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

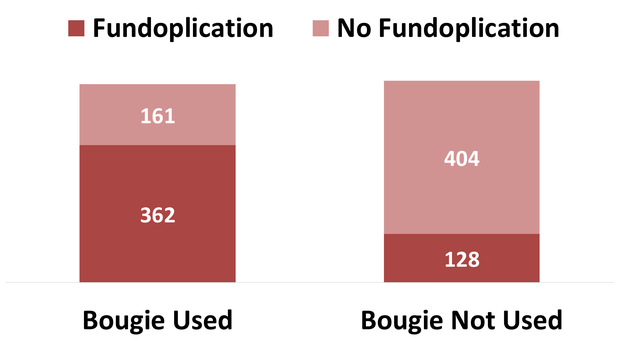
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Introduction

- 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 2010-2023
- Single tertiary care institution
- Statistical analysis: Chi squared test, Wilcoxon rank sum test



Results

Table 1. Intraoperative Outcomes after Paraesophageal Hernia Repair With or Without Esophageal Bougie

	Total	Bougie Not Used	Bougie Used	p-value
	N=1055	N=523	N=532	
Intraoperative Complication	21 (2.0%)	15 (2.9%)	6 (1.1%)	0.042
Intraoperative Bleeding	8 (0.8%)	5 (1.0%)	3 (0.6%)	0.46
Leak or Perforation	7 (0.7%)	7 (0.7%)	0 (0.0%)	0.007
Other Intraoperative Complication	5 (0.5%)	3 (0.6%)	2 (0.4%)	0.64

Table 2. Postoperative Outcomes after Paraesophageal Hernia Repair With or Without Esophageal Bougie

	Total	Bougie Not Used	Bougie Used	p-value
	N=1055	N=523	N=532	
30 Day Complication	77 (7.3%)	47 (9.0%)	30 (5.6%)	0.035
30 Day Reintervention	32 (3.0%)	20 (3.8%)	12 (2.3%)	0.14
GERD > 30 Days	92 (8.8%)	47 (9.1%)	45 (8.5%)	0.75
Dysphagia > 30 Days	68 (6.5%)	37 (7.1%)	31 (5.9%)	0.41
Recurrence	156 (14.8%)	69 (13.2%)	87 (16.4%)	0.15
Reoperation	68 (6.4%)	30 (5.7%)	38 (7.1%)	0.35
Mortality	3 (0.3%)	3 (0.6%)	0 (0.0%)	0.12

Conclusion

- We found a lower rate of intraoperative leaks, perforations and complications when esophageal bougie was used during laparoscopic paraesophageal hernia repair.
- We found no difference in reintervention, GERD, dysphagia, recurrence, reoperation, or mortality within 30 days.