

Variation by Race of Age, BMI, Insurance and Obesity Co-morbidities in Women Prior to Undergoing Sleeve Gastrectomy

Sarah Skelly, DO; Michael Davis, DO; Nicole Zucconi, DO, Gus Slotman, MD

BACKGROUND: Morbid obesity is a major health issue. Every clinical insight helps in managing these medically fragile individuals. Objective: to identify variations by race in the clinical characteristics of morbidly obese women.

METHODS: Data from 6,683 female patients in the Surgical Review Corporation's BOLD database pre-operative for sleeve gastrectomy was analyzed in five groups: African-American (n=810), Caucasian (n=4,929), Hispanic (n=582), Asian (n=20), and Other (Pacific Islander, Native American, or >1 race listed in BOLD; n=344). Statistical analysis was by ANOVA and Chi-squared.

RESULTS: Caucasians were oldest (46+/-11 years versus African-American 42+/-11, Hispanic 40+/-11, Asian 40+/-7, and Other 43+/-11, $p<0.05$). African-American and Other BMI (45+/-9 and 10) was highest (Hispanic 46+/-9, Caucasian 46+/-9, Asian 40+/-7, $p<0.05$). Highest health insurance was Medicaid – Hispanic (17%); Medicare – Other (4.4%); Private – African-American (81%); Self-Pay – Asians (32%), $p<0.0001$. No Asians had Medicaid or Medicare. African-Americans had highest CHF, hypertension, tobacco use, and unemployment ($p<0.05$) and lowest in none. Caucasians were highest in cholelithiasis, GERD, alcohol use, mental health diagnosis, depression, psychological impairment, obstructive sleep apnea, pulmonary hypertension, dyslipidemia, fibromyalgia, irregular menses, and stress urinary incontinence ($p<0.05$, $n=12$) and lowest in none. Hispanics had highest liver disease and lowest hypertension and leg edema ($p<0.001$). Asian abdominal panniculitis was highest and were lowest in alcohol, cholelithiasis, GERD, dyslipidemia, sleep apnea, fibromyalgia, mental health diagnosis, psychological impairment, somatic pain, pulmonary hypertension, and stress incontinence ($p<0.05$). Others were highest in leg edema and somatic pain, and were lowest in panniculitis, depression, liver disease, irregular menses, tobacco use, and unemployment. Substance abuse was <1% in all groups.

CONCLUSIONS: Age, BMI, and weight-related medical problems vary by race among morbidly obese women. African American and Other present at higher BMIs. African-American CHF, hypertension, tobacco, and unemployment dominated. Caucasian women had the highest rates of 12 obesity co-morbidities. Asians were lowest in BMI and 12 parameters and highest only in one. Hispanic liver disease was highest and hypertension lowest. Other somatic pain was highest, but were lowest in six categories. This advance knowledge may raise awareness of variations by race among obese women and improve management of morbidly obese females.