Paraesophageal Hernia Repair With Biosynthetic Mesh Reinforcement and Concomitant Bariatric Surgery: An Analysis of Outcomes

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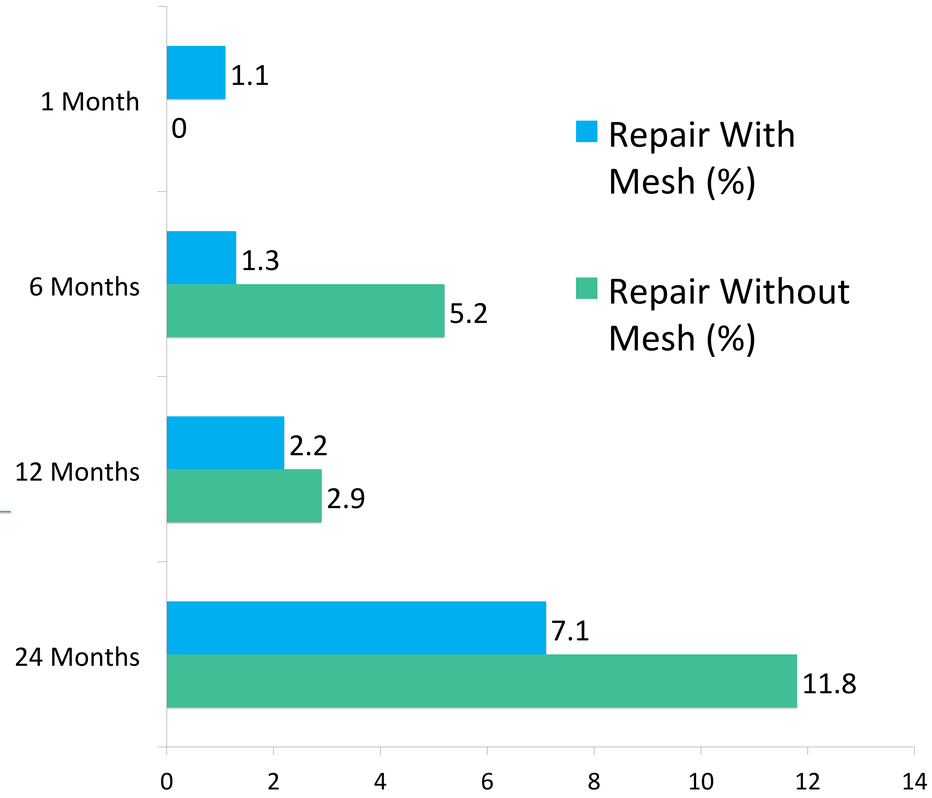
Introduction

- Paraesophageal hernias (PEH) are commonly encountered in the bariatric patient population
- Surgical repair is often performed with concomitant bariatric surgery (LRYGB or LSG)
- Permanent mesh reinforcement is associated with higher complication rates, therefore rarely utilized
  - Use of biosynthetic mesh is controversial
- Purpose: analyze the outcomes of patients undergoing concomitant bariatric surgery and PEH repair, with & without biosynthetic mesh reinforcement

Methods

- Retrospective Review: Feb 2018 – Dec 2019
- Inclusion Criteria: patients who underwent PEH repair with concomitant LRYGB or LSG
- Perioperative 30 day outcomes:
  - 1, 6, 12, and 24 month intervals
- Recurrences diagnosed via postoperative UGI, EGD, CT

Recurrence Rates



Results

- N = 214: with mesh vs without = 45.8% vs 54.2%
  - Age (Mean): with mesh vs without = 52.7 vs 48.9
  - BMI (Median): with mesh vs without = 42.0 vs 44.0
- LOS (days) (Median): with mesh vs without = 2 vs 1
- Readmission rates: with mesh = 6.1% vs 5.2%
- Repair with mesh found to have lower PEH recurrence rates
  - 6 months = 1.3% vs 5.2%
  - 2 years = 7.1% vs 11.8%
- Perioperative outcomes were otherwise similar
  - No mortalities or re-operations in either group
- No mesh complications encountered

Conclusion

- PEH frequently requires repair at the time of bariatric surgery - can be performed with or without biosynthetic mesh reinforcement
- In our study, repair with mesh was associated with lower recurrence rates and had similar perioperative outcomes
- Intraoperatively, the hiatus should be carefully inspected for evidence of a PEH and repair with biosynthetic mesh reinforcement should be considered