



Incidence and Predictors of Delayed Discharge Beyond Postoperative Day 1 After Bariatric Surgery at a Military Treatment Facility

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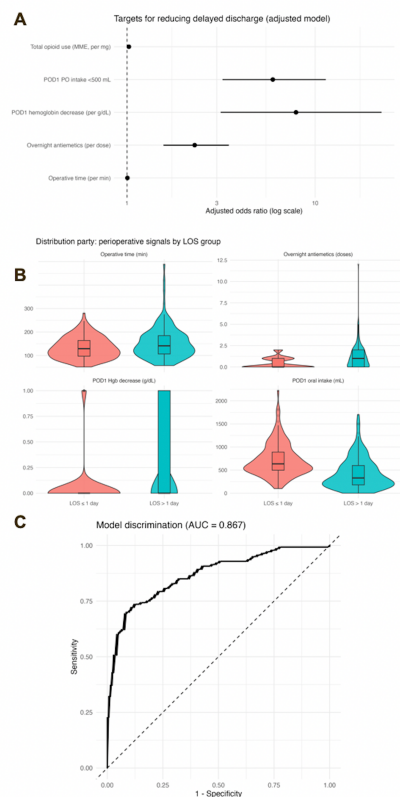
Introduction

- **Background:** ERAS protocols have made POD 1 discharge a standard after bariatric surgery, yet extended LOS remains common.
- **Knowledge gap:** Limited contemporary data define modifiable perioperative drivers of delayed discharge within military treatment facilities.
- **Rationale:** Identifying early postoperative signals associated with prolonged LOS may enable targeted interventions to optimize discharge efficiency
- **Aims:** Determine the incidence of delayed discharge and identify independent predictors

Methods

- **Study design:** Retrospective single-center cohort at a military treatment facility (01/2022–12/2024)
- **Population:** Consecutive adults undergoing primary or conversion/revisional minimally invasive SG or RYGB
- **Outcomes:** Delayed discharge, defined as hospital stay >1 postoperative day; preoperative and perioperative predictors
- **Statistical analysis:** Multivariable logistic regression for predictors of delayed discharge in development cohort (2023); bootstrap internal validation; temporal validation in 2022 and 2024 cohorts; discrimination by area under the curve; nomogram development and reported sensitivity, specificity, positive predictive value, negative predictive value for delayed discharge

Figures



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Results

Cohort: n=281 patients overall

- 140 (49.8%) with delayed discharge

In the delayed discharge cohort:

- Female sex > male sex (82% vs 65%)
- Dependents > retirees (66% vs 34%)
- Operative time longer (median 141 vs 129 minutes)
- POD 1 oral intake lower (330 mL vs 635 mL)
- ≥2 overnight antiemetic doses (21% vs 8%)
- POD 1 hemoglobin drop ≥2 g/dL (31% vs 5.7%)
- Total opioid use (MME) higher (median 33 vs 18 mg)

Multivariable predictors of delayed discharge

- POD 1 oral intake <500 mL
- Increased overnight antiemetic use
- POD 1 hemoglobin decrease ≥2 g/dL
- Longer operative time
- Model discrimination was strong (AUC=0.867)

Conclusions

- Delayed discharge beyond POD 1 occurred in approximately half of the bariatric surgery patients in this cohort.
- Early postoperative physiologic signals – oral intake, antiemetic requirements, hemoglobin drop – were the strongest predictors of delayed discharge and represent actionable targets for optimization to reduce prolonged hospital stays