

Racial Disparities in Postoperative Complications Following Post-Bariatric Body Contouring Surgery

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INTRODUCTION

Body-contouring surgery (BCS) is commonly performed after massive weight lost following bariatric surgery, yet racial disparities in postoperative outcomes remain underexplored.

OBJECTIVES

To evaluate racial differences in postoperative complications following BCS at 1 and 3 months

METHODS

Data Source: TriNetX database, comprising records from 115 healthcare organizations in the United States.

Cohorts: Patients undergoing BCS identified via CPT codes were satisfied by race (African American, Asian, "Other" (which consisted of Native Hawaiian and American Indians)) with **White patients as the control group**

Outcomes Measured: Outcomes included postgastric surgery syndrome, pain, emergency department visits, wound dehiscence, and wound infections.

RESULTS

Black patients: ↑ pain, ED visits, dehiscence, and infection (1 & 3 months)

Asian patients: ↓ complications across adverse outcomes

Other race: ↑ pain and infection, ↓ ED visits

“Racial disparities in postoperative complications following body-contouring surgery persist at both 1 and 3 months”

Table 1: Analysis of race on TriNetX Database one months following body-contouring surgery

	African American	White	Risk Ratio	95% Confidence Interval	P value
Postoperative pain	523 (5.35%)	342 (3.04%)	1.76	1.532 - 2.023	<0.0001
ED visits	461 (4.78%)	461 (4.23%)	1.13	1.044 - 1.230	0.0051
Wound dehiscence	395 (3.94%)	233 (2.13%)	1.85	1.562 - 2.196	0.0001
Wound infection	519 (5.23%)	495 (4.47%)	1.17	1.054 - 1.315	0.0065
Post-gastric syndrome	276 (2.81%)	303 (2.68%)	1.05	0.892 - 1.240	0.5612
	Asian	White	Risk Ratio	95% Confidence Interval	P value
ED visits	237 (2.81%)	511 (4.93%)	0.57	0.374 - 0.882	0.0129
Wound dehiscence	121 (1.48%)	428 (4.23%)	0.35	0.184 - 0.681	0.0024
Wound infection	87 (1.02%)	443 (4.25%)	0.24	0.167 - 0.361	<0.0001
	"Other" race	White	Risk Ratio	95% Confidence Interval	P value
Postoperative pain	436 (4.82%)	311 (3.07%)	1.57	1.15 - 2.14	0.0043
ED visits	378 (4.15%)	502 (4.77%)	0.87	0.79 - 0.96	0.0092
Wound dehiscence	218 (2.46%)	261 (2.59%)	0.95	0.91 - 0.99	0.0016
Wound infection	464 (5.01%)	448 (4.21%)	1.19	1.07 - 1.33	0.0012
Post-gastric syndrome	247 (2.64%)	268 (2.69%)	1.18	0.82 - 1.47	0.8014

Table 2: Analysis of race on TriNetX Database three months following body-contouring surgery

	African American	White	Risk Ratio	95% Confidence Interval	P value
Postoperative pain	611 (5.86%)	434 (2.83%)	1.53	1.351 - 1.743	<0.0001
ED visits	576 (5.92%)	555 (5.06%)	1.17	1.072 - 1.278	0.0012
Wound dehiscence	485 (4.81%)	359 (3.25%)	1.48	1.282 - 1.712	<0.0001
Wound infection	593 (5.95%)	529 (4.76%)	1.25	1.122 - 1.399	<0.0001
Post-gastric syndrome	332 (3.20%)	348 (3.05%)	1.05	0.911 - 1.212	0.4855
	Asian	White	Risk Ratio	95% Confidence Interval	P value
Postoperative pain	205 (2.38%)	542 (5.01%)	0.47	0.391 - 0.582	<0.0001
ED visits	287 (3.38%)	621 (5.93%)	0.69	0.514 - 0.907	0.0018
Wound dehiscence	129 (1.69%)	492 (4.83%)	0.58	0.233 - 0.843	<0.0001
Wound infection	163 (1.89%)	765 (7.37%)	0.26	0.191 - 0.367	<0.0001
	"Other" race	White	Risk Ratio	95% Confidence Interval	P value
Postoperative pain	583 (6.39%)	442 (4.07%)	1.59	1.22 - 2.02	0.0006
ED visits	416 (4.53%)	539 (5.09%)	0.89	0.79 - 0.96	0.0034
Wound dehiscence	218 (2.46%)	261 (2.59%)	0.97	0.91 - 0.99	0.0006
Wound infection	464 (5.01%)	448 (4.21%)	1.20	1.07 - 1.33	0.0002
Post-gastric syndrome	247 (2.64%)	268 (2.69%)	1.34	0.82 - 1.47	0.5014

DISCUSSION

Interpretation: Racial disparities in BCS outcomes are evident and sustained. These differences may reflect underlying healthcare inequities and variations in access to care.

Clinical Implications: Calls for identifying high-risk patients early screening and improve postoperative follow-up.

Summary: Significant racial disparities exist following BCS. Targeted strategies are needed to improve outcomes in high-risk populations