–19, 20–29, 30–39, and 40–49 years. To examine the effect that the duration of epilepsy has on postsurgical outcome, all 218 patients (those aged 50 years or older, as well as the younger groups) were grouped by duration of epilepsy (1–10, 11–20, 21–30, and longer than 30 years), with outcomes analyzed for each of these cohorts.

Eighteen patients aged 50 years or older (mean age, 54 years; maximum age, 64 years) at the time of surgery composed the focus of the analysis. At a minimal follow-up period of 2 years (mean, 64 months), 61% of the patients achieved an Engel class I outcome (seizure freedom); 22%, a class II outcome (rare seizures); and 17%, a class IV outcome (lack of a worthwhile reduction in seizures). These outcomes were statistically similar to those that were achieved in the younger patient groups. Likewise, complication rates were similar in all age groups. In the analysis of the effect of epilepsy duration on postoperative seizure reduction, the likelihood of a successful or unsuccessful outcome was similar for all cohorts.

This report presents valuable data regarding the candidacy of older patients with medically intractable temporal lobe epilepsy for surgical treatment, providing evidence that the efficacy and safety of operative resection are comparable to those in younger patients. Furthermore, long-standing duration of medically refractory epilepsy does not reduce the likelihood of a successful postoperative outcome. The present study does not address outcomes for elderly patients or for older patients with extra-temporal lobe epilepsy. It does, however, usefully inform the discussion of the relative risks and benefits of surgical treatment in older patients with temporal lobe epilepsy.

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COMMENTARY

Older patients and the elderly constitute a substantial, yet largely understudied, population of epilepsy patients. Understanding differences in the efficacy, tolerability, and safety of specific medical and surgical therapies in this group compared with younger patients is important in formulating management decisions and in counseling these patients on the relative