Outpatient Laparoscopic Sleeve Gastrectomy at a Canadian Community Hospital: Interim Results of a Prospective Feasibility Study

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Background

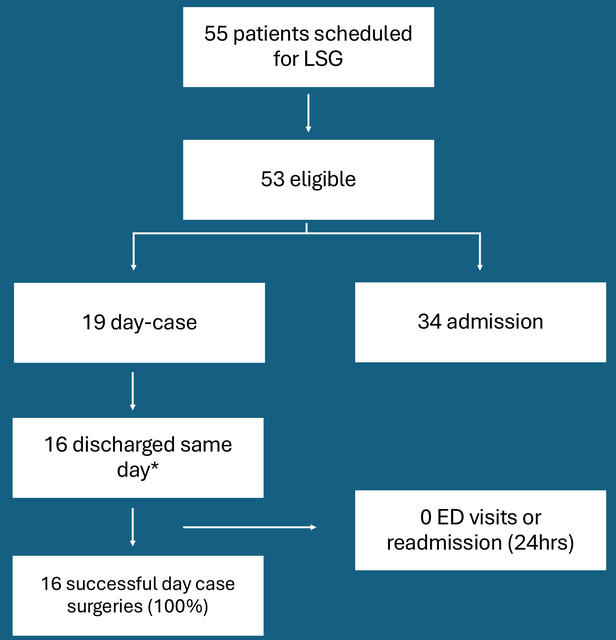
- Obesity prevalence continues to rise globally.
- Laparoscopic sleeve gastrectomy (LSG) is now the most common bariatric procedure.
- Interest in same-day discharge after LSG is increasing.
- Most evidence comes from retrospective studies in tertiary centers.
- Evidence from community hospitals remains limited.

Methods

- Prospective single-center feasibility study.
- Eligibility criteria:
  - Aged 18-65, undergoing primary LSG, without major comorbidities, living locally with adequate home support.
- Primary outcome: successful discharge without ED visit or readmission within 24 hours.
- Secondary outcome: 30-day complications, ED visits, readmission, and mortality.
- Results compared with those of eligible patients who chose admission during the same period.

Baseline Characteristics

	Day-case	Admission
Age (mean +/- SD)	42.2 +/- 5.8	47.1 +/- 10.3
Female (%)	88.9	84.3
BMI (kg/m^2)	43.0 +/- 3.9	48.5 +/- 6.4
ASA Class ≥ 3 (%)	72.2	61.2



**Discharge Criteria:*

- *Tolerating clear fluids ≥ 150mL.*
- *Hgb stable 4 hours post procedure (change of ≤ 20 g/L from pre-op).*
- *Patient weaned from supplementary oxygen.*
- *Vital stability (heart rate < 100 bpm, temperature < 38.5 °C).*

Results

- 53 patients met study inclusion criteria.
  - 19 selected day-case surgery, 34 chose admission
- **16 of 19 (84%) were discharged successfully the same day.**
  - 1 admitted for intraoperative procedure change.
  - 1 admitted for postoperative arrhythmia.
  - 1 admitted for hemoglobin drop.
- Primary outcome:
  - 0 ED visits within 24 hours.
  - 0 readmissions within 24 hours.
  - **100% protocol success rate.**
- No severe complications or mortality in either group.

Discussion & Conclusion

- Day-case surgery for LSG is feasible and safe in appropriately selected patients.
- Careful eligibility screening and strict discharge criteria are key to ensuring safety and detecting complications early.
- These results support safe expansion of outpatient LSG programs, including in community settings.

Future Directions

- Continue patient accrual and longer-term outcome analysis.
- Multicenter studies, including community and tertiary care centers.
- Randomized, matched comparative studies versus inpatient care.
- Health economic analyses evaluating savings of outpatient LSG.