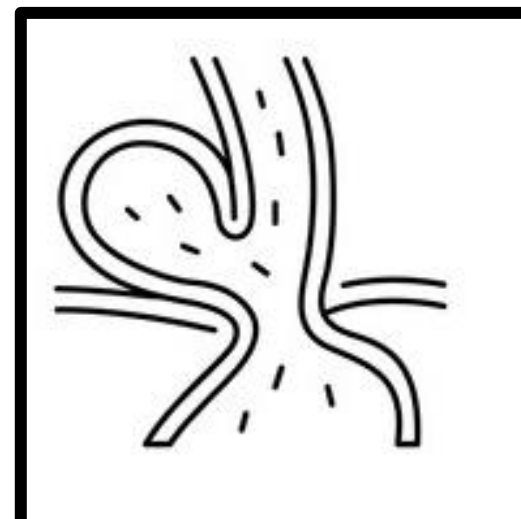


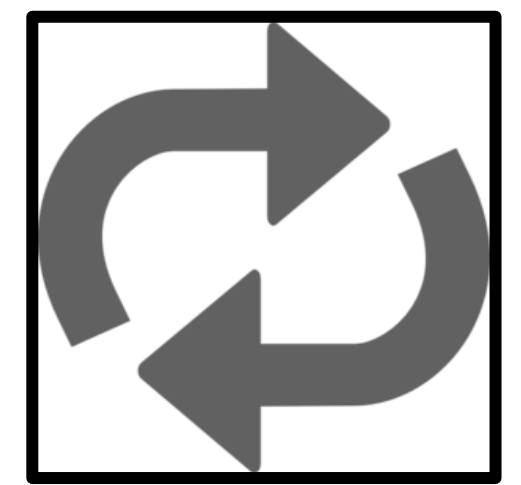
MESH USE DOES NOT CONFER ANY IMPROVEMENT IN OUTCOMES FOR BOTH PRIMARY AND RECURRENT PARAESOPHAGEAL HERNIA REPAIRS

Emily F Simon, MD; Joshua Lyons, MD; Ayesha Siddiq, MD; Samuel Zolin, MD; Natalie N Chakraborty, MD; Kayvan Barekatain, MD; Hamza Nasir Chatha, MD; Patrick Wieland, MD; Trisha Lal, MD; Saher-Zahra Khan, MD; Nicolette Winder, MD; Kallie Wynens, MD; Jeffrey Marks, MD

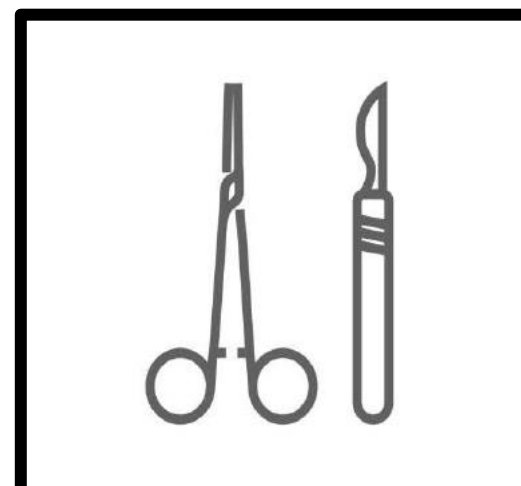
BACKGROUND



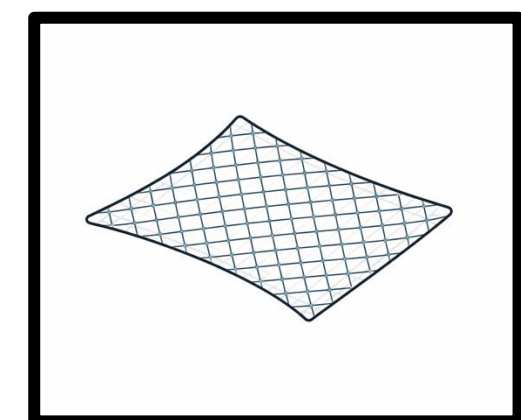
The role of mesh in paraesophageal hernia repair (PEHR) remains controversial.



Prior studies demonstrate inconsistent evidence regarding recurrence prevention.



Concerns remain about the postoperative complications given unclear efficacy.



