Laparoscopic Sleeve Gastrectomy as a Bridge to Transplant in Patients Evaluated at a Single Center with Heart Failure and Left Ventricular Assist Devices

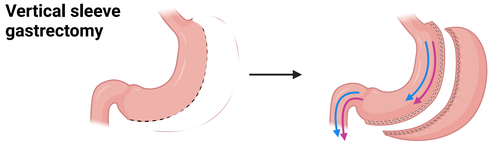
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BACKGROUND

- Advanced heart failure (AdHF) is associated with a high risk of mortality.[1]
- The left ventricular assist device (LVAD) supports cardiovascular function as a bridge to transplantation.
- Class 2 obesity (BMI >35 kg/m^2) is a relative contraindication to heart transplant.[2]
- We evaluate the safety and efficacy of bariatric surgery to achieve weight loss and improve access to transplantation for patients with obesity and AdHF.

METHODS

Adults with a BMI ≥ 35 kg/m^2 and LVAD evaluated for bariatric surgery (2023-2024) at a single academic institution (n = 5)



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RESULTS

Characteristic	n
Age (years), Median (IQR)	44 (40, 51)
Preoperative BMI (kg/m^2), Mean	54.4
Preoperative Ejection Fraction (%), Median (IQR)	20 (15, 22.5)
Preoperative NYHA (class), Median (IQR)	2 (2, 2.5)

Table 1. Baseline Characteristics (N = 5).

Outcomes

- Average length of stay was 5 days.
- 0 patients required readmission at 30 days.
- At 3 months, average BMI was 44.9 kg/m^2; average BMI decline was 9.5 kg/m^2 (Figure 1).
- One patient experienced an **EF increase of 20%** at 4-months post LSG.
- One patient died with worsening HF and bowel perforation at 6-months post LSG.
- One patient was **listed for transplant** 8 months after LSG and **received transplant** 9 months after LSG.

RESULTS CONTINUED

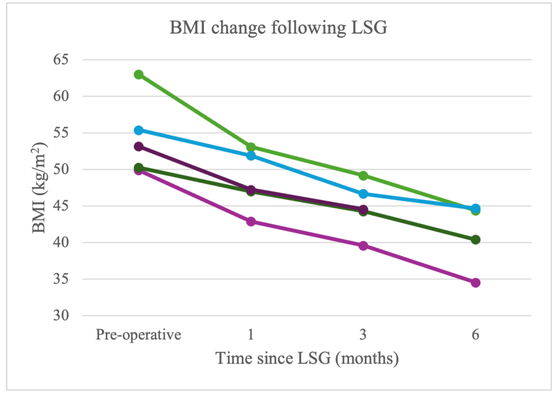


Figure 1. BMI Change Following LSG.

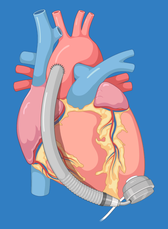
CONCLUSIONS

- Bariatric surgery is a safe and effective option for patients with obesity and advanced heart failure.

REFERENCES

1. Truby LK, Rogers JG. Advanced Heart Failure: Epidemiology, Diagnosis, and Therapeutic Approaches. *JACC Heart Fail.* 2020;8(7):523-536. doi:10.1016/j.jchf.2020.01.014
2. Jaiswal, A., Truby, L. K., Chichra, A., Jain, R., Myers, L., Patel, N., & Topkara, V. K. (2020). Impact of Obesity on Ventricular Assist Device Outcomes. Journal of Cardiac Failure, 26(4), 287-297. https://doi.org/10.1016/j.cardfail.2019.10.001

Bariatric surgery is a **safe and effective option** for patients with obesity and advanced heart failure



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