

Cytoreductive surgery for recurrent Glioblastoma in elderly patients: is it an overtreatment?

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Background

The role of surgery for recurrent glioblastoma (rGBM) is not well defined; in particular, there are almost no data on the impact of open resection for rGBM in the elderly population.

We therefore compared established preoperative and postoperative outcome parameters between elderly patients (≥ 65 years) treated at our Institution with cytoreductive surgery for primary and recurrent GBM (p-surgery, r-surgery, respectively).

Methods

Inclusion criteria of our database search were: patients ≥ 65 years with primary GBM pretreated with open surgery followed by Stupp protocol and open surgery at recurrence.

We identified 23 patients treated at our Institution between January 2006 and December 2011. For primary and recurrent surgery, extent of resection (median volumes), preoperative and postoperative KPS and PFS were determined.

Results

The median age of patients was 67.9 years at diagnosis and 68.4 years at 1st recurrence.

Median pre-operative KPS was 90% at diagnosis and 80% at 1st recurrence; median post-operative KPS was 80% (first operation) vs. 70% (1st re-resection).

By the first operation the pre-operative tumor volume of 14.2 ccm was reduced to post-operative tumor volume of 0.01 ccm, at 1st recurrence a preoperative tumor volume of 8.24 ccm was reduced to 0.47 ccm (all median values). PFS at first diagnosis was 8 months (range 4-30 months) vs. a median PFS of 5 months (range 4-12 months) after the 1st recurrence. The whole population presented a median OAS of 18 months (range 3-45 months).

Conclusions

In this selected population, open surgery for recurrent GBM compared to the primary treatment presented a similar impact on KPS, in spite of a substantial cytoreduction. PFS after rGBM is comparable with the published data on PFS in younger populations.

Our study shows that elderly GBM patients can benefit from an open resection at recurrence and they should not be per se excluded from aggressive treatment modalities.

