The surgical results in 2 series of patients with GGII and GGIII within eloquent were compared. Period A (2004-2009): 17 patients operated without IES. Period B (2009-2010): 19 patients operated with IES. RESULTS: The extent of tumor resection was 54.7% in group A and 79.9% in group B (P=.006). Six months after surgery, neurological morbidity was present in 8 patients of group A and one patient of group B (P=.015; odds ratio [OR] 16, 95% confidence interval [95% CI] 1.7-148.3). Two patients of group A with refractory epilepsy, and 8 patients of group B improved epilepsy control (P=.05; OR 42, 95% CI 2.1-825.7). Nine patients of group A and 18 patients of group B returned to the same socio-professional situation as before surgery (P=.015; OR 16, 95% CI 1.7-148.4).

The comparison of IES mapping surgery to conventional surgery revealed that the former enables to: increase in 25.2% the extent of tumor resection, decrease in 48.1% the risk of permanent sequelae, improve epilepsy control and preserve quality of life [1)].

1)

Suárez-Fernández D, Vázquez-Barquero A, Gómez E, Marco de Lucas E, Lopez LÁ, Mato D, Martín-Láez R, Ocon R, Martino J. [Efficacy and safety of intraoperative electrical stimulation mapping for resection of WHO grade ii and iii gliomas within eloquent areas]. Med Clin (Barc). 2012 Oct 6;139(8):331-40. doi: 10.1016/j.medcli.2011.12.024. Epub 2012 Jul 4. Spanish. PubMed PMID: 22766058.