Clinical Characteristics and Outcomes Following Adjustable Gastric Band (AGB) Vary by Age: Analysis of 67,214 Patients

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Introduction: 6-10,000 AGB/year have excellent results with dedicated centers/surgeons. Patient/AGB matching is key. Age as selection criterion is unknown. Objective: To identify variation by age in presentation and outcomes of AGB patients.

Methods: Baseline/post-operative data on 67,214 AGB patients from Surgical Review Corporation's BOLD database was analyzed by age: <30 (n=7,458), 30-40 (n=16,693), 40-50 (n=18,484), 50-60 (n=16,169), 60-70 (n=7,867) >70 (n=844) years. Data: demographics, BMI, and % incidence of 33 obesity co-morbidities. Statistics: ANOVA continuous variables; Dichotomous variables: general linear models.

Results: Pre-operative weight (<30 129+-24kg to >70 121+-20kg), BMI (<30 46+-7 to >70 44+-6), Female/Male (<30 84/16% to >70 64/36%), African-American/Asian/Hispanic (<30: 12/17/18% to >70: 0.3/0.5/0.3%), Medicaid/Private/Self-Pay insurance (30-40 32/26/26% to >70 0.3/0.4/0.7%), alcohol/tobacco/substance use, mental health diagnosis (MHD), PCOS, pseudotumor cerebri (PTC) varied inversely with age ($p<0.0001$). Caucasian (< 30 67% to >70 87%), Medicare (<30 2% to >70 55%), baseline angina, hypertension, CHF, DVT/PE, ischemic heart disease, dyslipidemia, leg edema (LEE), obesity hypoventilation (OHS), sleep apnea (OSA), peripheral vascular disease (PVD), pulmonary hypertension, hernia, panniculitis, cholelithiasis, stress incontinence (SUI), diabetes, gout, impaired function (IFS), musculoskeletal pain (MSP), fibromyalgia, and unemployment (n=21) varied directly ($p<0.0001$). 12 month hypertension, CHF, angina, PVD, LEE, dyslipidemia, OHS, OSA, cholelithiasis,

GERD, hernia, SUI, diabetes, gout, back pain, MSP, IFS, ($p<0.0001$), panniculitis ($p<0.001$), PHT, asthma ($p<0.05$) ($n=21$), varied directly: PTC, PCOS, alcohol/tobacco ($p<0.001$), MHD ($p<0.01$), varied inversely. 24 month CHF, OSA, hypertension, dyslipidemia, LEE, PVD, GERD, diabetes, gout, liver disease, hernia, cholelithiasis, SUI, MSP ($p<0.0001$), PHT and angina ($p<0.01$) ($n=16$) varied directly; alcohol/tobacco, PCOS, PTC varied inversely. 12/24 month BMI did not vary by age.

Conclusions: Serious pre-operative AGB patient co-morbidities increase directly with age. In spite of achieving equal/lower BMI, older patients resolve co-morbidities less than younger groups. These findings may facilitate identifying AGB patients who will benefit most from the procedure.