

Use of Mesh in Hiatal Hernia Repair

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Background

- Oelschlager et al. reported that the recurrence rate after pure suture repair without mesh reinforcement is as high as 59% at 5-year follow-up
- Initially synthetic mesh was used but had complications
 - Erosion, stricture, and dysphagia
- New research is evaluating the efficacy of biologic mesh reinforcement

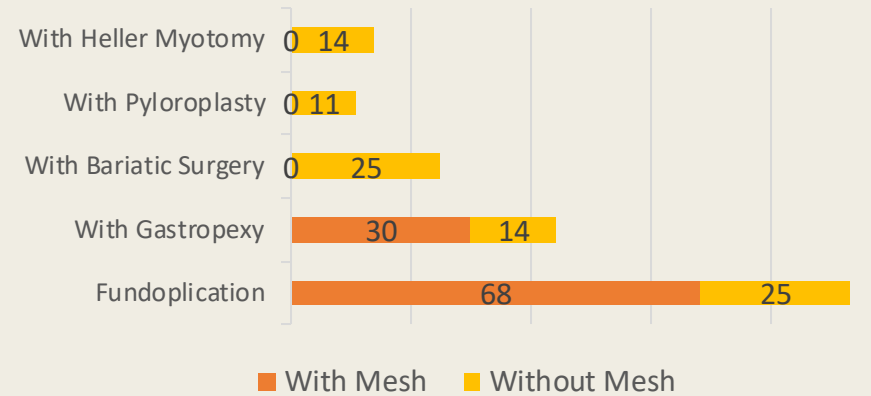
Methods

- Retrospective review from January 2017 to July 2021 who underwent paraesophageal hernia repair
- 89 patients' charts were reviewed
 - 36 having repair without mesh
 - 53 having repair with mesh with biologic mesh
- Chi square test used to analyze data

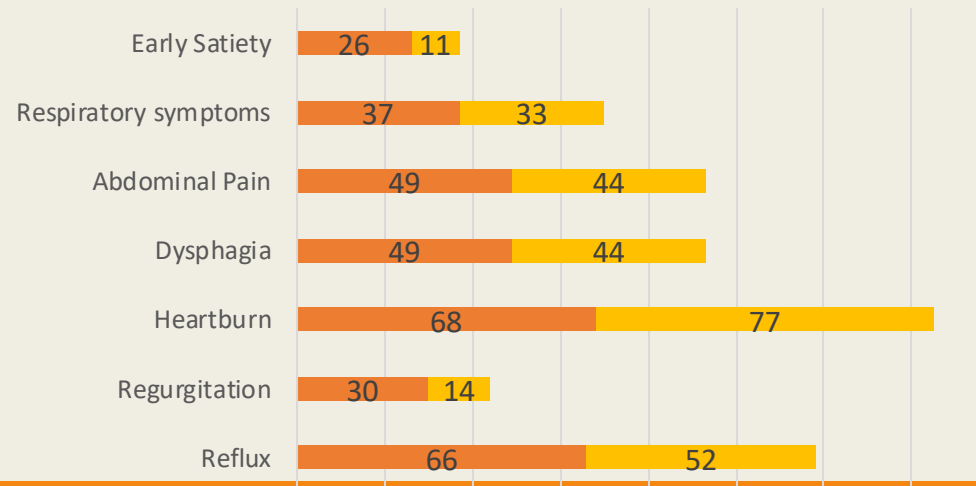
Patient Characteristics

- (Mesh vs Without mesh)
- Average age (66.6 v 55.4 years)
- Female (79% v 67%)
- Smoking (1% v 25%)
- BMI (28.9 v 32.2)
- Medical management (6.48 years v 5.25 years)
- Symptoms post op (43% v 58%)
- No difference in past medical history
 - GERD, HTN, DM, HLD, COPD, Esophagitis

Surgical Procedures



Preoperative Symptoms



Results

- (Mesh vs Without mesh)
- Length of follow up (19.2 v 18.3 months)
- Had recurrence (15% v 3%) (p: 0.06)
- Time to recurrence (20.5 v 16 months)
- Complications (70% v 14%) (p: 0.35)
- Major complications (2% v 3%) (p: 0.32)

Discussion

- No statistically significant results
 - Trend towards for regurgitation and early satiety

Limitations

- Small sample size
- Patient selection
- Single surgeon and institution
- Short term follow up

Future Research

- Follow patient further into the future
- Multiple surgeons
- Evaluate differing kinds of mesh
- Exclude the bariatric patients