Endoscopic Hill grade is not predictive of new post-operative GERD following sleeve gastrectomy with or without cruraplasty

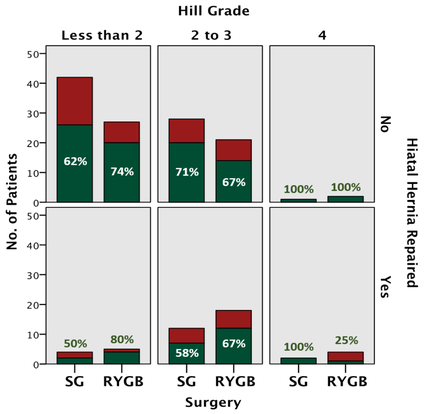
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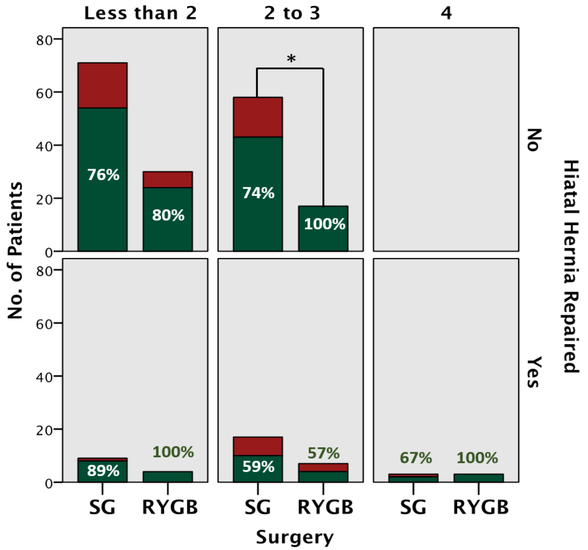
Background

- Hiatal hernias continue to be a concomitant finding in the pre-operative and intraoperative bariatric population. We know clinically significant hiatal hernias predispose patients to gastroesophageal reflux disease (GERD). Research in the past decade has shown that hiatal hernia repair during primary or revisionary bariatric surgery is safe and improves recurrence and reoperation rates[1]. However, evidence has also found that pre-operative endoscopic hiatal hernia identification is not representative of intraoperative findings[2]. We hope to determine if there is any significant difference in those with endoscopic diagnosis of hiatal hernia but no intraoperative diagnosis and repair by assessing their post-operative GERD rates against those who received a hiatal repair.

Methods

- We conducted a retrospective chart review of all pre-operative endoscopies performed by one surgeon from June 2020-May 2022 for planned bariatric surgeries. We excluded patients that had undergone previous bariatric surgery or hiatal hernia repair, and those that did not follow up beyond 6 months. The bariatric surgeries were performed by three surgeons at a single institution. Data collected included endoscopic Hill grade, LA grade esophagitis, the presence of pre- and post-operative GERD, bariatric surgery type, surgeon, and length of follow-up.





Results

- We compiled 594 patients that underwent pre-operative endoscopies. After removing patients who did not undergo surgery or did not follow up after 6 months, we were left with 387 patients. 135(35%) were diagnosed with hiatal hernia on pre-operative endoscopy. There was a significantly higher rate of pre-operative GERD resolution when a pre-operatively diagnosed hiatal hernia was fixed (11 vs 8, p=.05).
- There was also a significantly higher rate of new-onset GERD in patients who had Hill grade 2 or 3 hiatal hernia on pre-operative endoscopy and did not undergo repair during sleeve gastrectomy compared to gastric bypass (15 of 58 vs 0 of 17, p=.019). This difference was not seen when comparing all sleeve to all bypass patients (42 of 160 vs 9 of 61, p=.07), or when looking at hiatal hernia repair rates (7 of 17 vs 3 of 7, p=.94).

Conclusion

- While others have shown pre-operative endoscopy is not representative of intraoperative findings of hiatal hernia, we do see an increased rate of GERD resolution in patients with hernia repair. Additionally, there seems to be higher GERD generation in sleeve gastrectomy patients when pre-operatively diagnosed hernias are not fixed. Additional research should be undertaken to try and understand other factors that may influence these outcomes.

The authors have no disclosures.