


Journal Article



High-grade astrocytoma treated concomitantly with estramustine and radiotherapy

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Summary Experimental and early clinical investigations have demonstrated encouraging results for estramustine in the treatment of malignant glioma. The present study is an open randomized clinical trial comparing estramustine phosphate (Estracyt®) in addition to radiotherapy with radiotherapy alone as first line treatment of astrocytoma grade III and IV. The 140 patients included were in a good clinical condition with a median age of 55 years (range 22–87). Estramustine was given orally, 280 mg twice daily, as soon as the diagnosis was established, during and after the radiotherapy for a period of in total 3 months. Radiotherapy was delivered on weekdays 2 Gy daily up to 56 Gy. Eighteen patients were excluded due to misclassification, leaving 122 patients eligible for evaluation. Overall the treatment was well tolerated. Mild or moderate nausea was the most common side effect of estramustine. The minimum follow-up time was 5.2 years for the surviving patients. For astrocytoma grade III the median survival time was 10.6

(1.3–92.7) months for the radiotherapy only group and 17.3 (0.4–96.9+) months for the estramustine + radiotherapy group. In grade IV the corresponding median survival time was 12.3 (2.1–89.2) and 10.3 (0.3–91.7+) months, respectively. Median time to progress for radiotherapy only and radiotherapy and estramustin group in grade III tumours was 6.5 and 10.1 months, respectively. In grade IV tumours the corresponding figures were 5.1 and 3.3 months, respectively. Although there was a tendency for improved survival in grade III, no statistical significant differences were found between the treatment groups. No differences between the two treatment groups were evident with respect to quality of life according to the EORTC QLQ-protocol. In conclusion, this first randomized study did not demonstrate any significant improvement of using estramustine in addition to conventional radiotherapy, however, a trend for a positive response for the estramustine group was found in patients with grade III glioma.

Keywords astrocytoma - chemotherapy - estramustine - glioma - radiotherapy



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