



## 2026 NEW YORK REGIONAL SOCIETY OF PLASTIC SURGEONS ANNUAL RESIDENTS' NIGHT RESEARCH COMPETITION

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NEW YORK ACADEMY OF MEDICINE

**ABSTRACT SUBMISSION TITLE:** *B1 - Examining the Potential Additive Effect of Weight Loss Medications on Bariatric Surgery in Body Contouring Outcomes: A Propensity Score-Matched Analysis*

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**Abstract Text:**

**PURPOSE:**

Weight loss medications like glucagon-like peptide-1 (GLP-1) receptor agonists (RA) has drastically increased in popularity. Usage of medications has also emerged as a strategy for patients who have undergone bariatric surgery but struggled with weight loss plateau or weight regain. In body contouring, the combination of the two modalities may accelerate rapid weight loss and micronutrient deficiencies, potentially increasing the risk for surgical complications like poor wound healing and infection. In the current work, we compare postoperative outcomes following body contouring between post-bariatric surgery patients who are also on weight loss medications and those who are not.

**METHODS:**

A retrospective cohort study of post-bariatric surgery patients who underwent body contouring at two public tertiary care centers from July 2022 to June 2025 was performed. The cohorts were stratified by the active use of weight loss medications within 30 days prior to contouring surgery. Postoperative complications included

superficial/full thickness wounds, surgical site infection (SSI), seroma, hematoma, and hypertrophic/keloid scarring. Major complications including deep vein thrombosis/pulmonary embolism (DVT/PE), reoperation, and readmission were also examined. Post-bariatric surgery patients who were also on weight loss medications were compared to those who were not. Nearest-neighbor propensity score matching was used to match the two cohorts in a 2:1 ratio on covariates that were significant in univariate comparison.

#### RESULTS:

277 patients were included in the study, with a mean age of 45.3 and body mass index (BMI) of 30.6 kg/m<sup>2</sup>. The most common contouring procedure performed was panniculectomy or abdominoplasty (67.1%, n=186), followed by breast reduction or mastopexy (17.7%, n=49), brachioplasty (10.1%, n=28), thighplasty (4.7%, n=13), and back lift (0.36%, n=1). Of the total cohort, 39 patients (14.1%) were on weight loss medications, with most (n=34) being on GLP-1 RA. Compared to those who only underwent surgery, patients who were also on pharmacologic treatment had significantly older age (50.8 vs. 44.4), higher BMI (32.6 vs. 30.2 kg/m<sup>2</sup>), and higher prevalence of hypertension (41.0 vs. 24.4%) and diabetes (43.6 vs. 13.0%) (p<0.05). Following contouring surgery, the two cohorts had similar incidences of major complications (p>0.05). While the rates of seroma, hematoma, and hypertrophic/keloid scarring were comparable, patients who were on weight loss medications had significantly higher incidences of superficial wounds (10.3 vs. 2.94%, p=0.030), full thickness wounds or dehiscence (17.9 vs. 5.88%, p=0.008), and SSI (10.3 vs. 2.52%, p=0.016). After propensity score matching on age, BMI, hypertension, and diabetes (n=117), weight loss medication usage was associated with a significantly higher rate of full thickness wounds (17.9% vs. 3.8%, p=0.026) and similar rates of all other complications (p>0.05).

#### CONCLUSIONS:

A significant subgroup of patients, 14% in our cohort, require weight loss medications even after bariatric surgery. In our propensity score-matched analysis, medication usage is found to be associated with a higher rate of dehiscence following body contouring, suggesting negative synergistic effects of pharmacologic weight loss and bariatric surgery on wound healing. Post-bariatric surgery patients who are also on weight loss medications should be appropriately counseled on the increased risk for poor wound healing following body contouring.