البحث السادس

عنوان البحث باللغة الإنجليزية:

## The impact of high grade glioma extent of resection on the early postoperative period

## Abstract

**Background:** Microsurgical resection of high grade gliomas is considered the cornerstone management for most patients. However, the evidence available in the scientific literature on the effectiveness of the excision extent is scarce. A rule of thumb in neurosurgical oncology is that radical tumor resection improves survival. This rule, however, must be applied with caution as functional loss after resection is not uncommon. We conducted this study to investigate the impact excision extent of high-grade Glioma on the early post-operative clinical outcome of the patients. Extent of resection will be judged by postoperative MRI brain with gadolinium enhancement within 48 hours of surgery.

**Aim of study:** To evaluate the impact of extent of resection of high-grade Gliomas on the early post-operative clinical outcome of the patients. Extent of resection will be judged by postoperative MRI brain with contrast within 48 hours of surgery.

Patients and Methods: This study was conducted on 25 patients with high-grade gliomas. This is a prospective study that had been held at the neurosurgery department at Fayoum University hospital & Cairo university hospital between February 2021 and November 2021. All patients with supra-tentorial cortical and subcortical high-grade gliomas were included in our study **Results:** The association between residual percentage and the ICU length of stay was studied using Spearman's correlation which showed a strong positive correlation between them, correlation coefficient = 0.85 and P-value less than 0.001, A higher percentage of the residual is associated with Longer ICU admission. There was a statistically significant difference between those who improved and those who did not. Patients who stayed the same with no improvement had a larger percentage of residual.

**Conclusion:** We proved that in this study the impact of a higher degree of resection was related to improving better outcome in symptoms immediately postoperative with a lower incidence of complications and fewer ICU days and decreasing the need for massive dehydration measures. **Key words:** High grade Glioma, GBM, Radical resection, Survival.