

Electro-clinical Characteristics and Postoperative Outcome of Medically Refractory Tumoral Temporal Lobe Epilepsy

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BACKGROUND:

Very few studies have specifically addressed surgical treatment and outcome of patients with tumor-related temporal lobe epilepsy (TLE). AIM: To define the postoperative seizure outcome and the factors that influenced the outcome of patients with tumor-related TLE.

MATERIALS AND METHODS:

We selected patients whose surgical pathology revealed a temporal lobe neoplasm and who had completed > 1 year of postoperative follow-up. We reviewed the clinical, EEG, radiological and pathological data, and the seizure outcome of these patients and assessed the factors that influenced the outcome

RESULTS:

Out of the 409 patients who underwent surgery for refractory TLE during the 8-year study period, there were 34 (8.3%) patients with temporal lobe neoplasms. The median age at surgery was 20 years and the median duration of epilepsy prior to surgery was 9.0 years. MRI revealed tumor in the mesial location in 21 (61.8%) patients. Interictal and ictal epileptiform EEG abnormalities were localized to the side of the lesion in the majority. Mesial temporal lobe structures were included in the resection, if they were involved by the tumor; otherwise, lesionectomy alone was performed. During a median follow-up of 4 years, 27 (79%) patients were completely seizure-free. The only factor that predicted long-term seizure-free outcome was being seizure-free during the first two postoperative years

CONCLUSIONS:

Our results emphasize the fact that in patients with tumoral TLE, when the seizures are medically refractory, surgery offers potential for cure of epilepsy in the majority