Safety and Predictors of Early Discharge after Primary and Revisional Laparoscopic Roux-en-Y Gastric Bypass: Analysis of the MBSAQIP Database

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INTRODUCTION

- Improvements in bariatric surgery outcomes have prompted policy initiatives that explore shifting bariatric surgery towards outpatient procedures.
- Early discharge after primary laparoscopic Roux-en-Y gastric bypass (LRYGB) has been reported to be safe, but its safety for revisional LRYGB remains uncertain.
- Our study aimed to investigate the safety and patient factors associated with early discharge in patients undergoing revisional LRYGB as compared to primary LRYGB.

METHODS

MBSAQIP 2020-2022

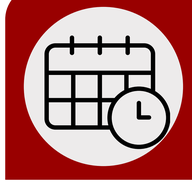


Primary LRYGB (n=137,443)

Conversion (SG → RYGB)

RYGB Revision

Revisional LRYGB (n=32,738)



Same day discharge (SDD, POD 0)

Next-day discharge (NDD, POD 1)

Inpatient (POD ≥ 2)

METHODS (continued)

χ^2- test or ANOVA: compared patient demographics, comorbidities and outcomes

Multivariable logistic regression: assessed the association of early discharge with outcomes

Multivariable logistic regression: determined factors associated with early discharge

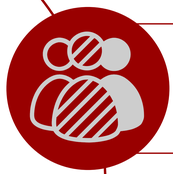
RESULTS: Outcomes

- Primary LRYGB: SDD = 2.5% (3,425 patients); NDD = 59.8% (82,169 patients)
- Revisional LRYGB: SDD = 2.4% (783 patients); NDD = 54.6% (17,888 patients)
- On unadjusted analysis, mortality in revisional LRYGB was higher in SDD compared to NDD and inpatient (0.4% vs 0.1% and 0.2%, *p* = 0.007)

Adjusted odds of postoperative outcomes following LRYGB

	Primary LRYGB		Revisional LRYGB	
	Rate (%)	aOR (95% CI)	Rate (%)	aOR (95% CI)
Minor complications				
Inpatient	18.6%	ref	20.6%	ref
Same-day discharge	14.4%	0.79 (0.72-0.87)	13.5%	0.65 (0.52-0.80)
Next-day discharge	12.7%	0.66 (0.64-0.68)	13.1%	0.62 (0.58-0.66)
Major complications				
Inpatient	7.1%	ref	9.4%	ref
Same-day discharge	2.1%	0.31 (0.25-0.40)	4.0%	0.46 (0.32-0.66)
Next-day discharge	2.7%	0.39 (0.37-0.41)	4.0%	0.45 (0.41-0.49)
Readmissions				
Inpatient	6.1%	ref	9.0%	ref
Same-day discharge	3.0%	0.55 (0.45-0.67)	4.2%	0.52 (0.37-0.74)
Next-day discharge	3.9%	0.67 (0.64-0.71)	5.6%	0.67 (0.61-0.73)
Reoperations				
Inpatient	3.0%	ref	4.4%	ref
Same-day discharge	1.1%	0.38 (0.28-0.54)	1.7%	0.47 (0.25-0.75)
Next-day discharge	1.1%	0.37 (0.34-0.40)	1.8%	0.46 (0.40-0.53)

RESULTS: Predictors of early discharge



Black or AA were less likely to be discharged the next day compared with White patients :

Primary: 14% vs 18.5%, aOR 0.76, 95%CI 0.74-0.78

Revisional: 24.6% vs 28.2%, aOR 0.82, 95%CI 0.78-0.87



Patients with ASA Classification IV/V had lower odds of SDD compared to Class I/II

Primary: 2.6% vs 4.1%, aOR 0.62, 95%CI 0.48-0.78

Revisional: 0.8% vs 2.4%, aOR 0.24, 95%CI 0.10-0.54

CONCLUSION

Early Discharge can be safe in select patients. But it may not be appropriate for revisional LRYGB due to mortality and longer stay

Higher ASA class and Black or AA race are associated with lower odds of SDD and NDD

Standardized criteria for early discharge are needed for optimal patient safety

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