Long Term Outcomes Following Laparoscopic Repair of Large Hiatal Hernias

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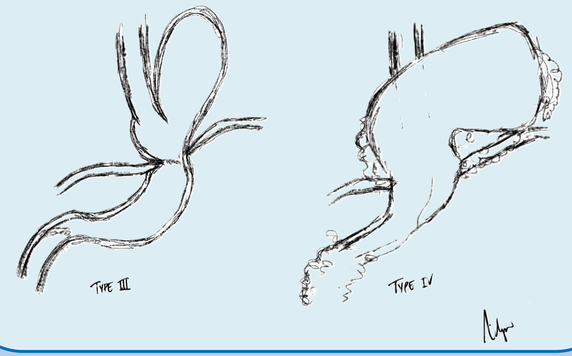
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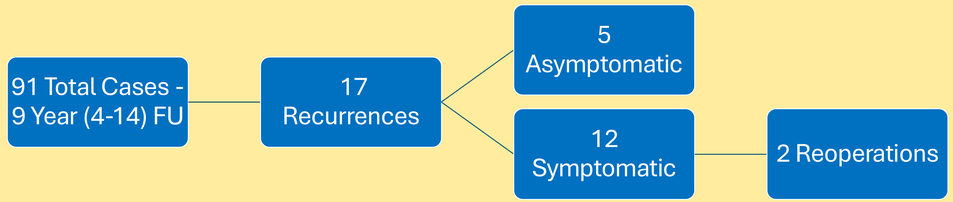
Introduction

Managing large para-oesophageal hernias (PEH) presents significant challenges due to the condition's complexity, variability in surgical outcomes, and limited high-quality evidence regarding long-term results. Large PEH (Hill grade III & IV) may be asymptomatic, identified incidentally on endoscopy or imaging, or present with dysphagia, reflux, chest pain, respiratory symptoms or gastric volvulus. Existing literature highlights the need for further research to refine clinical and intraoperative decision-making. This cohort study evaluates the long-term outcomes of consecutive patients who underwent laparoscopic repair of large PEH at a single institution between 2010 and 2020.

Demographics

Male: Female	*24:66*
Mean Age (Years)	*67.5*
Emergency Cases	*6*
Median Length of stay (days)	*6.1*
Median Follow Up (years)	*9 (4-14)*





Methods and Procedures

This study was conducted at Doncaster Royal Infirmary with prospectively collected data, including patient demographics, surgical indications, operative details, postoperative outcomes, and follow-up. All data were securely stored in NHS SharePoint. For analysis, only anonymized data were used, ensuring no patient-identifiable information was included in this report.

Results

This study included 91 patients (Male: Female = 24:66) with a mean age of 67.5 years. Of these, 90 surgeries were performed laparoscopically, with no conversion to open. Six cases were emergencies, and three were revision procedures. The average postoperative hospital stay was 6.1 days.

Common complications included dysphagia, chronic diarrhea, and surgical site infections. More severe complications, such as oesophageal perforation and postoperative mortality (1), were rare. The recurrence rate was 18.6% (17/91), while the morbidity rate was 16.5%.

Conclusion

This study provides valuable insights into both the immediate and long-term outcomes of PEH repair. While the study demonstrates relative safety of the procedure, axial (esophageal shortening) and radial (defect size) tension remain key technical challenges. Although overall, mortality is low (1%), perioperative morbidity and long-term recurrence must be carefully considered when deciding to operate.

Among the 17 recurrences, 12 were symptomatic, but most were managed conservatively, with only two patients requiring reoperation. Key risk factors for recurrence included surgeon experience and revision surgery. Prosthetic reinforcement of the crural repair may help reduce recurrence rates without negatively impacting immediate postoperative outcomes.

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