

Sleeve Gastrectomy as a Short Stay Procedure – How Safe is it?

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Bariatric Surgery, Short Stay Surgery, Day Care Surgery, Ambulatory Surgery, Weight Loss Surgery, Safe Bariatric Surgery

Biography

Dr. Nanda Rajaneesh, an eminent Surgeon, endowed with rich and diverse experience and distinguished academic record, has established herself as a Specialist in Breast surgery, Minimal invasive Gastrointestinal surgery(Laparoscopy) and Surgical Oncology. She has acquired many degrees through extensive training in surgical field and is also a member of the Royal College of Surgeons. At present, she is a Consultant, GI Laproscopic surgeon and oncosurgeon in Apollo Spectra and Sakra world Hospital, at Bangalore, India.

Introduction

Short stay procedures have gained popularity in many surgical sub-specialties. It is proven that short stay surgeries deliver the same high quality care as given to hospital patients. Advantages are early discharge, minimal loss of productivity, cost reduction, and less risk of infections. Laparoscopic sleeve gastrectomy (LSG) has consolidated as a primary bariatric technique. Because of its quick post-operative recovery, it can be safe to perform them as short stay procedures, with appropriate patient selection.

Aim

Aim of this study was to prove the safety of short-stay surgery after Laparoscopic sleeve gastrectomy.

Methodology

Patient selection was based on ASA grade. Only 1 and 2 were chosen for short stay procedure. Patients with BMI < 50 only were chosen. Data was collected prospectively about hospital stay, readmission rate and complications on 21 primary laparoscopic sleeve gastrectomy performed between January 2018 – January 2020

Data

From a total of 21 patients, 18 were discharged in the first 24 hours. 3 were discharged within 48 hours. No re-admissions were done for any of the patients. No major complications occurred between days 1 and 4. 2 patients had seroma of the port site wound.

Discussion

Ambulatory surgery or outpatient surgery is becoming increasingly common.

There is surely an increased demand for bariatric surgery, as the obesity epidemic expands and the success of minimally invasive weight loss surgery continues to be widely experienced and publicized. Patient, insurer, and

surgeon demands will lead to a greater share of these procedures being performed in an outpatient setting.⁴

This study suggests that laparoscopic sleeve gastrectomy can be done safely as a short stay procedure. However there are certain important aspects to be kept in mind such as patient selection and a good support system. There have been many reports of successful short-stay bariatric surgery which have been published, highlighting the importance of proper patient selection and preparation. It is important to have a dedicated anaesthetic regimen together with experienced surgeons in high-volume centres for good results. ¹

Careful patient selection, surgeon experience, and integrating the appropriate perioperative care components are associated with overall clinical success ³

One of the important factors to be kept in mind during patient selection is cardiorespiratory fitness level of the patient, as reduced cardiorespiratory fitness levels were associated with increased, short-term complications after bariatric surgery.² Cardiorespiratory fitness should be optimized prior to bariatric surgery to potentially reduce postoperative complications.² Basic understanding of common complications is essential for all practicing general surgeons ⁵ and thorough assessment of the patient before discharge to rule out signs of any complications cannot be emphasized more. A study done in Italy and another done in Arizona, USA demonstrates that ERAS protocol is safe, feasible, and efficient in bariatric surgery patients.^{6,7} Patient preparation and multidisciplinary/parallel team work are crucial points.⁶

How do we go about short stay laparoscopic sleeve gastrectomy surgery?

Patient assessment

Patient is assessed during a regular outpatient appointment for the first visit.

Thorough history is taken, BMI assessed, other causes of obesity are ruled out and other factors are studied to ensure that the patient is a right candidate for the surgery.

Psychiatric conditions and substance abuse are ruled out.

Patients with history of alcohol consumption and smoking are counselled and advised to quit before surgery and to abstain post surgery as well.

