S1074 Presidential Poster Award

Concomitant Transoral Incisionless Fundoplication Outcomes and Efficacy for Gastroesophageal Reflux Disease: A Retrospective Analysis

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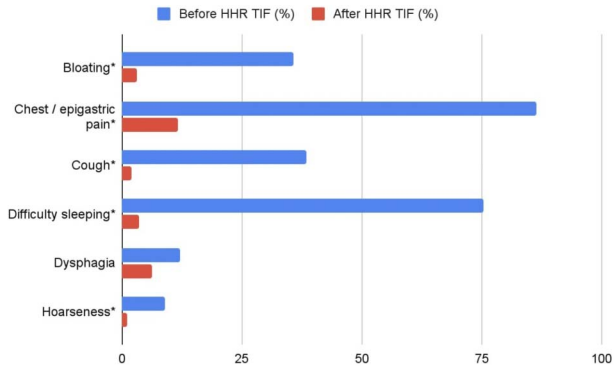
Introduction: Gastroesophageal reflux disease (GERD) affects up to 27.8% of the American population and costs USD 10 billion to the US healthcare yearly. Proton pump inhibitors (PPIs) remain the gold standard treatment despite long-term complications and being refractory in up to 40% of patients since it does not address the anatomical defects that might be present. Alternatives such as hiatal hernia repair with concomitant transoral incisionless fundoplication (cTIF) have been used to manage patients with larger hernias (>2 cm) or esophagitis grade B-D, but there is scarce literature about its efficacy. Therefore, we aim to assess the outcomes and efficacy of cTIF.
Methods: Retrospective data were collected from patients who underwent hybrid TIF in two centers from May 2012 to March 2021. Categorical variables were described as frequencies. Statistical analysis was performed using chi-square or fisher's exact tests to assess the relationships between different variables. Results with a p-value < 0.05 were considered statistically significant.
Results: Of 334 patients, 133 were male (39.82%) and 201 female (60.18%). Mean age was 54 ($\pm$ 14.7). Mean BMI was 28.4 ($\pm$ 5.3), mean size of hiatal hernia was 3.7cm ($\pm$ 1.25) and mean DeMeester score was 38.9 ($\pm$35.2). 52 patients (16.35%) had recurrence of at least one symptom after cTIF. Patients showed significant improvement in difficulty sleeping, chest or epigastric pain, cough, hoarseness, and bloating ($p<$ 0.000). Dysphagia was not improved (p=0.061). 282 patients were on daily proton pump inhibitors (PPI) before the procedure, with a mean use time of 5.6 years ($\pm$ 5.3). We found a significant PPI use reduction, from 92.45% to 44.75% of patients ($p<$ 0.000). No adverse events were reported. 8 patients (2.39%) had recurring GERD with a positive DeMeester score and underwent a second cTIF.
Conclusion: GERD is associated with decreased quality of life, especially for patients with refractory and severe symptoms. Hybrid TIF presents as a solid alternative for patients with GERD with hiatal hernia, with most patients showing significant improvements in symptoms. This is the largest cohort of patients who underwent cTIF performed by the same surgeon to the best of our knowledge. Further studies should aim to establish the long-term outcomes of the procedure.



[1074] **Figure 1.** Percentage of patients that had GERD-related symptoms before and after undergoing cTIF (HHR TIF). The most common symptoms before the procedure were chest or epigastric pain, difficulty sleeping, and cough. Almost half of the patients with positive dysphagia symptoms had symptom relief (p=0.061). Symptoms marked with an asterisk were found statistically significant ($p < 0.000$).

S1075 Presidential Poster Award

Early (<4 Weeks) vs Standard (≥ 4 Weeks) Endoscopic Drainage of Pancreatic Walled-Off Fluid Collections: A Systematic Review and Meta-Analysis

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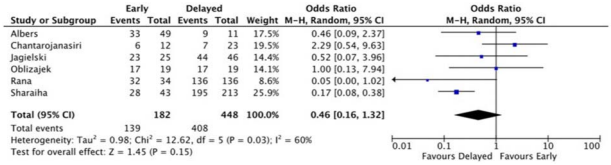
Introduction: Previous studies have demonstrated that the ideal time for drainage of walled off pancreatic fluid collections is 4-6 weeks after its development. However, some pancreatic collections, including pancreatic walled-off necrosis (WON), require earlier drainage. Nevertheless, the optimal timing of the first intervention is unclear, and consensus data are sparse. The aim of this study was to evaluate clinical outcomes and safety of endoscopic ultrasound (EUS) - guided drainage of pancreatic fluid collections < than 4 weeks after its development compared to ≥4 weeks after its development.
Methods: Search strategies were developed for PubMed, EMBASE, and Cochrane Library databases from inception through June 2022 in accordance with PRISMA and MOOSE guidelines. Outcomes of interest included technical success defined as successful endoscopic placement of LAMS, clinical success defined as reduction in cystic collection size, and procedure-related adverse events. A random effects model was used for analysis and results were expressed as odds ratio (OR) along with 95% confidence interval (CI).
Results: A total of 6 studies (630 patients) were included in our final analysis where 182 patients (28.9%) were enrolled in the early drainage cohort and 448 (71.1%) patients in the standard drainage cohort. Age ranges were similar between groups. Alcohol was the main driver of acute pancreatitis. Infection was the most common indication for pancreatic drainage (42.6%). The mean fluid collection size was 143.4 $\pm$ 18.8 mm for the early cohort vs 128 $\pm$ 19.7 mm for the standard cohort. Most fluid collections were located in the body of the pancreas (86.7%). Overall, technical success favored standard drainage over early drainage (OR 0.01; 95% CI 0.00 – 0.15; P=0.001). Clinical success also favored standard drainage over early drainage (OR 0.46; 95% CI 0.16 – 1.32; P=0.03). With regards to adverse events, there was no statistically significant difference in overall adverse events (OR 0.76; 95% CI 0.42 – 1.39; P=0.56) or mortality (OR 1.14; 95% CI 0.29 – 4.48; P=0.23). Hospital stay was longer for patients undergoing early drainage compared to standard drainage (23.7 vs 16.0 days, respectively). (Figure)
Conclusion: Compared to early drainage (< 4 weeks), endoscopic drainage of pancreatic fluid collections is significantly more efficacious when performed at least 4 weeks after development, with a shorter hospital length of stay. Therefore, pancreatic fluid collections should ideally be drained 4 weeks after development.



[1075] **Figure 1.** Forrest plot showing pooled rates of clinical success.