

Anterior Longitudinal Gastropexy in Hiatal Hernia Repair

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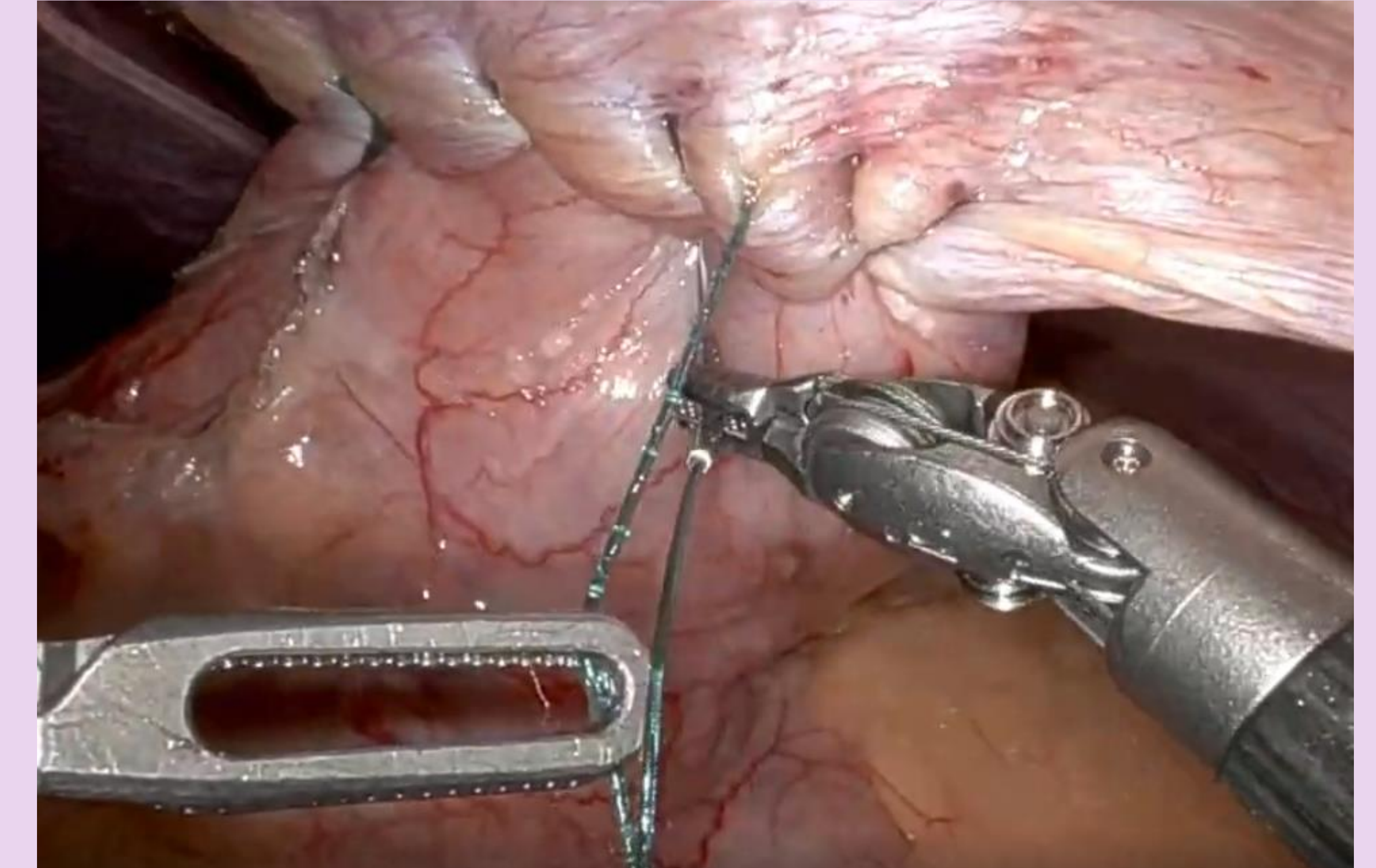
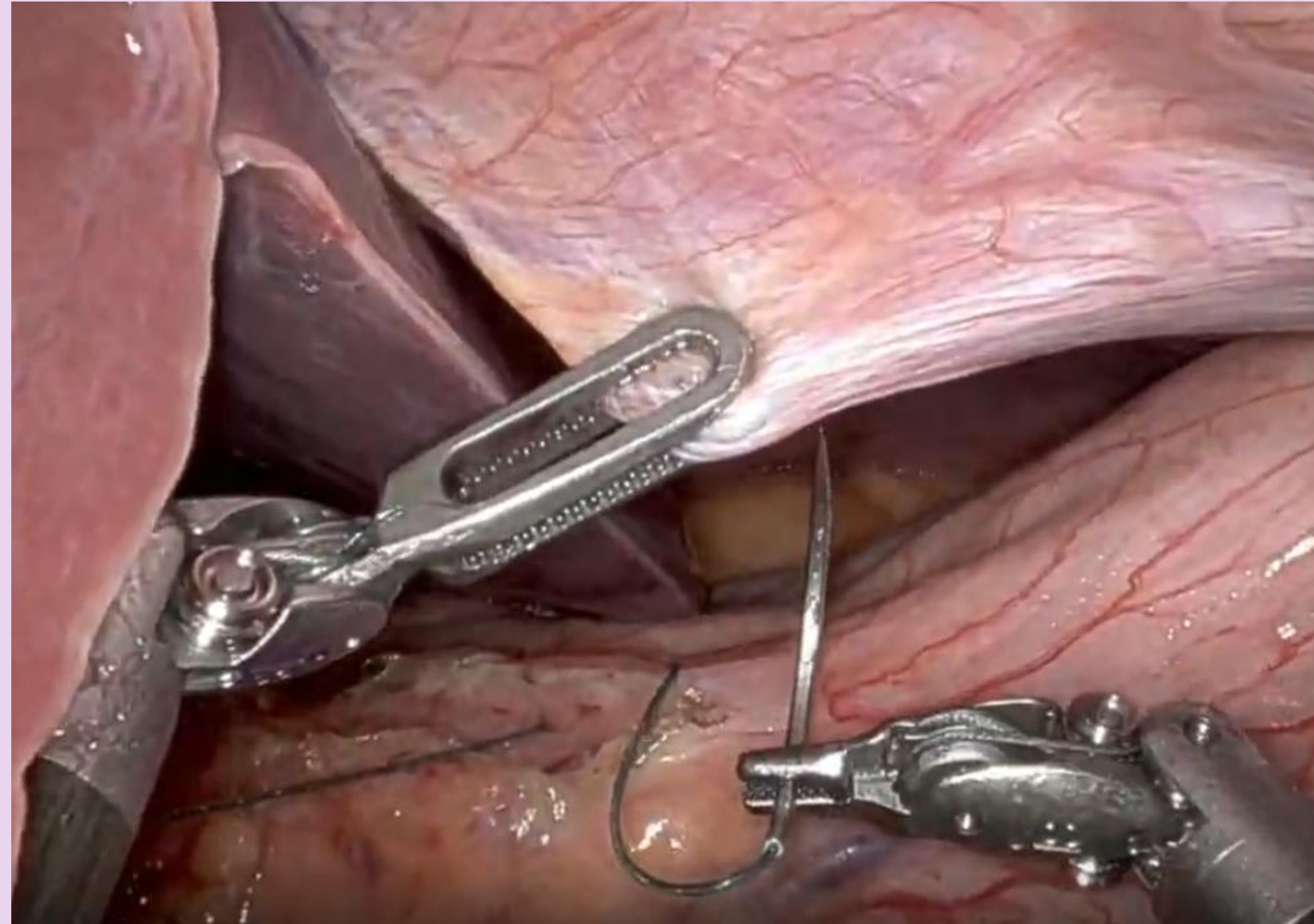
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Introduction

