

Females with Obesity Are Not All the Same: Variation of Pre-operative Clinical Characteristics by Health Insurance in Sleeve Gastrectomy Women

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Introduction: Clinical variation among women with obesity by health insurance has not been explored. Objective: to identify pre-operative clinical variation by health insurance among sleeve gastrectomy females.

Methods: Pre-operative data on 6,685 sleeve gastrectomy females from the Surgical Review Corporation's BOLD database was studied in four insurance cohorts: Medicaid (n=330), Medicare (n=126), Private (n=4,424), and Self-Pay (n=1,366). Variables: Demographics and 33 medical/behavioral conditions. Statistics: ANOVA, Chi-squared equation.

Results: Medicare/Medicaid/Private/Self-Pay age (56+-13/40+-5/45+-11/44+-12) and BMI (52+-12/50+-10/46+-8/44+-12) varied ($p<0.0001$). Medicare: Highest hypertension (69%), angina, CHF, DVT/PE, ischemic heart disease, pulmonary hypertension, sleep apnea (52%), obesity hypoventilation, hernia, panniculitis, cholelithiasis, stress incontinence, diabetes (55%), gout, dyslipidemia, menstrual irregularity, leg edema, back/musculoskeletal pain, fibromyalgia, disabled, psychological impairment, and unemployed (67%) ($p<0.0001$), GERD ($p<0.001$), mental health diagnosis (MHD, $p<0.01$); Lowest alcohol ($p<0.0001$), smoking ($p<0.001$), substance abuse and PCOS ($p<0.05$). Medicaid: Highest asthma, liver disease, smoking ($p<0.0001$) substance abuse ($p<0.05$); lowest none. Private: highest PCOS ($p<0.05$), second alcohol; lowest psychologic impairment ($p<0.0001$), MHD ($p<0.01$). Self-Pay: Highest alcohol; lowest cardiopulmonary (n=9), abdominal/hepatobiliary (n=6), somatic (n=3), diabetes, gout, dyslipidemia, menstrual irregularity, fibromyalgia, $p<0.001$).

Conclusion: Clinically, pre-operative female sleeve gastrectomy patients vary by insurance. Medicare females were oldest, heaviest, affected most by 24 obesity co-morbidities and disabilities, but smoked, drank, and used drugs least. Medicaid were youngest with highest asthma, liver disease, and tobacco use. Private and self-pay women had fewer co-morbidities in spite of doubled alcohol use versus Medicare/Medicaid. This advance knowledge of increased risks for Medicare and Medicaid sleeve gastrectomy females may facilitate operation choice and improve outcomes.