PREOPERATIVE WEIGHT LOSS IS LINKED TO IMPROVED MORTALITY AND LEAKS FOLLOWING ELECTIVE BARIATRIC SURGERY: AN ANALYSIS OF 548,597 PATIENTS FROM 2015 to 2018

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INTRODUCTION

The effects of pre-operative weight loss (PWL) on bariatric surgery outcomes are still unclear. Ongoing studies are needed for routine adoption of this practice given the multiple issues patients face with following difficult pre-operative weight loss protocols.

OBJECTIVE

Characterizing the prevalence of PWL and evaluate its impact on outcomes following elective bariatric surgery.

METHODS

Retrospective study

MBSAQIP® METABOLIC AND BARIATRIC SURGERY ACCREDITATION AND QUALITY IMPROVEMENT PROGRAM
2015-2018

Inclusion criteria

Age over 18 years old
Roux Y Gastric Bypass
Sleeve Gastrectomy

Exclusion criteria

Revisional surgery
Emergency surgery

RESULTS

Patients characteristics



- 548,597 patients from MBSAQIP database
- Mean age 44.5 ± 12 years
- Mean BMI 45.2 ±7.4 kg/m2
- Female sex 79.6%

Differences between PWL and no PWL cohorts

- 83.8% of patients underwent PWL
- PWL patients were more likely to be older, had increased comorbidities, and more of the male sex
- No difference in operative length

Unadjusted postoperative complications for PWL and non- PWL cohorts

	PWL (n = 459,500) n (%)	Non-PWL (n = 89,097) n (%)	*P* value
Leak	1654 (.36)	387 (.43)	.001
Bleed	4273 (.9)	776 (.9)	.09
Reoperation	5529 (1.2)	1059 (1.2)	.7
Reintervention	5678 (1.2)	1107 (1.2)	.9
Readmission	17,016 (3.7)	3392 (3.8)	.1
Cardiac	312 (.1)	48 (.1)	.1
Pneumonia	848 (.2)	196 (2)	.03
AKI	604 (.1)	100 (.1)	.1
Deep SSI	1215 (.3)	202 (.2)	.04
Wound disruption	233 (.05)	31 (.03)	.047
Sepsis	500 (.1)	73 (.08)	.02
Unplanned intubation	568 (.12)	148 (.17)	.001
Clostridioides difficile	467 (.13)	77 (.11)	.2
Serious complications	15,587 (3.4)	2956 (3.3)	.3
Mortality	386 (.08)	98 (.11)	.02

RESULTS CONTINUED

Characterizing PWL and PWL BMI differences in Sleeve Gastrectomy versus RY Gastric Bypass

RYGB	SG
5.96 ± 5.9 kg/m2	5.3 ± 5.5 kg/m2

P < .0001

CONCLUSION

- **PWL prior to bariatric surgery is common occurring >80% of cases**
- **Associated with improved 30-day mortality and reduced anastomotic leak rate**
- **PWL is not associated with reduced bleeds or overall serious other complications.**
- **The practice of PWL should be adopted routinely**