Aggressive treatment is appropriate for glioblastoma multiforme patients 70 years old or older: a retrospective review of 206 cases.


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Abstract

Elderly patients have largely been excluded from randomized trials for glioblastoma multiforme (GBM). We reviewed the results of treatment approaches, which included surgery, chemotherapy, and radiation in this group of patients. Patients were treated during the period 1979-2007 and were 70 years of age and older with histologically confirmed GBM. Overall survival (OS) was the primary endpoint of this retrospective study. Two hundred six patients 70 years of age and older were identified. Median age was 75 years (range 70-90). Median OS time was 4.5 months. Univariate analysis showed that OS was significantly impacted by KPS score (1.8 months for KPS ≤50 to 17.2 months for KPS ≥90, P < .001), age at diagnosis (5.1 months for age 70-79 versus 3.1 months for age ≥80, P < .001), and extent of disease (worse for bilateral disease [P = .003], multifocal disease [P = .005], and multicentric disease [P = .02]). On multivariate analysis, higher KPS score (P = .006), surgical resection (any surgery beyond biopsy) (P < .001), radiation therapy (P < .001), and chemotherapy (P < .001) were all found to be independently associated with improved OS. In this study of newly diagnosed glioblastoma patients over the age of 70 years, aggressive treatment with radiation, chemotherapy, and surgery is associated with OS.