Antiangiogenic therapy using bevacizumab in recurrent high-grade glioma: impact on local control and patient survival.


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Abstract

OBJECT: Antiangiogenic agents have recently shown impressive radiological responses in high-grade glioma. However, it is not clear if the responses are related to vascular changes or due to antitumoral effects. The authors report the mature results of a clinical study of bevacizumab-based treatment of recurrent high-grade gliomas.

METHODS: Sixty-one patients with recurrent high-grade gliomas received treatment with bevacizumab at 10 mg/kg every 2 weeks for 4 doses in an 8-week cycle along with either irinotecan or carboplatin. The choice of concomitant chemotherapeutic agent was based on the number of recurrences and prior chemotherapy.

RESULTS: At a median follow-up of 7.5 months (range 1-19 months), 50 (82%) of 61 patients relapsed and 42 patients (70%) died of the disease. The median number of administered bevacizumab cycles was 2 (range 1-7 cycles). The median progression-free survival (PFS) and overall survival (OS) were 5 (95% confidence interval [CI] 2.3-7.7) and 9 (95% CI 7.6-10.4) months, respectively, as calculated from the initiation of the bevacizumab-based therapy. Radiologically demonstrated responses following therapy were noted in 73.6% of cases. Neither the choice of chemotherapeutic agent nor the performance of a resection prior to therapy had an impact on patient survival. Although the predominant pattern of relapse was local, 15 patients (30%) had diffuse disease.

CONCLUSIONS: Antiangiogenic therapy using bevacizumab appears to improve survival in patients with recurrent high-grade glioma. A possible change in the invasiveness of the tumor following therapy is worrisome and must be closely monitored.

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MeSH Terms, Substances

LinkOut - more resources