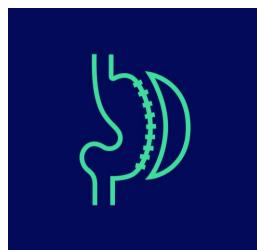
The Effect of Meal Frequency on the Occurrence of Gastroesophageal Reflux Disease after Laparoscopic Sleeve Gastrectomy #18

Sabdullah almunifi.

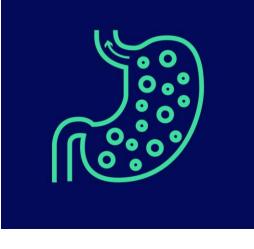
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## **CONFLICT OF INTEREST DISCLOSURE**

• I have no potential conflict of interest to report

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# Introduction

- Saudi Arabia has a high obesity rate (over 35%)<sup>1</sup>.
- The most Common Bariatric surgery performed is (LSG)<sup>2</sup>.
- GERD and de novo reflux are more common following LSG <sup>3</sup>.
- Food intake after surgery may affect stomach pressure and the development of GERD symptoms <sup>4</sup>.
- Vakhshoori et al. observed that who ate > six snacks and meals daily had 43% lower incidences of GERD than those who ate less than three snacks or meals.

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2. Wojciak, P.A., et al., Laparoscopic sleeve gastrectomy: a study of efficiency in treatment of metabolic syndrome components, comorbidities and influence on certain biochemical markers. Videosurgery and Other Miniinvasive Techniques, 2020. 15(1): p. 136-147.

3. Merrouche M, Sabate JM, Jouet P, Harnois F, Scaringi S, Coffin B, et al. Gastroesophageal reflux and esophageal motility disorders in morbidly obese patients before and after bariatric surgery. Obes Surg. 2007;17(7):894–900.

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## Method:

- A retrospective single center examined the relationship between meal frequency and GERD in patients who had undergone LSG. Jan 2016 - Dec 2022.
- RO was diagnosed when a patient exhibited symptoms such as heartburn, regurgitation, etc. or reflux esophagitis on UGETE.

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## **Results:**

- Most patients were female (57%) and aged 31-40 (35%).
- BMI decreased from 46.37 kg/m2 to 31.24 kg/m2 .
- Only 15.6% of patients (17) had a preoperative endoscopy. The importance of preoperative endoscopy.
- 44 patients (40.3%) of all post-LSG patients developed RO.
- Most patients who developed RO (44 in total) were consuming 1–2 daily meals (47.7%) and 3–4 meals (38.6%), compared to 11.4% and 2.3% for those consuming 5–6 and more than six daily meals, respectively.

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# **Conclusion:**

- Patients who have undergone long-term LSG may experience excessive gastric sleeve filling and potentially develop RO if they consume a limited number of larger meals to meet their daily caloric requirements.
- RO is more likely when consuming a few large meals and less likely when eating smaller meals more frequently.
- Consuming multiple small meals throughout the day is worthwhile to meet the necessary daily caloric requirements and prevent excessive filling of the gastric sleeve.

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#### **Notes:**

- The absence of a control group implies that these findings are partially attributable to LSG.
- Prospective multicenter studies are needed to provide more reliable results, And determine the ideal daily meal frequency and portion size to meet the post-LSG daily caloric requirements.
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# Thanks

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