

PubMed

Display Settings:  Abstract[Am J Clin Oncol](#). 2000 Apr;23(2):155-9.

## Treatment of recurrent glioblastoma multiforme using fractionated stereotactic radiosurgery and concurrent paclitaxel.

Lederman G, Wronski M, Arbit E, Odaimi M, Wertheim S, Lombardi E, Wrzolek M.

Department of Radiation Oncology, Staten Island University Hospital, New York 10305, USA.

### Abstract

Despite the progress in neurosurgery and radiotherapy, almost all patients treated with malignant gliomas develop recurrent tumors and die of their disease. Eighty-eight patients (median age 56 years) with recurrent glioblastoma (median tumor volume 32.7 cm<sup>3</sup>) were treated with noninvasive fractionated stereotactic radiosurgery and concurrent paclitaxel used as a sensitizer. The median interval between diagnosis of primary glioblastoma and salvage radiosurgery was 7.8 months. Four weekly treatments (median dose: 6.0 Gy) were delivered after the 3-hour paclitaxel infusion (median dose: 120 mg/m<sup>2</sup>). Survival was calculated by the Kaplan-Meier method from radiosurgery treatment. Overall median survival was 7.0 months, and the 1-year and 2-year actuarial survival rates were 17% and 3.4%, respectively. When grouped by performance status, there was no difference in survival between the patients with low and high Karnofsky score. Patients with tumor volume less than 30 cm<sup>3</sup> survived significantly longer than those with tumor greater than 30 cm<sup>3</sup> (9.4 vs. 5.7 months,  $p = 0.0001$ ). Their 1-year survival rate was 40% and 8%, respectively. Eleven patients (11%) had reoperation because of expanding mass. Stable disease was seen in 40% of patients ( $n = 34$ ), and increase in radiographically detected mass was observed in 41 patients (48.8%). Although the treatment of recurrent GBM is mostly palliative, the fractionated radiosurgery offers a chance for prolonged survival, especially in patients with a smaller tumor volume.

PMID: **10776976** [PubMed - indexed for MEDLINE][+ Publication Types, MeSH Terms, Substances](#)[+ LinkOut - more resources](#)