

Racial Disparities in Hospital Stays among Patients Undergoing Craniotomy for Tumor Resection at a Single Academic Hospital

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Introduction

Racial disparities in patients undergoing brain tumor surgery in the

United States are reported in national database studies. However, racial disparities remain poorly characterized within urban medical centers.

Methods

Medical records of adult patients who underwent tumor resection from

March 2013 to January 2017 at a single academic medical center were retrospectively reviewed. We categorized patients as Asian, Hispanic, Black, or White. Asian, Hispanic, and Black patients were then matched to White patients of similar demographics to isolate the effects of race on outcomes. The primary outcome was length of stay (LOS). Secondary outcomes included hospital mortality, disposition, and access to adjuvant therapies.

Results

A total of 462 patients identified as Asian (15.2%), Hispanic (8.7%), Black (3.9%), or White (72.3%) and were analyzed. In the matched cohort, Asian patients had an increased risk of prolonged LOS (OR 3.05, 95% CI [1.30-7.12]), Hispanic patients stayed in the hospital longer than White patients ($P = .04$), and non-White patients had a higher risk of prolonged LOS (OR 2.62, 95% CI [1.44-4.76]). Asian and Non-White patients were less likely to receive chemotherapy (OR 0.42, 95% CI [0.20-0.87] and OR 0.35, 95% CI [0.20-0.60], respectively) when compared to White patients.

Conclusions

Our study sheds light on racial disparities among brain tumor patients

at the institutional level. Hispanic patients stayed in the hospital longer and Asian patients were less likely to receive chemotherapy compared to White patients.

Learning Objectives

By the conclusion of this session, participants should be able to: 1) understand the racial makeup of the population which this hospital serves, 2) recognize the differences in treatments and outcomes between races at this institution, and 3) understand the need for continued studies of this nature.

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