AIM: Evaluate outcomes following the use of mesh in primary and recurrent PEHRs.

METHODS

INCLUSION:

- Patients undergoing PEHR
- 2010-2023

EXCLUSION:

- Age <18
- Non-elective
- Multi-procedural case
- <30 days follow up

DATA SOURCE

- Retrospective chart review

PATIENT GROUPS:

- Primary PEHR
- Recurrent PEHR
- Mesh
- Mesh
- No mesh
- No mesh

STATISTICAL ANALYSIS:

- Univariable: Chi-Square, Kruskal-Wallis
- Multivariable Logistic Regression

RESULTS

PATIENT GROUPS:

Primary PEHR		Recurrent PEHR	
Mesh	N=147 (17.4%)	Mesh	N=32 (28.8%)
No Mesh	N=697 (82.6%)	No Mesh	N=79 (71.2%)

UNIVARIABLE ANALYSIS:

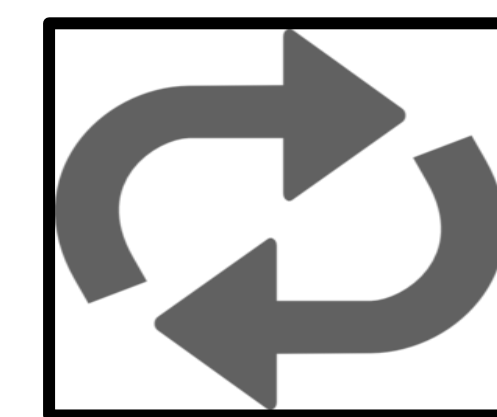
	Primary Repair			Repeat Repair		
	Mesh	No Mesh	p-value	Mesh	No Mesh	p-value
Recurrence	34 (23.1%)	154 (22.1%)	0.78	10 (31%)	27 (34%)	0.77
30-day Complications	10 (6.8%)	55 (7.9%)	0.65	4 (13%)	6 (8%)	0.41
Reoperation	6 (4.1%)	48 (6.9%)	0.21	3 (9%)	5 (6%)	0.57
GERD	4 (2.7%)	50 (7.2%)	0.78	3 (9%)	11 (14%)	0.51
Dysphagia	14 (9.5%)	56 (8.0%)	0.61	3 (9%)	7 (9%)	0.81

MULTIVARIABLE LOGISTIC REGRESSION MODEL:

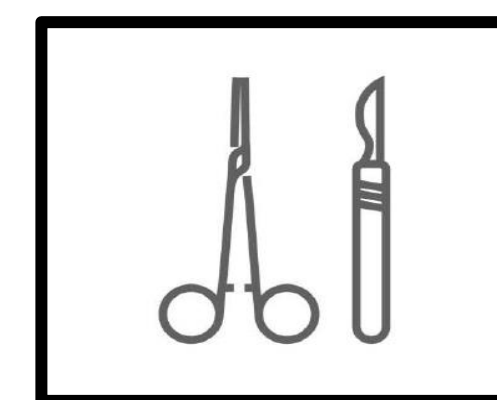
- *Model 1:* factors associated with **hernia recurrence** in patients undergoing **primary PEHR**
- *Model 2:* factors associated with **hernia recurrence** in patients undergoing **recurrent PEHR**
- *Independent factors included in model:* **mesh versus no mesh**, BMI, age, smoking, diabetes, and operative factors

Mesh was **not associated** with **reduced odds of hernia recurrence** in either model

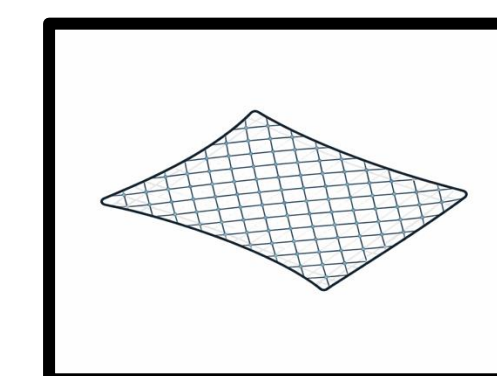
CONCLUSIONS



In both primary and recurrent PEHR, mesh did not decrease hernia recurrence.



Postoperative outcomes were comparable with and without mesh.



Mesh should be used selectively given lack of clear clinical advantage.