Racial and Ethnic Disparities in Ambulatory Surgical Center Utilization for Hip Arthroscopy

Gabriel P Joseph¹, Troy B Amen, Abhinaba Chatterjee², Benedict U Nwachukwu³, Gabriella Ode³, Riley Joseph Williams⁴
¹Stanford University, ²Weill Cornell Medicine, ³Hospital For Special Surgery, ⁴Hospital For Special Surgery - Weill Cornell Med

INTRODUCTION: Racial and ethnic disparities within medicine and surgery have been extensively reported over the last decade. To date, however, it remains unknown how these disparities have evolved in sports and arthroscopic surgery, alongside the emergence of privatized ambulatory surgical centers. The purpose of this study was to assess disparities amongst white, Black, and Hispanic patients in the utilization of ambulatory surgery centers (ASCs) for hip arthroscopy, a procedure rapidly becoming a more frequent intervention for hip pathology.

METHODS: We conducted a retrospective review of the Healthcare Cost and Utilization Project (HCUP) New York State 2016 State Ambulatory Surgery Database (SASD). Differences in ASC utilization of hip arthroscopy were assessed alongside crude utilization rates for the year studied. A chi-squared test was used to analyze expected vs. observed ASC utilization rates. Multivariable logistic regression analysis were also used to adjust for age, sex, primary payer, zip code income guartile, and medical comorbidities.

RESULTS: An estimated 5587 patients in New York State in 2016 received hip arthroscopies, at a crude utilization rate of 41.0 per 100,000 for white patients and 8.3 per 100,000 for both black and Hispanic patients. Amongst those that did receive hip arthroscopies, a significant disparity was found in ASC utilization with a higher rate of white patients undergoing procedures at an ASC (14.2%) as compared to Black patients (7.4%, p = .003), and Hispanic patients (4.8%, p < .001). Controlling for covariates, multivariable logistic regression analysis revealed that White patients were 2.89 times more likely to receive hip arthroscopy at an ASC than their Black and Hispanic counterparts (95% CI [1.95, 4.30], p < 0.001).

DISCUSSION AND CONCLUSION:

This study finds evidence of significant racial disparities in the relative utilization of ASCs for hip arthroscopy between white, Black, and Hispanic patients. These restrictive patterns of access to high volume same day surgery centers may explain broader overall disparities in orthopaedic surgery and sports medicine. These findings highlight the need for early intervention by orthopaedic surgeons and policy makers alike to both understand and address these emerging inequalities in ASC access before they become entrenched within our standard orthopaedic sports practices.