# SELECTIVE VS. STANDARD TEMPORAL LOBE RESECTIONS

Sajko T[1], Hećimović H[2], Sesar N[1], Krešimir Rotim[1]

[1]Department of Neurosurgery, [2]Department of Neurology University Hospital Center „Sestre milosrdnice“, Zagreb, Croatia

**Introduction:** Temporal lobe epilepsy (TLE) is the most common refractory epilepsy syndrome. Surgery, if properly performed, has proved as effective and safe in treating the refractory temporal lobe epilepsy, especially in patients with adequate preoperative evaluation.

**Patients and methods:** 29 patients were operated on at the Department of Neurosurgery University Hospital „Sestre milosrdnice“ from November 2009. until February 2012.
23 patients had hippocampal sclerosis, three patients had temporal gliosis, one patient had pylocitic astrocytoma, one patient had a temporal ganglioglioma and one patient was a non lesional temporal lobe epilepsy case. 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, neuropsyhological examination, interictal PET/CT brain scan and visual field examination.
Selective amygdalohippocampectomy via subtemporal approach was performed in 23 patients with hippocampal sclerosis. In patients with temporal gliosis and a patient with temporal ganglioglioma an extended lesionectomy was performed. Temporal lobectomy was performed in patient with pylocitic astrocytoma and in patient with nonlesional temporal lobe epilepsy. 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 29 months. Patients were classified according to the ILAE and Engel postsurgical assessment.

**Results:** 18 out of 23 patients in the selective AH group were followed for more than one year. Out of 18 patients with one year follow up, 17 patients (94%) are completely seizure and aura free (ILAE=1; Engel =1). In the extended lesionectomy and temporal lobectomy group 5 out of 6 patients were followed more than a year. Three patients are seizure and aura free (ILAE=1; Engel=1) and two patients have a significant reduction of seizures (One patient ILAE=2, Engel=2; one patient ILAE=3, Engel=3).

**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 outcomes and find it comparable with other published series.