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EFFICACY OF DIFFERENT REGIMENS OF ADJUVANT RADIOCHEMOTHERAPY FOR TREATMENT OF GLIOBLASTOMA

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Aims and background: **We retrospectively analyzed the impact of different adjuvant chemotherapy regimens in a group of patients treated for glioblastoma compared to patients receiving only postoperative radiotherapy.**
Material and methods: **Eighty-six consecutive patients underwent radiotherapy between January 2000 and December 2003: 52 patients received radiotherapy alone, 17 patients radiochemotherapy with low-dose temozolomide (20 mg/m^2) + cyclooxygenase-2-inhibitors (200 mg), 6 patients radiochemotherapy with high-dose temozolomide (50 mg/m^2). Eleven patients, with unfavorable prognostic factors, were treated with imatinib and 55/2.5 Gy.**
Results: **The groups treated with high- and low-dose temozolomide showed the longest overall survival (median, 21 months and 17 months, respectively). Median overall survival was 9 months for radiation alone and 4 months for the imatinib-treated group. The same positive trend of temozolomide on prolonged overall survival was confirmed when only patients submitted to maximally radical resection or patients with KPS >70 were considered. Differences in progression-free survival were not statistically significant.**
Conclusions: **Patients treated with adjuvant temozolomide either inside or outside of study protocols had survival times similar to other reports or randomized studies. The absence of a significant influence of temozolomide on progression-free survival could depend on the unavoidable drawbacks and biases of retrospective investigations or on the definition of relapse used. The unsatisfactory results of radiotherapy plus imatinib may have been due to a high prevalence of unfavorable prognostic factors in the respective patients. The ongoing controlled trial will further define the efficacy of adjuvant/concomitant imatinib.**

Key words: chemotherapy, glioblastoma, radiotherapy.

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