

Racial Differences in Accessibility to Bariatric Surgery and Post-Bariatric Body Contouring Surgery

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Background

- Bariatric surgery stands out as a highly effective intervention for severe obesity, delivering substantial and sustained weight loss and often resolving associated comorbidities.
- Body contouring surgeries are essential for addressing excess skin and enhancing post-weight loss quality of life.
- This study aims to assess racial disparities in access to bariatric and post-bariatric body contouring surgeries and evaluate associated postoperative outcomes across racial groups in the United States.

Methods

Study Design

- Retrospective study

Dataset

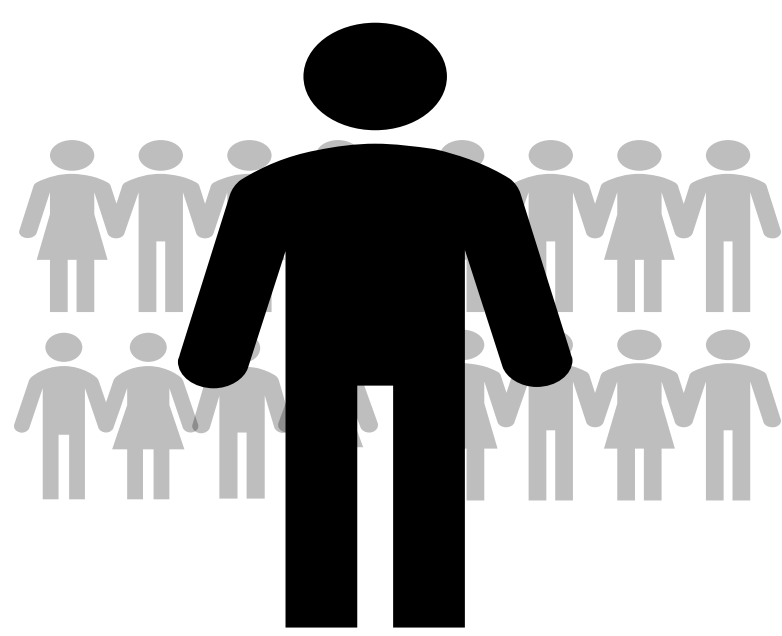
- TriNetX United States Collaborative Network
- 2013 - 2023

Inclusion Criteria

- 18 years of age or older
- Patients eligible for bariatric surgery were identified as:
 - Body mass index (BMI) greater than 40 (ICD 10: Z68.4)
 - BMI greater than 35 with one comorbidity, such as sleep apnea (ICD 10: G47.3), hypertension (I10), type 2 diabetes mellitus (E11), and heart disease (ICD 10: I51.9)

Data Analysis

- Propensity score matching
- Measures of association, such as risk ratios and odds ratios



243,390 patients eligible for bariatric surgery
174,390 bariatric surgeries performed
1,639 body contouring surgeries performed after bariatric surgery

Average age: 51 (2023)
Gender: Female 66.71% (2023)

Table 1. Odds of undergoing bariatric surgery across racial groups from 2013-2023

	Odds ratio (95% CI)	<i>p</i> -value
Caucasian	Referent group	
African American	0.813 (0.795, 0.831)	< 0.0001
Asian	0.487 (0.441, 0.538)	< 0.0001
Native Hawaiian	0.321 (0.28, 0.37)	< 0.0001
Native American	0.743 (0.631, 0.875)	0.0003

Table 2. Odds of undergoing body contouring surgery across racial groups from 2013-2023

	Odds ratio (95% CI)	<i>p</i> -value
Caucasian	Referent Group	
African American	0.871 (0.785, 0.967)	0.0093
Asian	0.907 (0.834, 0.987)	0.0239
Native Hawaiian	0.884 (0.786, 0.995)	0.0412
Native American	0.996 (0.454, 2.185)	0.9936

Results

Table 3. Risk of adverse outcomes of patients one year following body contouring surgery from 2013-2023

	African American		Asian	
	Risk Ratio (95% CI)	<i>p</i> -value	Risk Ratio (95% CI)	<i>p</i> -value
Death	1.342 (1.013, 1.777)	0.0396	0.767 (0.382, 1.538)	0.4537
Nutritional deficiencies	1.524 (1.172, 1.982)	0.0015	0.496 (0.251, 0.979)	0.0436
Dumping syndrome	1.352 (1.163, 1.572)	< 0.0001	0.696 (0.545, 0.888)	0.0039
Weight regain	2.274 (1.562, 3.31)	< 0.0001	0.951 (0.396, 2.28)	0.9096
Wound disruption	1.436 (1.21, 1.705)	< 0.0001	0.221 (0.115, 0.425)	< 0.0001
Reoperation	0.921 (0.819, 1.035)	0.1663	0.535 (0.405, 0.705)	< 0.0001

No statistically significant differences in adverse outcomes for Native Hawaiians and Native Americans.

Caucasian patients = Referent group

Discussion

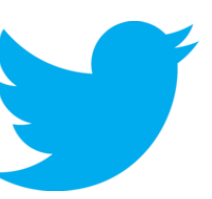
- Over the years, increased percentage of patients of diverse races undergoing surgery.
- Despite the increasing diversity of our nation’s population, disparities in access to bariatric surgery and post-bariatric body contouring surgery persist.
- Significant racial disparities were observed in postoperative outcomes for African American and Asian patients.

Conclusion

Future efforts should focus on improving access, addressing social determinants of health, and ensuring consistent postoperative follow-up for all racial and ethnic groups.

References

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