Concomitant (without Adjuvant) Temozolomide and Radiation to Treat Glioblastoma: a Retrospective Study

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Abstract

Between November 2004 and August 2006 we treated 35 patients with concomitant temozolomide (TMZ) and radiotherapy. Twelve patients had very large or multicentric glioblastoma multiforme with a poor performance status and received TMZ plus radiation doses of 45–50.4 Gy. The median survival of these patients was only 3.8 months. Twenty-three patients would have been eligible for randomisation in the European Organisation for Research and Treatment of Cancer/National Cancer Institute of Canada (EORTC/NCIC) trial comparing combined and adjuvant TMZ plus radiation against radiotherapy alone. This group of patients received 60 Gy in 30 fractions plus concomitant TMZ (75 mg/m²) but no adjuvant chemotherapy. At a median follow-up of 26 months, five of 23 patients are alive. The median survival time was 17 months (1.43 years; 95% confidence interval 0.96–1.55). Eighteen per cent were alive at 2 years. Toxicity from TMZ was infrequent. This series adds to indirect evidence that the concomitant rather than the adjuvant is the more efficacious part of the EORTC/NCIC schedule for this type of patient. Further trials should include a concomitant chemoradiotherapy regimen as well as concomitant plus adjuvant chemotherapy.

Key words: Brain tumours; glioblastoma multiforme; radiotherapy;
temozolomide

Article Outline

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