

DAY-CASE LAPAROSCOPIC PARTIAL GASTRECTOMIES FOR THE TREATMENT OF GISTS IN ADULTS: A TWO YEAR STUDY AT A UNIVERSITY TEACHING HOSPITAL

Introduction

Day-case surgeries allow patients to return home on the same day after undergoing their surgical procedure, allowing shorter inpatient stays, reduced hospital costs and reduced risk of hospital acquired infections amongst other benefits. Laparoscopic partial gastrectomy (LPG) is the most popular treatment option for small gastrointestinal stromal tumors (GISTS) and other benign stomach lesions. Due to the short operating time needed to perform most LPGs, there are few post-operative complications, with a recent study showing a gastric leak rate of only 3%. Little research however, has been done to investigate the safety and efficacy of performing LPGs in ambulatory centres as day cases. Results of recent studies suggest day-case LPGs are a safe and effective treatment option for small gastric lesions and GISTS in a select group of patients. There is great potential for day-case LPGs to provide effective treatment for patients whilst saving valuable hospital resources.

Objectives

The aim of this study was to assess the efficacy and safety of day-case LPG procedures as a more desirable alternative to admitting patients to hospital >24hrs post LPG surgery. We wanted to use the data collected over a two-year period in our university teaching hospital to investigate patient, or other factors which might facilitate a safe same-day discharge.

Methods

From January 2021 to September 2022, we recorded all patients who underwent an LPG procedure at our hospital and were discharged <24hrs following surgery. Patient pre-operative assessments, operation notes and historical medical notes were accessed to record certain patient factors, including age, comorbidities and ASA score. The number of complications and 30-day readmission rates were noted and compared between those discharged <24hrs and those hospitalised >24hrs.

Results

Between January 2021 and September 2022, there were 28 total laparoscopic partial gastrectomies performed to treat GISTS, 11 of which were performed as day cases. The mean age was 63 years. There were no open conversions. There were no post operative complications or readmissions recorded. Patient selection however, was careful, as patients with high BMIs, at high bleeding risk or with extensive gastric surgical history were not suitable for the procedure.

Conclusions

For a select group of patients, including those with healthy BMI and low bleeding risk, day-case LPG is a safe and effective treatment option for those with GISTS and benign stomach lesions. There were no significant differences in readmission rates and post-op complications when compared with patients admitted to hospital for >24hrs after surgery. However, it must be taken into account that the sample size of patients in this study was small and therefore further similar studies are needed with larger numbers of patients to assess the safety and efficacy of LPGs on a wider, more practical scale. This would also allow us to identify further patient factors that may worsen or alleviate post-op complications of day-case LPGs. To conclude, day-case LPG has the potential to become the primary treatment pathway for low-risk patients suffering from small GISTS and benign stomach lesions, as it will save valuable hospital resources and costs, with no added post-operative complications. Further research however, is needed to identify further patient factors that may be affected by day-case LPGs in order to identify suitable candidates for day-case procedures.

References

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Gulzar Dhanoya, Shameen Jaunoo

Surgery Department, Brighton and Sussex University Hospitals NHS Trust
Esophagogastric research group