

## Adjuvant radiotherapy and fotemustine in treatment of anaplastic astrocytoma and glioblastoma multiforme patients.

**Sub-category:**

CNS Tumors

**Category:**

Central Nervous System Tumors

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**Abstract:**

Anaplastic astrocytoma (AA) and glioblastoma multiforme (GBM) are malignant astrocytomas originating from glial cells. Surgery offers improvement in quality of life and survival. Radiotherapy (RT) remains the most effective treatment for malignant astrocytoma in terms of survival. Adjuvant chemotherapy potentiate the effects of surgery and RT. Fotemustine (FM) is a third generation nitrosourea compound. In this study, RT and FM were administered sequentially, efficacy and tolerability of the regimen was assessed. Thirty-four consecutive patients who were operated and diagnosed as AA or GBM histopathologically were enrolled into the study. After surgery, adjuvant RT (total 6000cGy dose cranial + boost) and sequentially FM 100mg/m<sup>2</sup> every 3 weeks for 6 cycles were administered. 18 male and 16 female patients were enrolled into the study. Median age of the patients was 45 (range 23-74) years. Of the patients 13 were diagnosed as AA, 21 GBM. Total excision of tumor was done in 30 patients, subtotal excision in 2 patients, lobectomy in one patient and one patient was inoperable. Median 3 cycles (range 1-6) and total 120 cycles of chemotherapy was administered. Toxicity was moderate, grade 3-4 nausea and vomiting were detected in 20/120 cycles (16%). Median progression free survival (PFS) and overall survival (OAS) were calculated as 9 months (95%CI 6-12 months) and 17 months (95%CI 11-27 months) respectively. OAS rates at 1 and 2 years were 54% and 25%, respectively. Median OAS was 19 months (95%CI 5-28 months) for AA patients and 17 months (95%CI 5-33 months) for GBM patients, the difference in survival was not statistically significant between histopathological groups ( $p > 0.05$ ). In terms of survival, there was no statistically significant difference between patients receiving 3 or less and more than 3 cycles of chemotherapy. According to the results of the study, sequential administration of RT and FM postoperatively is effective and tolerable in these patients.

**► Associated Presentation(s):**

1. Adjuvant radiotherapy and fotemustine in treatment of anaplastic astrocytoma and glioblastoma multiforme patients.

Meeting: 2003 ASCO Annual Meeting

Presenter: Mustafa Altinbas

Session: Central Nervous System (General Poster Session)

**► Other Abstracts in this Sub-Category:**

1. A randomized trial of direct decompressive surgical resection in the treatment of spinal