Repair of paraesophageal hernias (PEH) can greatly improve quality of life for patients. Despite advances in surgical technique for PEH repair, high recurrence rates persist. Our research aimed to assess the effectiveness of our technique of anterior longitudinal gastropexy during robotic-assisted hiatal hernia repair to lower recurrence rates.

Methods and Procedures

A single-center retrospective cohort analysis for all patients who underwent robotic assisted PEH repair with a single surgeon between April 2023 and September 2024. Primary outcomes were clinical and radiological recurrence rates. Postoperative course and functional results were also studied. Subgroup analysis was then performed between PEH repair with gastropexy vs without gastropexy. In the group without gastropexy; standard toupet fundoplication was performed instead if anatomy was suitable. Other aspects of hiatal repair were consistent which included use of a buttress suture around the crura with absorbable mesh. All patients from February 2024 onwards underwent gastropexy; only 3 patients prior to that underwent gastropexy. Patients were followed in the clinic at intervals for a period of 1-year. Standardized questions relating to symptoms and quality of life were documented on EMR clinic notes. Only patients with recurrence or persistence of symptoms were studied with imaging studies and/or EGD to out rule PEH recurrence and treatment of symptoms. All patient charts were reviewed for imaging studies (CT, MRI or Upper GI study) performed post-operatively to assess recurrence determined by re-herniation of the stomach greater than 2 cm above the diaphragm.



Gastropexy Technique: Performed after extensive mobilization of the esophagus to obtain 5 cm intra-abdominal esophageal length and closure of the hiatus. Pneumoperitoneum is dropped to 5 mmHg. The anterior stomach just distal to the GE junction is then sutured to the anterior abdominal wall with a running 2-0 absorbable V-Loc stitch to create a 5 cm anterior longitudinal gastropexy.

Results

138 patients were included in the study.

Of the 56 in the gastropexy group, 20 patients had imaging, all showing no recurrence, 12 with imaging between 9-18 months post-op. 45 patients made it to 6-month follow-up and of these 36 patients to 1 year. Overall recurrence rate was zero.

82 patients in the cohort without gastropexy, 38 of these patients had post-op imaging, 13 (16%) were found to have recurrent hernia.

Conclusions

Our initial research shows anterior longitudinal gastropexy to be superior to no gastropexy in preventing PEH recurrence while maintaining good functional outcomes.