

## Survival rate and quality of life following surgery of patients diagnosed with high-grade glioma

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**Introduction:** Gliomas are characterized by extreme ability to local invasion and frequent recurrence with progression into less differentiated and more malignant forms. Surgical resection and stereotactic radiotherapy are by far the most effective methods of treatment. There is a significant difference in survival and quality of life in patients in relation to the applied therapy, histological grade and location of the tumor. The study was performed to estimate the overall survival rate and comfort of life of patients diagnosed with primal high-grade glioma who underwent a surgical procedure, followed by stereotactic radiotherapy or combined treatment (radiotherapy plus chemotherapy).

**Methods:** The research group consists of 240 patients who were hospitalized in the Neurosurgical Clinic

at the Medical University of Silesia in Katowice in the period of 2008–2013. Both survival and quality of life have been estimated in relation to the applied therapy. The Karnofsky scale was applied to determine patients' comfort of life depending on the presence of neurological symptoms and consequently their daily functioning.

**Results and conclusions:** The study revealed that the results of treatment depend on the applied therapy, tumor location, histological grading, patient's age and their condition at the moment of diagnosis. In several cases, recurrence and progression towards more malignant forms has been observed.

**Key words:** Malignant CNS' tumors, Gliomas, Karnofsky Scale, QoL