Advisor(s): Dr. Natalya Chernichenko M.D.

Racial Disparities in Head and Neck Surgery

Introduction: Racial disparities have been noted to affect the quality of healthcare over the past several decades. This has been especially noted within the African American communities such as delays in drug/surgical treatment. There has been some published literature on racial disparities within head and neck surgery however, there exists a paucity of studies that utilize national surgical databases.

Methods: The American College of Surgeons National Surgical Quality Improvement Program (ACS-NSQIP) database was retrospectively queried between 2005-2017. White and African American (AA) patients who underwent major surgical intervention for head and neck squamous cell carcinoma (HNSCC) were identified. Univariate analyses were utilized to compare rates of preoperative, surgical, and postoperative variables between White and AA patients.

Results: Between 2005-2017, a total of 7,317 patients (White: 6,661 [91.0%)] and AA: 656 [9.0%]) underwent major resection of HNSCC. White patients were more likely to be within the age groups (65-79 and ≥80 years old), undergo elective surgery, be admitted from home, have higher BMI, have ASA class 1 and 2, and have independent functional status (all, p<0.05).

Thirty-day postoperative outcome data highlighted higher rates of wound (32.9% vs 17.9%; p<0.001), pulmonary (11.3% vs 7.4%; p<0.001), sepsis-related complications (5.9% vs 3.9%; p=0.010), and reoperation (16.8% vs. 10.8%; p<0.001) within the AA cohort. Within complications, AA patients had higher rates of deep SSI, wound dehiscence, and bleeding requiring transfusion, postoperative pneumonia, and sepsis (all, p<0.05).

Conclusion:

There are clear disparities in demographics and complication rates between AA and White patients within the ACS-NSQIP database. More research is needed to elucidate the reasons for these differences.