Re-visiting Racial Disparity in Outcomes Following Craniotomy for Resection of Adult Intracranial Tumors

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Introduction

With amendment of the Affordable Care Act, 2010, rigorous attempts have been made to provide healthcare access to uninsured US population. Despite these efforts, racial disparity in access to primary healthcare and subsequently outcomes following major surgical procedure exists.

Methods

Study Design: In a population-based, observational, cohort study using the HCUP inpatient databases, we assess for any racial disparity in short-term outcomes following surgical resection for 4 intracranial tumor types: gliomas, meningiomas, acoustic neuroma and pituitary lesions.

Outcome endpoints: Inpatient mortality, discharge disposition, LOS, cost, and post-operative complications (cardiac; neurological; venous-thromboembolism, hydrocephalus, hyponatremia, wound complications, wound infections).

Exposures: Primary exposure of interest is racial differences (Blacks, Hispanics, Asians, others with

Results

Results: Significant racial disparities for various outcomes for individual tumor types was observed in a multivariable regression analysis. For each outcome, forest plots depicting estimates for all tumor types are plotted for easy interpretation of data.

Conclusions

Conclusion: Our study quantifies the estimates for racial disparity on outcomes in patients undergoing surgeries for 4 intracranial tumors. The data could provide supporting evidence for policy-making in addressing the gap in healthcare access across United States population with diverse ethnicity.

Learning Objectives

By going through the presentation, the participants:

1.)Would learn about baseline estimates as quantified depicting racial disparity in outcomes, in patients undergoing surgical resection for any of the 4 analyzed brain tumors

2.)Significance of a multi-faceted approach to target under-privileged areas by providing health care access, warranting an inter-play of multitude of factors including dedicated time, efforts, and resources.

References

The findings incorporate data from multiple clinical practice settings across diverse geographical locations in the US. Knowing the impact of racial disparity for a particular outcome could help in risk-stratification and vigilant monitoring for a particular outcome (eg DVT or PE) in specific races to improve outcomes.