eTEP VS- TAPP IN THE MANAGEMENT OF PRIMARY MIDLINE VENTRAL HERNIAS: A PROSPECTIVE COMPARATIVE STUDY OF SHORT-TERM CLINICAL OUTCOMES

Ramesh Bhargav Kavuluri[1], Manash Ranjan Sahoo[2], Deepak Ranjan Nayak[3], Bhuban Mohan Das[4]

[1] : Junior Resident, [3] : Associate Professor, [4] : Professor - Dept of Gen Surgery, SCB medical college and hospital, Cuttack, Odisha ; [2] : Vice-Chancellor Odisha Universiy of health sciences –INDIA

1. Introduction

Evolution of hernia surgery from open to minimally invasive techniques has improved patient outcomes

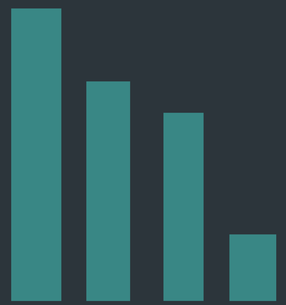
From Leblanc and booths' IPOM repair to Igor belanskys' eTEP for ventral hernias, we have come a long way

Abdominal wall hernia surgeries ~20million/year globally

Limited studies compared TAPP and eTEP in management of primary midline ventral hernias

2. Objectives

To compare the TAPP and eTEP techniques in the management of primary midline ventral hernias with defect sizes less than 5 cm



3. Materials & Methods

A Single center prospective cohort study

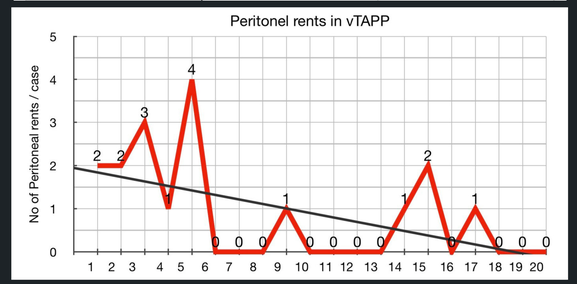
40 patients, 20 in each group by (TAPP and eTEP groups) propensity score matching

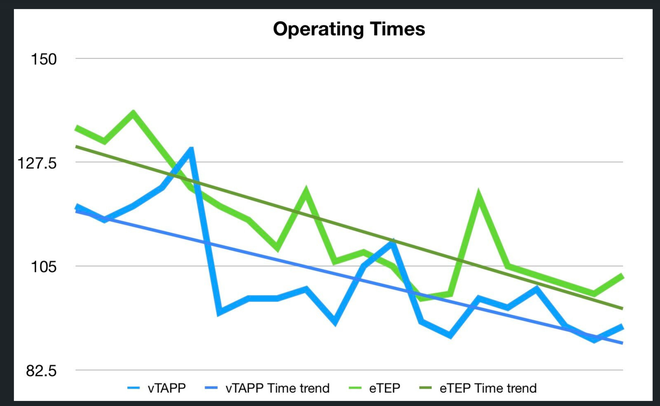
Groups were compared based on operative time, post operative pain, quality of life (QoL)

Study period 2023 January- 2024 July

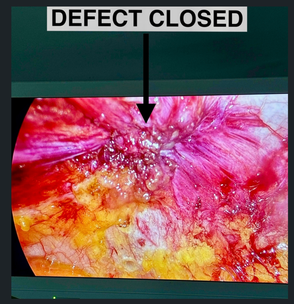
4. Results

Demographics	vTAPP	eTEP
Age	Mean 47.6 SD	Mean 48.2 SD
Gender	Male- 12 Female-8	Male- 12 Female-8
BMI	24kg/m^2	23.6kg/m^2
Type of hernia	Umbilical- 16 Epigastric- 3 Subxiphoid-1	Umbilical- 16 Epigastric- 3 Subxiphoid-1
Comorbidities	Diabetes-2 Hypertension-2	Diabates- 2 Hypertension-3
Diastesis Rectii	2 patients	2 patients

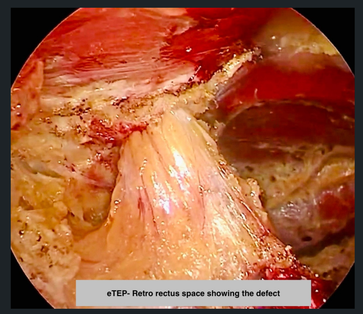





PERITONEAL DISSECTION






eTEP- Retro rectus space showing the defect

Post-operative Complications

Complications	vTAPP Group	eTEP Group	P Value
Minor Complications			
Urinary retention	2/20 (10%)	1/20 (5%)	0.6134[a]
Prolonged Ileus	1/20 (5%)	0	0.4883[a]
Port-Site infection	1/20 (5%)	0	0.4883[a]
Major Complications			
Hematoma formation	2/20 (10%)	1/20 (5%)	0.6134[a]
Seroma formation	1/20 (5%)	0	0.4883[a]
Mesh Infection	0	0	-
Prolonged Pain	0	0	-
Systemic complications	0	0	-
Recurrance of hernia	0	0	-
Mean followup period	16.01months 4.61SD	16.05months. 4.60 SD	0.9665[b]

[a]Fisher's Exact Test, [b]Two-Sample t-Test

5. Discussion

Mean operating time for TAPP was significantly less than eTEP

No difference amongst groups interms of peri-operative complications, recurrance rates, length of hospital stay, Quality of Life (QoL)

"Eccentric dissection" in TAPP gave better ergonomics and decreased peritoneal rents

eTEP for hernias less than 5cms defect size might be cumbersome

6. Conclusions

Ventral hernia management has plethora of options

Choose the appropriate technique for the right patient

Both techniques are feasible and demonstrated comparable outcomes

References

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2) Prasad P, Tantia O, Patle NM, Khanna S, Sen B. Laparoscopic ventral hernia repair:A comparative study of transabdominal preperitoneal versus intraperitoneal onlay mesh repair. J Laparoendosc Adv Surg Tech A 2011;21:477–83.