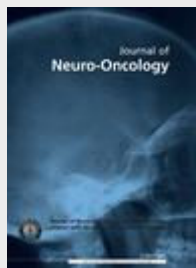



Journal Article



Survival and quality of life after hypofractionated stereotactic radiotherapy for recurrent malignant glioma

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Abstract

Purpose To prospectively evaluate efficacy, side effects and quality of life in patients with recurrent malignant glioma after hypofractionated stereotactic radiotherapy.
Methods and materials From 1/2003 to 8/2005, 15 patients with recurrent malignant glioma were prospectively scheduled for hfSRT with 5 × 7 Gy (90%-isodose). Median gross tumor volume and planning target volume were 5.75 (range, 0.77–21.94) and 22.4 (range, 4.22–86.79) cc, respectively. Irradiation was performed with the dedicated stereotactic radiosurgery system Novalis™ (BrainLAB, Heimstetten, Germany).
Results Rates of remission, no change and progressive disease were 27%, 33%, and 40%, respectively, after a median follow-up of 9 months. Progression-free survival rates at 6 and 12 months were 75% and 53% respectively. Quality of life, measured by the European Organization for Research and Treatment of Cancer Quality of Life Questionnaire scores could be kept stable in two thirds of the patients for a median time of 9 months, respectively. **Conclusion:** Hypofractionated stereotactic radiotherapy with 5 × 7 Gy of recurrent high grade glioma is an effective treatment that helps to maintain quality of life for an acceptable period, comparable to the results obtained with current chemotherapy schedules. Combined approaches of radiotherapy, chemotherapy and other targeted therapies deserve further investigation.

Keywords Stereotactic radiotherapy - Recurrent malignant glioma - Hypofractionated therapy - Novalis™ system



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