to identify and analyse studies reporting outcomes of post-esophagectomy rehabilitative interventions.

Methods: Major reference databases (PubMed, Medline, EMBASE, Cochrane Library and Google scholar) were interrogated and a systematic search with a pre-defined search strategy was performed up until January 2020. All eligible articles were screened in line with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. Study quality was assessed using the MINORS (Methodological Index for Non-Randomized Studies) criteria for cohort studies and the Cochrane risk of bias tool for randomised studies.

Results: Three studies (n = 1 pilot study; n = 1 feasibility study and n = 1 randomised controlled trial) including some 108 patients were included in this narrative review, of whom 64 patients had undergone esophagectomy. Rehabilitative strategies utilised included a combination of physical activities such as walking and low- to moderate-intensity exercises, dietary counselling, psychological support and occupational therapy input. There was wide variation in the outcomes assessed between studies. Postoperative physical activity with exercises consistently demonstrated maximum positive impact upon cardiopulmonary fitness. The median MINORS score for included studies was 9 (8-10) and the risk of bias in the included randomised trial was low.

Conclusion: There is a paucity of data currently to help determine the impact that rehabilitation may have on clinical outcomes and quality of life following esophagectomy. While improved physical function has been demonstrated, there is a need to determine which interventions patients deem most important and acceptable to help them return to as close to baseline as possible. Additionally, there is a need to further understand the impact rehabilitation may have upon long-term outcomes.

417 GASTRIC CONDUIT FISTULA AFTER ESOPHAGECTOMY: WHY IT HAPPENS AND HOW TO MANAGE

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Gastric tube fistula is a rare event, but very feared, as it invariably progresses with associated mediastinitis and can be fatal. We present a case in which this fistula occurred together with all diagnostic investigation of etiology and treatment, in addition to a brief review of this complication.

Methods: A 45-year-old patient underwent minimaly invasive esophagectomy due to end-stage achalasia. After 6 days, she presented acute multivisceral migration to the chest and needed to reintervation by open surgery and hiatoplasty. The patient evolved with outflow of bile through the chest drain. Conservative treatment was attempted. However, after 4 days, she underwent thoracotomy and suture of the orifice, and a nasal tube was maintained to drain the gastric tube. There was no suture dehiscence and in control a seriogram evidenced pyloric stenosis. After 2 months, she was submitted to GPOEM with improvement of gastric emptying and normal return to feeding.

Results: The risk factors for gastric tube fistula are the same as those for cervical or intrathoracic anastomosis fistula after esophagectomy. Some authors attribute the vascularization of the stomach and malnutrition. However, as shown in this case, impairment of gastric emptying is an important factor to increased pressure and consequent fistula.

The patient experienced acute migration through the hiatus, which obstructed the tube for a few hours. And after the defect was corrected, he maintained an increased pressure due to pyloric achalasia, which was initially treated by depressurizing the tube by nasogastric tube and then GPOEM.

Conclusion: Gastric tube fistula can be avoided when we can establish a good gastric tube emptying condition.

418 SYSTEMATIC REVIEW OF LEARNING CURVES IN MINIMALLY INVASIVE PARAESOPHAGEAL HERNIA REPAIR: IS THERE ENOUGH EVIDENCE FOR MENTORSHIP IN SURGICAL RESIDENCY?

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Laparoscopic repair remains the approach of choice for the surgical management of symptomatic paraesophageal hernia (PEH), although robotic techniques are becoming increasingly popular. The learning curve for minimally invasive PEH repair can be variable and little is known of its potential impact upon surgical residents' training. The aim of this review is to appraise current literature on learning curves in PEH repair and its impact on training and mentorship of surgical residents.

Methods: Literature searches were performed in three databases: MEDLINE (1980-2020), EMBASE and the Cochrane Library. Search results were screened in line with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. Data quality was assessed in accordance with the Newcastle-Ottawa Scale for cohort studies.

Results: A total of 6 studies were identified; 4 laparoscopic and 2 robotic assisted with 2678 patients assessed in total. One study used a cumulative sum (CUSUM) analysis to define learning with the remainder of studies using between 3 and 11 parameters. 2 studies evaluated trainees' performance in performing laparoscopic PEH repair when mentored by surgeons who had achieved competence on the learning curve. Both studies reported equivalent clinical outcomes for laparoscopic PEH repair performed by trainees versus consultants, although one study suggested 5-year outcomes were inferior in the trainee group despite mentorship.

Conclusion: Despite being commonly performed, little is known about the learning curves for minimally invasive PEH repair. Furthermore, whether prior laparoscopic experience confers any advantage to performing robotic PEH repair is not known at present. Further data to help evaluate the learning curve for those performing PEH is required in order to enhance training and permit quicker attainment of competency.

423 OUTCOME OF LAPAROSCOPIC SURGERY FOR THE MANAGEMENT OF CORROSIVE STRICTURE OF THE OESOPHAGUS

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The surgical treatment for a corrosive stricture of the oesophagus, after failed endoscopic dilatation, often involves oesophageal replacement using a gastric or a colonic conduit. This is traditionally done via the conventional open approach. The objective of this study was to ascertain short and long term outcomes of Laparoscopic gastric (LGP) and colon pull up (LCP) for the treatment of corrosive stricture of the oesophagus

Methods: Retrospective study of patients of corrosive oesophageal stricture, who, following a failed endoscopic dilatation, underwent a laparoscopic gastric or colon pullup between Jan 2011 and November 2019. All patients were evaluated with an upper endoscopy/contrast study to determine upper level and extent of stricture. Stomach was the preferred conduit, colon was used when either stomach was involved in the scarring process or in high pharyngeal strictures. Early and late postoperative outcomes were ascertained.

Results: During the study period, 254 patients with corrosive stricture oesophagus were managed surgically. Of these 50 underwent LGP and 10 underwent a LCP and these formed the study group. Mean age was 22.4 (2–42) years. The mean operative time (174.6 ± 43 and 322 ± 63 min) and blood loss (58.6 ± 23.9 and 108 ± 30.8 mL) for LGP and LCP respectively. Four patients developed mild respiratory infection. Eight patients developed cervical anastomotic leak. One patient had a colojejunal leak and another leak from the gastric tube staple line which was managed with drainage and antibiotics. At a mean followup of 51 months all patients were euphagic.

Conclusion: Laparoscopic surgery for corrosive strictures of oesophagus is safe and provides good short and long term outcomes.

430 BALLOON TAMPONADE UTILIZATION FOR SEVERE ESOPHAGITIS CAUSING HEMORRHAGIC SHOCK

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Esophagitis as a cause of upper gastrointestinal bleeding (UGIB) is a difficult entity to treat and is associated with significant morbidity. Epidemiologic studies note a 7-18% incidence of significant hemorrhage due to esophagitis. Current existing treatment options for UGIB complicated by hemorrhagic