Postoperative Outcomes After Paraesophageal Hernia Repair (PEH) With and Without the Use of Esophageal Bougie

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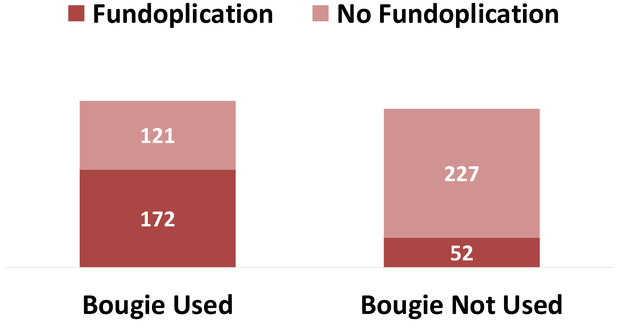
Introduction

- Intraoperative use of esophageal bougie is common but not universally used during paraesophageal hernia repair.
- Aim: To investigate the safety and benefit of intraoperative esophageal bougie use.

Methods

- Retrospective chart review from 2010-2019
- Single tertiary care institution
- Statistical analysis: Chi squared test, Wilcoxon rank sum test

Total Patients: 572



Results

Table 1. Outcomes after PEH repair with or without bougie

	Total	Bougie Not Used	Bougie Used	p-value
	N=572	N=279	N=293	
30 Day Complication	57 (10.1%)	33 (12.0%)	24 (8.3%)	0.14
30 Day Procedure	20 (3.6%)	11 (4.0%)	9 (3.1%)	0.59
GERD > 30 Days	89 (15.9%)	45 (16.5%)	44 (15.3%)	0.68
Dysphagia > 30 Days	61 (10.9%)	34 (12.5%)	27 (9.4%)	0.24
Recurrence	74 (13.2%)	35 (12.9%)	39 (13.5%)	0.83
Redo	29 (5.2%)	16 (5.9%)	13 (4.5%)	0.47
Mortality	2 (0.3%)	2 (0.7%)	0 (0.0%)	0.24

Table 2. Outcomes after PEH repair without fundoplication

	Total	Bougie Not Used	Bougie Used	p-value
	N=341	N=226	N=115	
30 Day Complication	41 (12.1%)	29 (13.0%)	12 (10.4%)	0.49
30 Day Procedure	14 (4.1%)	10 (4.5%)	4 (3.5%)	0.67
GERD > 30 Days	54 (16.1%)	36 (16.3%)	18 (15.7%)	0.88
Dysphagia > 30 Days	28 (8.3%)	22 (10.0%)	6 (5.2%)	0.14
recurrence	37 (11.1%)	26 (11.8%)	11 (9.7%)	0.57
Redo	16 (4.8%)	11 (5.0%)	5 (4.4%)	0.82
Mortality	2 (0.6%)	2 (0.9%)	0 (0.0%)	0.55

Table 3. Outcomes after PEH repair with fundoplication

	Total	Bougie Not Used	Bougie Used	p-value
	N=224	N=52	N=172	
30 Day Complication	16 (7.3%)	4 (8.0%)	12 (7.1%)	0.83
30 Day Procedure	6 (2.8%)	1 (2.0%)	5 (3.0%)	0.69
GERD > 30 Days	33 (15.1%)	9 (18.0%)	24 (14.3%)	0.52
Dysphagia > 30 Days	33 (15.2%)	12 (24.0%)	21 (12.6%)	0.048
recurrence	35 (15.9%)	9 (18.0%)	26 (15.3%)	0.65
Redo	13 (5.9%)	5 (10.0%)	8 (4.7%)	0.16
Mortality	0 (0.0%)	0 (0.0%)	0 (0.0%)	0

Conclusion

- We found no difference in intraoperative complications with bougie use or difference in postoperative outcomes overall when esophageal bougie was used.
- We found that patients who had fundoplication at the time of PEH repair had a significant decrease in postoperative dysphagia after 30 days if a bougie was used.