Nutritional counselling is given much before, and patient and family are given a detailed explanation of the procedure, outcome, do's and don'ts after the surgery and are also educated about lifestyle changes required post-surgery. Respiratory and Cardiac functions are assessed by specialists to ensure fitness. Preanaesthetic assessment is done and patient is ensured to be fit for the surgery. Patient who fall under ASA 1 & 2 are considered safe. ASA 3 can be selected after consultation with the anaesthetic team provided their disease is well controlled

Patients > 75 years and < 6 months should not be selected. Also patients with any

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obvious difficult airway features are not selected until optimized.

Preoperative preparation

Patients planned for sleeve gastrectomy are advised to follow liquid diet for 15 days prior to surgery. Liquid diet low in carbohydrate, low in fat and moderate in protein liquid diet plan explained. This helps in shrinkage in the liver size, which also helps during surgery, enabling easier liver retraction.

On the day of surgery

On the day of surgery, patient arrives at the OT reception for admission at 7.30am

Patient is nil by mouth for 6 hours

Admission process is done within 15 minutes

Patient is admitted in the pre-op ward

Surgeon team meets the patient & family, explains the surgical procedure, possible complications and consent is taken

Anesthesia team reviews the patient and patient is shifted to the operation theatre at 8.45am

Family updated about the operation status and reassured.

Once surgery is completed, patient is shifted to post-operative ward. Adequate IV analgesics and IV hydration ensured. Patient's family updated and visits the patient. Patient shifted to private room after 4 hours. Ambulated after 6 hours. Post-operative day 1- started on sips of water. Nutritionist review is taken and diet chart explained for the diet to be followed after discharge. Diet post-surgery is liquid diet for 2 weeks, gradually switched over to pureed diet and then later soft solids in small quantities in frequent intervals advised. Discharged after morning rounds the next day. Discharge medications are all given in syrup formulations.

Patient and family explained about Warnings signs - Persistent vomiting, abdominal distention, pain and fever, advised to visit the ER.

Patient is reviewed on regular follow up visits to keep track on diet, weight loss and exercise. Long term low impact metabolic exercises are advised.

As mentioned previously, 21 patients underwent Sleeve gastrectomy as a short stay procedure in the above manner without any complications.

Conclusion

This study suggests laparoscopic sleeve gastrectomy can be done safely as a short stay procedure and that hospital stay for more than 24 hours is not required, with a standardized patient selection criteria.

References

1. Raeder J. Bariatric procedures as day/short stay surgery: is it possible and reasonable?. *Curr Opin Anaesthesiol.* 2007;20(6):508-512. doi:10.1097/ACO.0b013e3282f09443
2. McCullough PA, Gallagher MJ, Dejong AT, et al. Cardiorespiratory fitness and short-term complications after bariatric surgery. *Chest.* 2006;130(2):517-525. doi:10.1378/chest.130.2.517
3. McCarty TM. Can bariatric surgery be done as an outpatient procedure?. *Adv Surg.* 2006;40:99-106. doi:10.1016/j.yasu.2006.05.006
4. Sasse KC, Ganser JH, Kozar MD, et al. Outpatient weight loss surgery: initiating a gastric bypass and gastric banding ambulatory weight loss surgery center. *JSL.* 2009;13(1):50-55.
5. Sarkhosh K, Birch DW, Sharma A, Karmali S. Complications associated with laparoscopic sleeve gastrectomy for morbid obesity: a surgeon's guide. *Can J Surg.* 2013;56(5):347-352. doi:10.1503/cjs.033511
6. Trotta M, Ferrari C, D'Alessandro G, Sarra G, Piscitelli G, Marinari GM. Enhanced recovery after bariatric surgery (ERABS) in a high-volume bariatric center. *Surg Obes Relat Dis.* 2019;15(10):1785-1792. doi:10.1016/j.soard.2019.06.038
7. Gondal AB, Hsu CH, Serrot F, et al. Enhanced Recovery in Bariatric Surgery: A Study of Short-Term Outcomes and Compliance. *Obes Surg.* 2019;29(2):492-498. doi:10.1007/s11695-018-3579-z
8. Nagliati C, Troian M, Pennisi D, Balani A. Enhanced Recovery after Bariatric Surgery: 202 Consecutive Patients in an Italian Bariatric Center. *Obes Surg.* 2019;29(10):3133-3141. doi:10.1007/s11695-019-03962-w