

WEIGHT LOSS AND OBESITY CO-MORBIDITY OUTCOMES VARY BY RACE AFTER OPEN ROUX-EN-Y GASTRIC BYPASS (ORYGB): ANALYSIS OF 5,389 BOLD DATABASE PATIENTS



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INTRODUCTION

Today, ORYGB is chosen primarily for massively obese patients and for those with complex intra-abdominal scarring/anatomy. In managing these fragile patients, every clinical insight helps. While pre-operative characteristics of ORYGB patients differ among racial groups, whether or not post-ORYGB outcomes are affected by race is unknown.

OBJECTIVE

The objective of this study was to identify outcomes variation in weight loss and obesity co-morbidities following ORYGB by racial groups

METHODS

Data from the Surgical Review Corporation's BOLD database on 5,389 patients who underwent open Roux-en-Y gastric bypass (ORYGB) was analyzed retrospectively in four groups over 24 months postoperatively: African-American (n=503), Caucasian (n=3769), Hispanic (n=460), and Other (Pacific Islands, Native American, or >1 race recorded; n=652). Five Asian patients were too few to analyze. Outcomes analysis used General Linear Models that included baseline and post-operative data, and were modified for binomial distribution of dichotomous variables.

Results:6,24months	African-American	Caucasian	Hispanic	Other	p-value
Weight	116+-30,92+-23	103+-26,88+-22	102+-28,85+-30	95+-23,86+-24	<0.05,<0.05
BMI	41+-9,33+-7	37+-8,31+-7	37+-9,31+-8	34+-7,31+-7	<0.05,NS
Weight loss	36+-13,54+-19	38+-13,53+-20	37+-12,51+-21	37+-12,48+-18	<0.05,<0.05
Liver Disease	18.65%,19.72%	18.65%,10.8%	8.52%,0%	2.39%,3.03%	<0.0001, NS
Hyperlipidemia	27.33%,21.13%	34.73%,27.08%	9.63%,23.08%	24.18%,24.24%	<0.05,NS
Depression	21.54%,21.13%	36.58%,34.85%	16.3%,19.23%	7.46%,6.06%	<0.01,<0.05
Back pain	47.59%,50.7%	42.99%,41.48%	26.67%,38.46%	39.1%,30.3%	<0.001,NS
Hypertension	50.48%,38.03%	45.46%,39.2%	34.81%,26.92%	56.72%,60.61%	<0.001,<0.05
Diabetes	24.12%,12.68%	24.29%,16.48%	20.37%,11.54%	24.48%,21.21%	<0.05,NS
GERD	31.51%,28.17%	30.54%,28.98%	11.85%,23.08%	25.97%,28.79%	<0.05,NS
Abdominal Hernia	5.47%,4.23%	8.92%,11.74%	3.33%,3.85%	1.79%,6.06%	NS,NS
Cholelithiasis	20.26%,25.35%	21.58%,21.02%	9.63%,7.69%	6.57%,3.035%	<0.001,NS

RESULTS

Angina, CHF, peripheral vascular disease, pulmonary hypertension, obstructive sleep apnea, obesity hypoventilation syndrome, asthma, abdominal hernia, stress urinary incontinence, gout, PCOS, pseudotumor cerebri, leg edema, mental health diagnoses and alcohol/tobacco/substance abuse did not vary by race.

CONCLUSIONS

Many clinically important outcomes following ORYGB vary by race. It is important for surgeons to recognize significant variations in postoperative results for morbidly obese patients based on their race, which advance knowledge can impact how patients respond to ORYGB. Understanding differential responses by race classification in weight loss and in the resolution of weight-related medical problems can help physicians optimize post-ORYGB medical care.