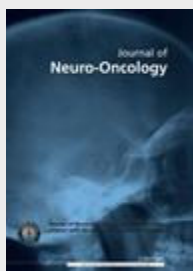


## Journal Article




## Toxicity from chemoradiotherapy in older patients with glioblastoma multiforme

Journal	Journal of Neuro-Oncology
Publisher	Springer Netherlands
ISSN	0167-594X (Print) 1573-7373 (Online)
Category	Clinical-patient studies
DOI	10.1007/s11060-008-9593-6
Subject Collection	Medicine
SpringerLink Date	Wednesday, April 09, 2008

**Online First**

 PDF (203.2 KB)  HTML

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**Received:** 16 November 2007 **Accepted:** 28 March 2008 **Published online:** 9 April 2008

**Abstract** *Introduction* Elderly patients have glioblastomas (GBM) that are aggressive and poorly responsive to treatment. They are also prone to the side effects of treatment of GBM. *Methods* To shed light on the treatment of elderly patients with GBM, we reviewed the treatment toxicities and survival of patients 65 years of age or older who were treated with chemoradiotherapy, which is the new standard of care for GBM in younger patients. *Results* Thirty-nine patients at a single cancer center in Canada met the eligibility criteria for this retrospective study. Nineteen patients were treated initially with TMZ and radiotherapy and 20 others were treated with radiotherapy alone (only two had TMZ subsequently). Eight patients in the chemoradiotherapy group (42%) experienced Grade III or IV toxicity versus none in the radiotherapy group. The median overall survival in the chemoradiotherapy group was 8.5 months (range, 2.0–24.7 months) versus 5.2 months (range, 1.5–14.2 months) in the radiotherapy group, an apparent benefit which may have been due to an imbalance in age at diagnosis, extent of resection and performance status. In this series of GBM cases, methylation of the MGMT gene promoter was not associated with longer survival, either overall, or within the chemoradiotherapy treated subset. *Conclusions* Elderly patients with GBM treated with chemoradiotherapy can be expected to experience significant toxicity. Large randomized trials will be necessary to determine whether chemoradiotherapy prolongs the survival of elderly patients and whether MGMT promoter status predicts benefit from temozolomide in this subset of patients.

**Keywords** Chemoradiotherapy - Elderly patients - Glioblastoma - Toxicity

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References secured to subscribers.

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