

Outcomes and Patient-Reported Satisfaction of Microsurgical and Prosthetic Breast Reconstruction in an Underserved, Minority Population

Presenter: Tessa J Campbell, MD

Co-Authors: Kayla Leibl, M.D., Plastic and Reconstructive Surgery, Albert Einstein College of Medicine/Montefiore Medical Center, Bronx, NY; Nicolas Greige, MD, Albert Einstein College of Medicine, Bronx, NY; Katie E Weichman, MD, Plastic and Reconstructive Surgery, Albert Einstein College of Medicine/Montefiore Medical Center, Bronx, NY

Affiliation: Division of Plastic Surgery, Montefiore Medical Center, Bronx, NY

BACKGROUND

With the passage of the 1998 federal Women’s Health and Cancer Rights Act, which mandated insurance coverage for breast reconstruction, there has been a significant increase in post-mastectomy breast reconstruction rates.¹ While prior studies have evaluated access to and type of breast reconstruction across racial and socioeconomic backgrounds, there remains a paucity of studies assessing outcomes, both surgical and patient-reported, in racially, ethnically, and socioeconomically underserved populations. The aim of this study was to evaluate the surgical outcomes and patient-reported satisfaction of microsurgical and prosthetic breast reconstruction in a diverse, urban population.

METHODS

A retrospective review of all patients undergoing post-mastectomy breast reconstruction from August 2015 to December 2019 at a single institution was conducted. This institution provides care to an urban, largely underserved, minority population. Patient demographics, complications, and BREAST-Q survey responses were analyzed.

RESULTS

A total of 330 patients were analyzed. The majority of patients identified as Hispanic/Latinx (47.2%), followed by Black (33.4%), Caucasian (11.5%), and other (7.9%). One hundred seventy-five patients (53.1%) underwent alloplastic reconstruction, while 155 patients (46.9%) underwent microsurgical breast reconstruction. Patients identifying as Black were significantly more likely to undergo microsurgical breast reconstruction (57.8%), while patients identifying as Caucasian were more likely to undergo implant-based reconstruction (66.6%) ($p=0.03$). The rate of postoperative complications, including hematoma, seroma, mastectomy flap necrosis, implant explantation, donor site breakdown, abdominal wall complications, cellulitis, and fat necrosis, did not significantly differ by race. When assessing patient-reported outcomes using the BREAST-Q survey, patients who identified as Black had significantly lower overall satisfaction with their reconstruction compared to those identifying as Hispanic/Latinx (mean difference = -9.4, 95% CI: -2.4 – -16.3) when adjusting for reconstructive modality. The other BREAST-Q domains of interest, including satisfaction with breasts, chest physical wellbeing, psychological wellbeing, or sexual wellbeing did not differ significantly based on race.

CONCLUSION

In this diverse, largely underserved population, minority race was not associated with increased postoperative complications in either microsurgical or prosthetic-based post-mastectomy breast reconstruction. Patients identifying as Black, however, had a significantly lower overall satisfaction with their reconstruction when compared to Hispanic/Latinx patients. Further investigation is required to identify causative factors and address this disparity.

1. Baxter NB, Howard JC, Chung KC. A systematic review of health disparities research in plastic surgery. *Plast Reconstr Surg.* 2021 Mar; 147(3): 529e-537e.