REVISION OF FAILED ENDOSCOPIC SLEEVE GASTROPLASTY TO LAPAROSCOPIC SLEEVE GASTRECTOMY - PITFALLS AND TIPS

Victoria Hall[1] MD, BSc (Hons First Class), DipGrad, Kay Tai Choy[2] MBBS, Mathew Lyon[3] MBBS, Kamal Heer[4]MD, DNB, FRCS(Ed), FRCS, MS (Bio-ethics), Harish Kumar[3,5]MD, MS, FRCS(Ed), FRCS, MBA, FRACS

1 University of Notre Dame, 2 James Cook University, 3 University of Queensland, 4 Monash University, 5 Cairns and Hinterland Health Service

Introduction

Endoscopic Sleeve Gastroplasty [ESG] has become quite popular quite quickly. There is no medium to long-term data on outcomes and suitability criteria.

Already, there are reports of failures and revisions. We examine the possible pitfalls during revision and tips on how to avoid them. The authors have also put forth a classification of grades of failure for ESG.

Tips

Intact:

- Tattoo the line of stitching (along the plication) at least 2-3 cm away from the stitched plicated sites

Disruption:

- Locate each needle & cinch and tattoo them irrespective of where they lie
    - Carbon Black [Spot], however, India ink is another good alternative
    - Sleeves with a 34Fr bougie and assess the tattoo marks in relation to the bougie

- It is very difficult to 'unplicate' so best is to take the fat at the edge of the plicated gastroplasty
- Fundus and antrum are usually untouched
- That should help facilitate division of short gastrics and freeing fundus to left crus
- Sleeve starts 2-3 cm from pylorus
- It is our practice to perform intraoperative leak tests with methylene blue and air followed with Gastrografin swallow the next day

Proposed classification of failures of ESG

A: Single layered plication and B: Two layered plication

Based on personal and other colleagues' experiences with failed/disrupted ESG, we propose the following classification to have an objective assessment of failure for future assessment of this nascent procedure.

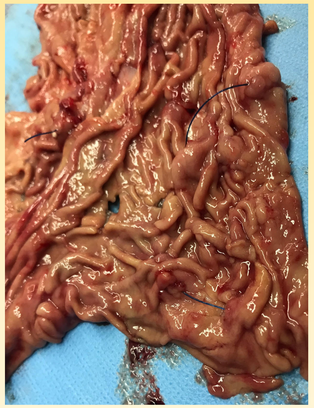
Table 1: HK Classification of Failed Endoscopic Sleeve Gastroplasty

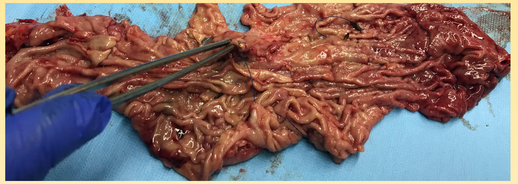
Type 1		
	A	Partial disruption of single layered ESG [at least two to three stitches have disrupted]
	B	Partial disruption of second layer of two layered ESG [at least two to three stitches have disrupted]
Type 2		
	A	Complete disruption of second layer of two layered ESG
	B	Complete disruption of second layer and partial disruption of first layer of two layered ESG [at least two to three stitches]
Type 3		
	A	Complete disruption of single layered ESG
	B	Complete disruption of both layers of two layered ESG
Type 4		
	A	Failure to lose weight or weight regain after initial success despite completely intact single layered ESG
	B	Failure to lose weight or weight regain after initial success despite completely intact two layered ESG

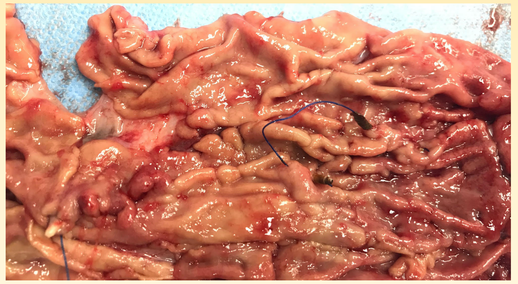
Potential Pitfalls of ESG

We have been referred failures as early as the first week to a few months from other practices. We perform gastroscopy to assess the degree of disruption and locate as best as we can all the needles and cinches. In the case of complete disruption, the needles and cinches can lie far apart as well as at different levels. These can pose problems during stapling.

Opened stomach showing broken stitches, needles and cinches







Discussion and Conclusion

Honest data collection and reporting of success and failures of ESG is essential to avoid it falling in disrepute.