

Short- and Long-term Impact of Second Bariatric-Metabolic Operations

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Background

Bariatric-metabolic re-operation is one durable treatment option for patients who do not achieve adequate weight loss and co-morbidity resolution following first bariatric-metabolic procedure. There is limited evidence on the appropriate re-operation strategy, which poses challenges in clinical practice.

Objective

Retrospectively assess the efficacy of bariatric-metabolic re-operation among patients who had undergone secondary bariatric procedure.

Methods

Patients who had undergone or planning to undergo a bariatric-metabolic operation were recruited (Abu Dhabi Diabetes & Obesity Study; ADOS2B). Out of 749 patients, 22 had >1 bariatric-metabolic operation. Patients with missing data on type or date of first (B1) or second (B2) operations were excluded. Efficacy of re-operation was assessed by comparing data at 12 months pre-B2 (baseline) to that between 3-24 months post-B2. Wilcoxon Signed-Rank test was used for statistical analyses.

Results

Thirteen patients were included in our analyses. At B2, median age was 40.0 (32.0-43.0) years; 69.2% were female; 6 had sleeve gastrectomy, and 7 had gastric bypass. All patients who initially had a sleeve gastrectomy (n=5), had a gastric bypass at B2. None of the patients had a gastric bypass at B1. Compared to baseline, there were significant decreases in weight and BMI at all timepoints post-B2: largest drop in weight at 3-6 months post-B2 (**Figure 1**). Excess body weight (EBW) lost was significantly higher among patients who had a gastric band at B1 compared to those who had a sleeve gastrectomy [Mean EBW lost: 27.8 Kg (74.8%) versus 9.6 Kg (32.8%); $p<0.01$]. HbA1c levels decreased significantly among patients with prediabetes or type 2 diabetes (n=6) from a median (interquartile range; IQR) of 5.70% (5.50-5.64) to 5.30 (5.00-5.50) ($p=0.031$).

Conclusions

Largest weight loss benefits from re-operation were observed among patients who initially had gastric banding. In line with previous findings¹, these results suggest that gastric banding may not be an ideal primary bariatric-metabolic operation for individuals with severe obesity. Further identification of re-operation success measures is crucial in building optimum treatment strategies.

¹ Kindel T, Martin E, Hungness E, Nagle A. High failure rate of the laparoscopic-adjustable gastric band as a primary bariatric procedure. Surg Obes Relat Dis. 2014.

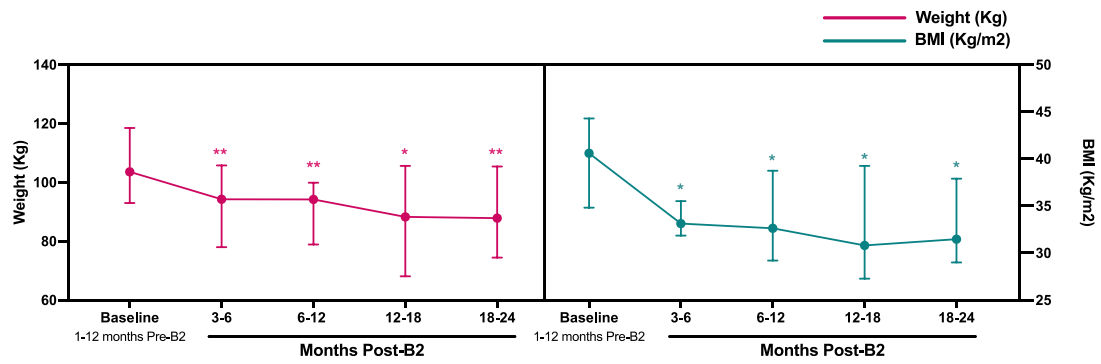


Figure 1. Changes in weight and BMI among study participants.

B1: first bariatric-metabolic operation; B2: second bariatric-metabolic operation

Wilcoxon Signed-Rank Test: * $P < 0.05$; ** $P < 0.01$