OUTCOMES OF SAME DAY DISCHARGE IN BARIATRIC SURGERY

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Introduction

- Restrictions during the COVID-19 pandemic influenced a shift to same-day discharge in bariatric surgery. This study investigates outcomes for same-day discharge versus overnight admission after bariatric surgery.

Aims

- Primary outcomes: compare readmission rates, ER visits, outpatient IV fluid treatment within 30 days of surgery, and 30-day mortality rates for same-day discharge (SDD) vs POD1 discharge.
- Secondary outcomes: immediate postoperative complications within 30 days, including leaks, surgical site infections, pneumonia, urinary tract infections (UTI), the need for blood transfusion, or venous thromboembolism (VTE).

Methods

- Retrospective cohort study performed July 2019 to March 9th, 2023.
- Patients underwent primary laparoscopic or robotic-assisted sleeve gastrectomy or Roux-En-Y gastric bypass.
  - Inpatient group - patients discharged POD1
  - Outpatient group - patients discharged on day of surgery.
- Patients eligible for discharge unless BMI>60, home O2 use, CKD5, or high risk VTE.
- Same day discharge criteria
  - Pain controlled with oral medication, ambulating 3 times, performing incentive spirometry, tolerating 30 ml of water every 15 minutes, maintaining normal vitals, able to void, sitting in a chair, no altered mental status or somnolence.
- Statistical analysis: Wilcoxon test and Chi-Square

Results

- 1125 patients met inclusion criteria.
  - Sleeve gastrectomy: 852 outpatient, 227 inpatient
  - Roux-En-Y Gastric Bypass: 70 outpatient, 40 inpatient
- Inpatient sleeve group significantly higher in age, BMI, and presence of comorbidities (COPD, diabetes, dyslipidemia, hypertension, sleep apnea).
- Inpatient bypass group significantly higher age and incidence of previous VTE.
- No significant difference in reoperations, IV fluid treatments, or 30-day mortality for inpatient & outpatient groups for both surgery types.
- No statistically significant difference in adverse events regarding secondary outcomes, though incidence was overall low.
- The inpatient bypass group (RYGB) showed significantly greater ER visits (21.7% vs 10%; p=0.0108) than inpatient sleeve gastrectomy (SG) group.

	SG[a]			RYGB[b]		
	SDD[c]	POD1[d]	*P*	SDD	POD1	*P*
Readmission, no. (%)	18 (2.1%)	11 (4.6%)		0	6 (13.1%)	
ICU[e] Admission, no. (%)	7 (0.8%)	3 (1.3%)		0	0	
ED[f], no. (%) Visit	80 (9.2%)	27 (11.3%)	0.3199	6 (8.6%)	12 (26%)	0.0108
IV treatment as an outpatient, no. (%)	88 (10.1%)	17 (7.1%)	0.1654	9 (12.9%)	8 (17.4%)	0.4994
Reoperation, no. (%)	2 (0.2%)	1 (0.4%)		0	0	

Results

- Inpatient sleeve group showed significantly higher readmission percentage than outpatient group (4.6% vs 2.1%; p=0.02882.)

	No Readmission (row %) (column %)	Readmission of at least 1 day (row %) (column %)	Row Total	*P*
SDD[a]	852 (97.9%), (79%)	18 (2.1%), (62.1%)	870	.02882
POD1[b]	227 (95.4%), (21%)	11, (4.6%), (37.9%)	238	
Total	1079	29	1108	

a = SDD, b = POD1

Discussion

- Inpatient group subjects more likely to have higher BMI and obesity related comorbidities.
- Primary outcomes were not inferior for SDD for both surgery types.
- Limitations included single center, only two surgeons, and low sample size for gastric bypass group
- For several secondary outcomes, too low sample size and too low of incidence of adverse events to draw statistical conclusions

Conclusion

Same-day discharge after bariatric surgery is a safe and reasonable option for patients with few comorbidities.