Survival outcomes in elderly patients with glioblastoma.

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Abstract

AIMS: Many elderly glioblastoma patients are excluded from randomised trials due to age, comorbidity or poor functional status. The purpose of this study was to describe the survival outcomes in all elderly patients with glioblastoma managed at a tertiary cancer centre.

MATERIALS AND METHODS: A retrospective chart review identified 235 elderly patients (age 65 years or over) with a histological diagnosis of glioblastoma between 1 December 2006 and 31 December 2013. The primary outcome of this study was overall survival by treatment type. Univariate and multivariate Cox proportional hazard models were used to explore significant prognostic variables associated with overall survival.

RESULTS: The median survival for all patients was 6.5 months (95% confidence interval 5.3-7.7), with 1 year overall survival of 23.7% (95% confidence interval 18.8-30.0). The median survival for patients treated with radiation and chemotherapy was 11.1 months (95% confidence interval 8.1-13.7). Patients treated with radiation alone had a median survival of 6.8 months (95% confidence interval 5.6-7.9). For patients managed with comfort measures only, the median survival was 1.9 months (95% confidence interval 1.6-2.6). Univariate analysis revealed age, performance status, surgery type (biopsy, subtotal resection, gross total resection) and type of treatment received (comfort measures only, radiotherapy alone, radiotherapy and chemotherapy) to be statistically associated with overall survival. In the multivariate analysis, only two predictive factors (treatment received and surgery type) were significant.

CONCLUSIONS: Elderly patients with glioblastoma selected for treatment (surgery followed by radiation alone or radiation and chemotherapy) survive longer than patients managed with comfort measures. Prospective randomised trials will help guide management for patients eligible for therapy. Elderly patients with glioblastoma who are deemed not eligible for active therapy have very short survival.

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KEYWORDS: Elderly; glioblastoma; survival

PMID: 25549930 [PubMed - in process]