

CLINICAL CHARACTERISTICS OF SUPER-OBESE FEMALE SURGICAL PATIENTS VARY BY RACE: ANALYSIS OF 1212 BOLD DATABASE PATIENTS

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Introduction—The obesity epidemic has transformed every surgical practice into a bariatric office. Obesity affects more females than males, and every clinical insight helps surgical care of these medically fragile women. Racial differences among super-obese women have not been investigated. The objective of this study was to identify clinical variations by race among super-obese female surgical patients.

Methods and Procedures: Pre-operative data from 1,212 women in the Surgical Review Corporation's BOLD database who chose bilio-pancreatic diversion/duodenal switch (BPD/DS) was analyzed in five groups: African-American (n=106), Caucasian (n=1,000), Hispanic (n=34), and Other (Pacific Islander, Native American, or >1 race listed in BOLD; n=72). Age, weight and Body Mass Index (BMI) were compared by analysis of variance. Dichotomous variable distribution was assessed by the Chi-squared equation.

Results: Black/Caucasian/Other/Hispanic weight (kg: 152.9+/-28., 138.5 +/-27.0, 138.8 +/-26.4, 136.2 +/-27.8), BMI (56.3 +/-10.1, 51.0 +/-9.2, 51.1 +/-9.0, 52.8 +/-11.4), age (40.3 +/-10.3, 45.3 +/-11.3, 42 +/-12.4, 41.7 +/-10.8) varied significantly ($p < 0.0001$), as did unemployment (22.6%, 29.9%, 44.1%, 15.3%, $p < 0.05$). Obesity co-morbidities are detailed in Table 1. African-Americans had highest abdominal hernia, obstructive sleep apnea, and stress urinary incontinence, and lowest cholelithiasis, GERD, dyslipidemia, and pseudotumor cerebri. Caucasian mental health diagnoses, depression, GERD, menstrual irregularities, polycystic ovarian disease and psychological impairment were highest. Hispanics had the highest rates of abdominal panniculitis, dyslipidemia, pseudotumor cerebri, and pulmonary hypertension. Other group had the highest stress urinary incontinence, and the lowest abdominal hernia and panniculitis, mental health diagnosis, depression, menstrual irregularities, obstructive sleep apnea, polycystic ovarian disease, psychological impairment, and pulmonary hypertension. African American and Caucasians alcohol use was highest, and lowest in Other. Health insurance, angina, asthma, back pain, congestive heart failure, DVT/PE, fibromyalgia, functional status, diabetes, gout, HTN, ischemic heart disease, liver disease, lower extremity edema, musculoskeletal, obesity hypoventilation, peripheral vascular disease, substance abuse and tobacco use did not vary.

Conclusions: Super-obese women vary clinically by race. Pre-operative BPD/DS, African-American females were heaviest, Caucasians oldest, and Hispanics most unemployed. African-Americans were highest in 3 co-morbidities and lowest in 4, versus Caucasians highest 7/lowest 0, Hispanics highest 5/lowest 0, and Other highest 1/lowest 10. This advance information can raise clinical suspicion for medical

problems in super-obese surgical patients, and may, thereby, facilitate improved peri-operative surgical management.