Transabdominal Retro-muscular Repair For Ventral Hernias: A Single Center Retrospective Analysis

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Introduction

•Ventral and incisional hernias require durable repair.
•**TARM (Transabdominal Retromuscular) repair** is a minimally invasive technique
•It enables **retromuscular (sublay) mesh placement** via a transabdominal approach.
•Combines benefits of laparoscopy with principles of open Rives–Stoppa repair.
•Can be performed using **laparoscopic or robotic platforms**

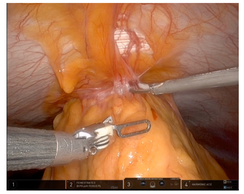
Aim

To evaluate the **safety, feasibility, and short-term outcomes** of TARM repair.

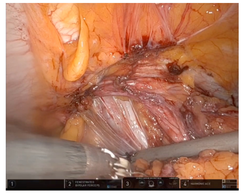
Methodology

- Retrospective analysis of a prospectively maintained database
- January 2024 and December 2025
- Choice between robotic and laparoscopic approaches was based on surgeon preference and patient-specific factors.
- Follow up at 1 week, 1 month, and 3 month

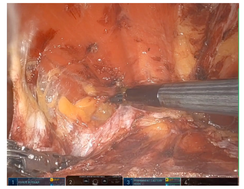
Surgical steps



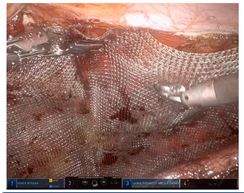
Reduction of hernia content



Reduction of hernia sac

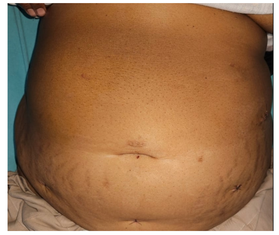


Creation of retro-rectus space



Polypropylene mesh placement

Primary ventral hernia



Post robotic TARM repair

Variable	n= 43
Male	12 (28%)
Female	31 (72%)
Mean age (years)	43 +/- 11.1
Mean BMI (kg/m²)	27.4 ± 3.9
Primary hernia	26 (60.5%)
Incisional hernia	17 (39.5%)
Robotic	23
Laparoscopic	20
Conversion	None
Mean defect size (cm)	3.7 ± 2.3 cm

Results

Mean operative time (mins)	110 ± 36 (50–180)
Mean hospital stay	1.3 ± 0.6 days
Complications (overall –9%)	**4**
• Hematoma	1
• Surgical site infection	2
• Intestinal obstruction	1
• Recurrence (at 3 months)	None

Conclusion

- TARM repair is a safe and effective minimally invasive option for ventral hernia repair.
- Both robotic and laparoscopic techniques achieve excellent short-term outcomes - low morbidity, early discharge, and precise mesh placement.
- Further studies with longer follow-up are required to evaluate recurrence rates and long-term durability