

## WHY IS EPILEPSY SURGERY BETTER OPTION IN PHARMACORESISTANT PATIENTS

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**Introduction:** Less than 1 percent of patients with pharmacoresistant epilepsy are referred to epilepsy centers at an average of 22 years after onset. Surgery, if properly performed, has proved superior over medicamentous treatment of pharmacoresistant mesial temporal lobe epilepsy (MTLE). Surgery should be considered fairly early in the course of pharmacoresistant MTLE treatment.

**Patients and methods:** 29 patients with pharmacoresistant MTLE due to hippocampal sclerosis were operated on at the Department of Neurosurgery University Hospital „Sestre milosrdnice“ from November 2009. until May 2013. 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 (SAH) via

subtemporal approach was performed in 27 patients and standard anterior temporal lobectomy and amygdalohippocampectomy was performed in two patients. One patient with selective AH experienced temporal intracerebral hemorrhage with transient sensory dysphasia and achieved full recovery at three months postoperatively. Follow-up ranged from two months to 43 months. Patients were classified according to the ILAE and Engel postsurgical assessment.

**Results:** 7 out of 29 patients were followed for more than three years. 17 out of 29 patients were followed more than two years and 5 patients less than a year. Out of 24 patients with a follow up more than two years, 21 patients (87%) are completely seizure and aura free (ILAE=1; Engel =1).

**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.