Treatment Outcome of Elderly Patients With Glioblastoma who Received Combination Therapy.

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Abstract
OBJECTIVES: Large population-based registries in Western countries show that the treatment strategy for glioblastoma multiforme (GBM) in elderly patients is likely less intensive. The purpose of this study was to clarify the treatment outcome of elderly patients with GBM and to explore appropriate treatment strategies.

METHODS: We analyzed records from 86 patients (median age, 59 y; range, 9 to 77 y) diagnosed and histologically confirmed to have GBM, between January 1991 and June 2006 at our institutions; 14 elderly patients (range, 71 to 77 y) and 72 younger patients (range, 9 to 70 y). Fifty-two patients underwent total or subtotal resection and 34 patients underwent partial resection or biopsy. The median radiation dose was 54 Gy and 79 patients (92%) received anticancer agents.

RESULTS: Among the 51 patients in recursive partitioning analysis (RPA) classes 5 and 6, the median survival time of the 12 elderly and 39 younger patients were 10.5 months [95% confidence interval, 5.8-12.8] and 11.7 months (95% confidence interval, 9.3-13.0), respectively (P = 0.32). Multivariate analysis showed only RPA class as an independent prognostic factor for overall survival rate (P = 0.009), whereas age (P = 0.85), total radiation dose (P = 0.052), and treatment with anticancer agents (P = 0.32) were not.

CONCLUSIONS: After adjustment for RPA class, the treatment outcome of patients aged >70 years was equal to that of younger patients. Definitive treatment should not be withheld based on age alone.