MASSIVE PARAESOPHAGEAL HERNIA IN THE OBESE PATIENT POPULATION; FUNDOPLICATION VS. ANTI-REFLUX GASTRIC BYPASS

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INTRODUCTION

- Obesity is a risk factor for gastroesophageal reflux disease (GERD) and hiatal hernia (HH).
- Historically, fundoplication is the operation of choice for GERD with HH.
- We propose a new operation, Anti-Reflux Gastric Bypass (ARGB), utilizing a short efferent limb for GERD treatment.
- We hypothesized ARGB would lower HH recurrence rates, increase resolution of GERD, and improve weight loss compared to fundoplication.

METHODS

- Retrospective study performed from 1/2013 – 2/2021 evaluating patients undergoing repair of large HH (>5cm) with obesity (BMI>30).

RESULTS

- Forty-two patients underwent fundoplication, 16 patients underwent ARGB.
- Patients were predominantly female (fundoplication: 88.1%, ARGB: 87.5%).
- Fundoplication patients were older (64 vs. 50) with larger mean hernia size (8.5x6.3cm vs. 6.6x6.3cm), ARGB patients had a higher BMI (34.42 vs. 39.55).
- Recurrence trended lower with ARGB and no difference in symptom resolution (Table 1).
- Weight loss was superior with ARGB (p = 0.0002).

	Fundoplication	ARGB	P-value
Recurrence	14.3%	0.0%	0.173
Heartburn resolution	84.0%	93.3%	0.388
Regurgitation resolution	83.3%	100.0%	0.471
Dysphagia resolution	78.3%	100.0%	0.401
Cough resolution	60.0%	100.0%	0.549
Dyspnea resolution	81.3%	100.0%	0.716
Chest pain resolution	61.9%	100.0%	0.072
Nausea resolution	55.0%	60.0%	0.894

METHODS CONTINUED

- Primary outcome was hernia recurrence, secondary outcomes include symptom resolution and weight loss.
- Analysis utilized multivariate logistic regression adjusted for age, BMI, and hernia size; by nonlinear mixed modeling.

CONCLUSIONS

- Obese patients with large HH and GERD treated with ARGB trended toward a lower HH recurrence rate, similar GERD resolution, and improved weight loss.
- Symptomatic resolution was similar between groups with all outcomes trending toward superiority with ARBG.

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