Does Insurance Status Affect Outcomes in Glioblastoma Multiforme Patients?

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Introduction

Glioblastoma Multiforme (GBM) is the most aggressive primary malignant brain tumor. Less than 3% of patients greater than the age of 65 are alive two years after diagnosis. Patients regardless of insurance status diagnosed with GBM are referred to LSUHSC – Shreveport, a tertiary center for neurosurgery, for treatment. This study aims to determine if there is any difference in time to treatment and tumor recurrence among patients with different insurance statuses.

Methods

We retrospectively analyzed the medical records of 111 patients with tissue diagnosis of glioblastoma multiforme from January 2010 to January 2013. Patients were sorted by three categories: uninsured, Medicare, and commercial insurance. Tumor recurrence is defined by either brain biopsy or clinical / radiographic follow-up. Time to treatment is the time from tissue diagnosis to chemo/radiation treatment.

Results

Out of 111 patients, 70 patients were male. 25 patients did not have insurance on admission, 30 patients had commercial insurance, and 56 patients had Medicare. Medicare patients were older than the other groups, the average age being 63.6. Uninsured patients' average age was 46.2, while commercial insurance average age was 52.8. Time to recurrence for uninsured patients was 11.1 months, commercial insurance was 14.8 months, and Medicare was 14.5 months. Time to treatment for uninsured patients was 23.5 days, commercial insurance was 22.7 days, and Medicare was 27.2 days.

Conclusions

There was no significant difference in time to treatment for uninsured patients as compared to patients with commercial or Medicare insurance in our institution. Uninsured patients did have quicker tumor recurrence than the other two groups.

Learning Objectives

To determine if there is difference in outcome in patients without insurance.