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LETTER TO THE EDITOR

The Impact of Sleeve Gastrectomy on Gastroesophageal Reflux Disease in Patients with Morbid Obesity: a letter to the editor

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Sancho et al.'s recent report on the effect of laparoscopic sleeve gastrectomy (LSG) on the symptomatology of gastroesophageal reflux disease (GERD) was both interesting and timely [1]. Their finding of a significant proportion of "de novo" GERD and a clinical phenotype of "no improvement" amongst cohorts with symptomatic GERD following LSG surgery creates both an opportunity for clinical consensus as well as uncertainty. Indeed, it is the "uncertainty component" of this binary that served as the initiating hypothesis behind our recently published comprehensive dose–response meta-analytic review [2] on the trajectory of GERD symptoms post-bariatric surgical intervention. In a dose–response meta-analysis (DRMA) of 31 studies, a significant proportion (63.4%) of patients ($n = 4715$) who underwent laparoscopic sleeve gastrectomy experienced an improvement in gastroesophageal reflux disease symptoms (95% CI 32.46–72.18). Additionally, we found a window period of 2 years following which GERD symptoms start to recur. This latter observation is consistent with the 18 months milestone that Sancho et al. reported to coincide with the reappearance of symptoms including impaired oesophageal body motility [1]. In our review, compared to patients who underwent LSG, cohorts who had laparoscopic Roux-en-Y gastric bypass ($n = 580$ patients) had a more sustained GERD symptom relief. Indeed, a recent review by Balla et al. [3] exploring the determination of GERD symptomatology through instrumentation (manometry and ph. monitoring) found "de novo" GERD point estimates within the "ballpark" (17–68%) of what was described by Sancho et al. Ongoing areas of residual uncertainty has always been how sustainable is GERD symptom relief post-Bariatric surgery? Pooled estimates from our synthesis showed that for both patient cohorts (LSG and Roux-en-Y gastric bypass) GERD symptoms return to baseline after 4 years (Fig. 1). What happens beyond this milestone (4 years) is clinical equipoise which is open to further studies to evaluate.

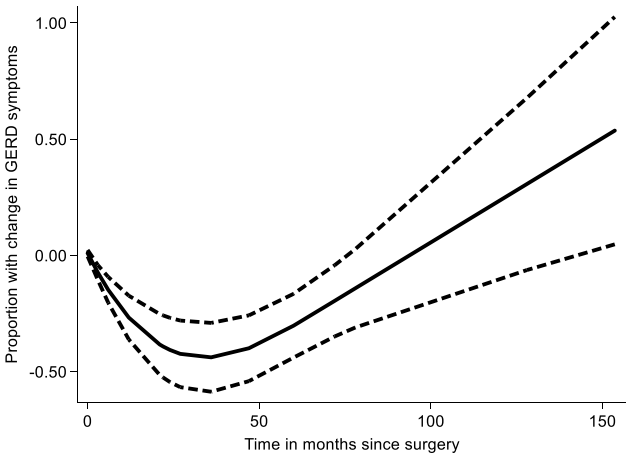

Fig. 1 Dose–response meta-analysis (DRMA) results for laparoscopic sleeve gastrectomy (LSG). The figure shows the difference in period prevalence estimate from baseline over the temporal profile of GERD symptoms. Dashed lines represent the 95% confidence intervals (adapted from Elzouki et al.[2])

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Declarations

Conflict of Interest The authors declare no competing interests.

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