

PHARMACORESISTANT EPILEPSIES AND NEUROSURGICAL PROCEDURES

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Introduction: Hippocampal sclerosis is the most common pathologic abnormality underlying temporal lobe epilepsy (TLE), followed by other pathology, mostly tumors. Surgery, if properly performed, has proved as effective and save in treating the refractory temporal lobe epilepsy, especially in patients with adequate preoperative evaluation.

Patients and methods: 20 patients were operated on at the Department of Neurosurgery University Hospital „Sestre milosrdnice“ from November 2009. until February 2011.

60% were females, with the mean age of 32 years and mean epilepsy duration of 22 years. 17 patients had hippocampal sclerosis and 3 patients had temporal ganglioglioma. All patients experienced refractory complex partial seizures on monthly basis despite the optimized dosis of 2 or 3 antiepileptic drugs. Preoperative evaluation included a detailed clinical history taking, continuous videoEEG monitoring lasting from 2 to 14 days, high resolution 1,5 T or 3T magnetic resonance (MR) including T1-WI, T2-WI and FLAIR images, neuropsychological examination, interictal PET/CT brain scan and visual field examination.

Selective amygdalohippocampectomy via subtemporal approach was performed in 17 patients with hippocampal sclerosis (9 left-sided, 8 right-sided). In one patient with ganglioglioma the standard anterior temporal lobectomy was done and in two other ganglioglioma patients an extended lesionectomy was performed. One patient experienced temporal intracerebral hemorrhage with transient sensory dysphasia and achieved full recovery at three months postoperatively. Follow-up ranged from two to 17 months. Patients were classified according to the ILAE post-surgical assessment.

Results: 13 out of 20 patients operated on were followed for more than one year, 4 patients were followed for more than 6 months and 2 patients with a two months follow up. Out of 13 patients with a one year follow up, 10 patients (77%) are completely seizure and aura free (ILAE=1; ILAE=3). In total, 85% of patients are seizure free and with no auras postoperatively.

Conclusion: We presented results of the epilepsy surgery programme at our Institution. Despite the short term follow-up we feel encouraged with the surgical and seizure outcome and find it comparable with other published series.