

Assessment of dysphagia and impact on weight outcomes post-surgery

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Background

Dysphagia can be a subjective symptom, which can be influenced by many anatomical and physiological factors. In addition to this, other concomitant processes such as reflux may contribute. There are few well-defined methodologies and accepted scoring systems for dysphagia. Most widely published reporting systems do not adequately assess the functional and emotional impact of dysphagia. Furthermore, few have reported prevalence of dysphagia post bariatric surgery, as its own clinical entity, without being examined under the umbrella of reflux disease.

Objectives

To assess prevalence of dysphagia, post Laparoscopic Sleeve Gastrectomy (LSG) using a validated patient-reported tool, DHI (Dysphagia Handicap Index). DHI measures the handicapping effects of dysphagia on emotional and functional domains.

Methods

124 patients one year or more post LSG were contacted using email and phone follow-up. 101 patients responding to the DHI (81.5%). Post-operative weight outcomes were calculated. Physical, Emotional and Functional subscales were analysed combined as well as separately. To further delineate oesophageal dysphagia, three additional questions were added to the DHI.

Results

Average pre-operative weight and BMI is 123.9 kg and 43.1 kg/m², respectively. The average reduction in BMI at one year or more was 13.1 kg/m². 58 patients reported none to mild dysphagia (57.4%) and 43 reported moderate to severe dysphagia (42.6%). No patient required pneumatic dilatation. The median reported DHI subscale scores are: Physical subscale – 4 (0-26), Functional subscale – 4 (0-22), Emotional subscale – 2 (0-14). On multivariate analysis, when all other variables are held fixed, for each point increase in DHI Emotional subscale, %TWL was 1.1 points lower (median %TWL 32%, p=0.001) and %EWL was 2.10 points lower (median %EWL 77%, p=0.023). High DHI Emotional scores are found to be associated with poorer weight loss outcomes.

Conclusion

Dysphagia post LSG was commonly reported. While physical symptoms of dysphagia did not impact weight loss outcomes, higher scores of the Emotional subscale of the DHI was associated with poorer weight loss.