Esophageal Bougie Use Does Not Improve Outcomes in Paraesophageal Hernia Repair

Sami O Abul-Khoudoud, MD[1]; Joshua L Lyons, MD[1,2]; Emily F Simon, MD[1]; Trisha Lal, MD[1]; Natalie Chakraborty, MD[1]; Kayvan Barekatain, MD[1]; Jill Knepprath, MD[1]; Hamza N Chatha, MD[1]; Saher-Zahra Khan, MD[1]; Patrick Wieland, MD[1]; Nicolette M Winder, MD[1]; Samuel J Zolin, MD[1,2]; Jeffrey M Marks, MD[1,2]

[1]University Hospitals Cleveland Medical Center – Cleveland, OH, [2]Case Western Reserve University – Cleveland, OH

BACKGROUND

- Esophageal bougies are often used during paraesophageal hernia repair to guide hiatal closure and wrap sizing.
- Prior literature suggests no clear benefit for dysphagia or recurrence after hiatal hernia repair.
- **Objective:** This study compared outcomes after PEHR with versus without intraoperative bougie use.

METHODS

- **Retrospective** cohort from a single academic institution, 2010–2023.
- **Adults** with BMI ≥ 18.5 undergoing **elective, first-time PEHR** without concomitant procedures.
- **Primary Outcome:** Postoperative dysphagia.
- **Secondary Outcomes:** 30-day complications, readmission, GERD, recurrence, and reoperation.

STUDY DESIGN

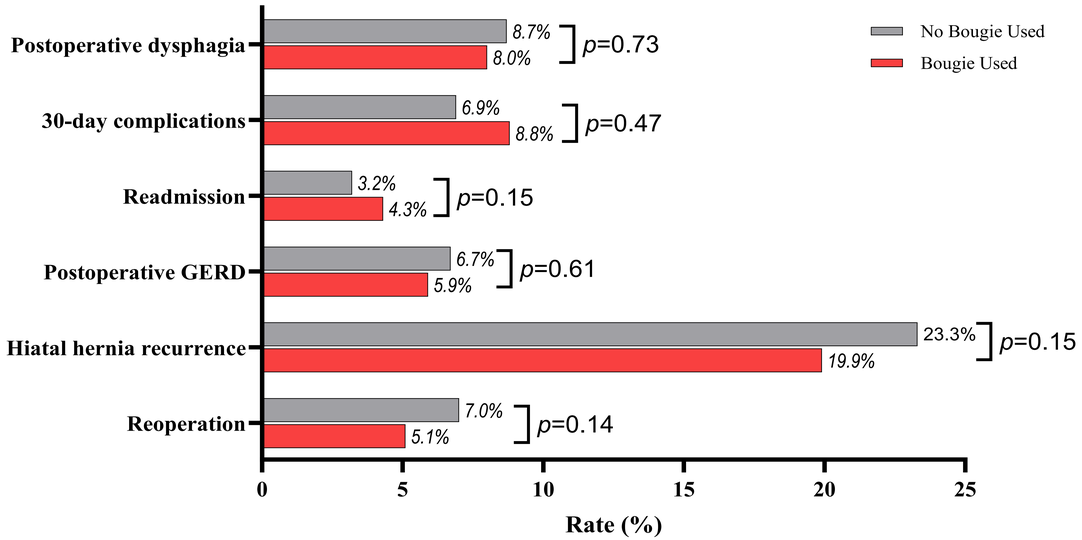
Elective first-time PEHR → **Grouped by Bougie Use** → **Stratified by wrap extent (None, Partial, Full)**

RESULTS

Cohort Characteristics (N = 839 PEH Repairs)

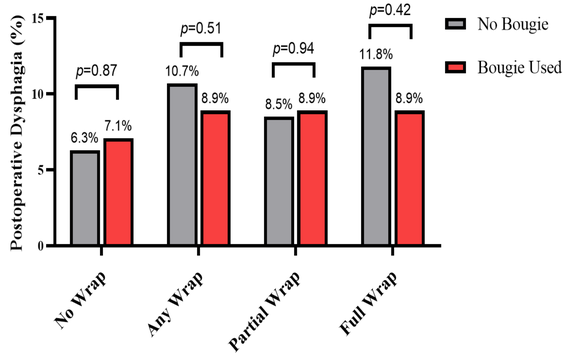
- **Bougie Use:** 463 (55%)
- **Fundoplication:** 582 (69%) — Nissen: 408 (70%); Partial: 172 (30%)
- **Demographics:** Well-matched baseline characteristics across all bougie and wrap cohorts.
- **Full vs. Partial Wrap:** Patients undergoing a full wrap were significantly older (64.4 vs 62.4 years; $p<0.001$) and more likely female (81.9% vs 74.7%; $p<0.001$).

Figure 1. Bougie use not associated with significant differences in primary or secondary endpoints.



DYSPHAGIA UNAFFECTED BY WRAP EXTENT

Figure 2. Rates of dysphagia not associated with extent of wrap regardless of bougie use.



CONCLUSION

- **No Overall Benefit:** Routine intraoperative bougie use during PEHR is not associated with improved primary or secondary outcomes, including postoperative dysphagia.
- **Strategy Independent:** This lack of clinical benefit persists regardless of the fundoplication strategy employed (none, partial, or full).
- **Clinical Takeaway:** These data support a selective, rather than routine, approach to bougie use during hiatal hernia repair.

References

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11100 Euclid Avenue
Cleveland, Ohio 44106-5047
216-983-4930
Sami.Abul-Khoudoud@uhhospitals.org