Impact of obesity on rate of recurrent symptoms after eTEP ventral hernia repair with a mean follow-up of 46 months

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BACKGROUND

- Robotic enhanced-view totally extraperitoneal (eTEP) hernia repair is a novel approach that is pushing the boundaries of hernia surgery.
- Given the emergence of eTEP repairs for ventral hernias there is less long term data regarding recurrence rates

METHODS

- Retrospective single institution cohort study

Patient demographics and comorbidities, perioperative variables, 30-day outcomes were stratified to BMI < 35 kg/m^2 (acceptable risk) and BMI ≥35 kg/m^2 (high risk) groups. These groups were then contacted in August 2023 for interval follow up information

RESULTS

- Total of 97 eTEP procedures from April 2018-2020
- 57% of the initial cohort who responded to a phone questionnaire regarding recurrent symptoms,. There was a mean follow up of 45.5 months months for BMI < 35 group and 47.6 months for the BMI > 35 group
- There was a slightly higher but not statistically significant (0.12) rate of recurrent symptoms in the BMI < 35 group compared to the BMI > 35 group

Table 1. Demographics and peri-operative outcomes

	BMI <35 (n=59)	BMI >=35 (n=36)	P-value
Mean Age (stdev)	55.4	53.5	0.48
Male (%)	42.4	33.3	0.39
Smoking (%)	16.9	11.1	0.44
Diabetes (%)	13.8	28.6	0.08
ASA >3 (%)	0.0	2.8	
Mean BMI	29.0	40.9	
Length of Stay (days)	1.4	1.3	0.83
Infection(%)	3.4	8.3	0.30
Seroma(%)	11.9	19.4	0.32
Ileus or SBO	0.0	0.0	
Readmission(%)	3.4	8.3	0.30

Table 2. Long-term patient follow-up at 4 years, 57% follow-up rate

	BMI <35 (n=32)	BMI >=35 (n=22)	P-value
Post-op Followup (months)	45.5	47.6	0.53
Recurrent Symptoms (%)	33.9	25.0	0.12

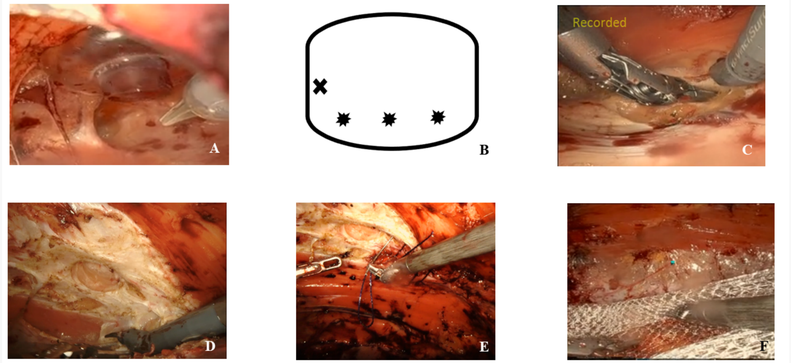


Figure 2: eTEP Operative Technique Starts with gaining extraperitoneal access (a) and places ports laterally (b). The retrorectus space is dissected (c) to expose the hernia defect (d), which is then closed with barbed suture (e) before placing mesh.

CONCLUSIONS

- No statistical difference in the rate of recurrent symptoms between BMI < 35 group compared to the BMI > 35 group with mean follow up of 46.3 months
- Given outcome of symptom recurrence we plan for interval CT scan to correlate

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