LAPAROSCOPIC TOTALLY EXTRAPERITONEAL HERNIOTOMY VERSUS LAPAROSCOPIC TOTALLY EXTRAPERITONEAL MESH REPAIR FOR UNILATERAL INGUINAL HERNIA IN YOUNG MALES - A DOUBLE BLINDED RANDOMIZED CONTROLLED TRIAL

Anubhav Vindal* MS, DNB, MNAMS, MRCS Ed, FAIS, FCLS, FACS, FRCS Glas, FRCS Ed; **Ajay Jangid#,** MBBS, MS; **Shreya Agarwala #,** MBBS, MS

Pawanindra Lal @ MS, DNB, MNASc, FIMSA, FRCS Ed, FRCS Glas, FRCS Eng, FRCS Irel, FCLS, FACS, FAMS, FFSTEd

*Professor of Surgery, Co Chairman Division of Minimal Access Surgery; #Senior Resident in Surgery; @Director Professor & Head of Surgery, Chairman, Division of Minimal Access Surgery

From - Division of Minimal Access Surgery, Department of Surgery, Maulana Azad Medical College, University of Delhi, India

Introduction

The use of mesh for hernia repair carries the possibility of complications like postoperative pain, discomfort and infertility due to entrapment of vas defrens.

To avoid these potential complications of mesh repair, we devised and previously described mesh free Laparoscopic Totally Extraperitoneal Herniotomy **(TEP-Hy)** for unilateral inguinal hernias in young males with a normal posterior wall of the inguinal canal.

The present study compares the outcomes of TEP-Hy with laparoscopic mesh repair **(TEP)** in this subset of patients.

Method

Study period- 3 years.

40 male patients aged 18-30 years with Nyhus category 1/2 inguinal hernia 20 patients each TEP-Hy and TEP group.

Primary objective- recurrence at 12 months.

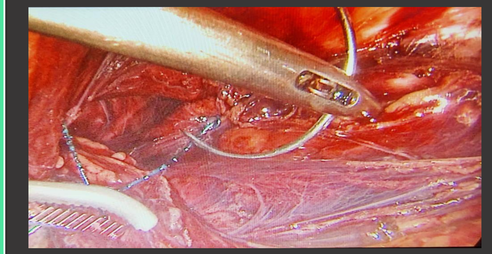
Secondary objectives-

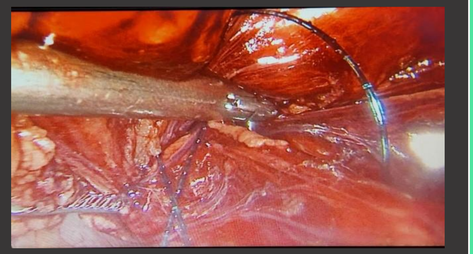
Post-operative pain (VAS), time to resume activities of daily living (days), complications, and patient satisfaction (Capuzzo score).

All cases- day care procedures.

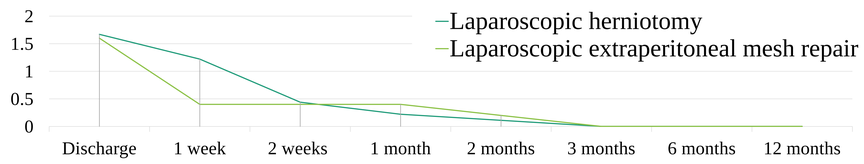
The patient and the observer were blinded towards the allocation groups.

Tightening of deep ring in NYHUS category 2

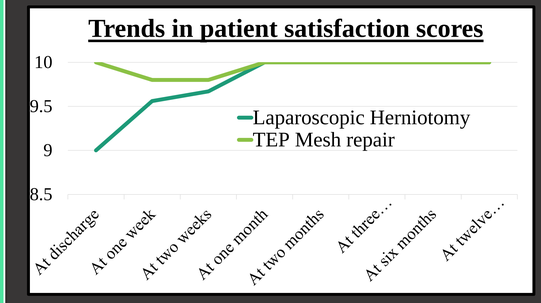




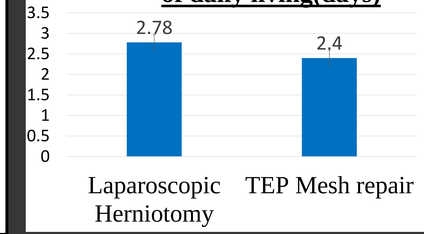
Trends in VAS Scores



Trends in patient satisfaction scores



Time to return to activities of daily living(days)



Results

Follow-up: 15 to 36 months (Mean 21 months).

Recurrence: At 12 months, nil in both groups.

Complications: None observed in any of the patients during the follow up.

Postoperative pain: TEP-Hy and TEP groups on day 0 (VAS 1.7+/-0.55 versus 1.5+/-1.1, p=0.72) and day 30 (VAS 0.2+/-0.67 versus 0.4+/- 0.55, p=0.307).

Patient satisfaction score: Day 0: 9+/-0.71 TEP-Hy group versus 10+/-0 TEP group ($p<0.05$) and on Day 30 was 10+/-0 in both the groups.

Time to resume activities of daily living: TEP-Hy vs TEP group (2.78+/-0.55 days versus 2.4+/-0.6 days, p=0.5).

Conclusion

First study to compare TEP-Hy with TEP for inguinal hernia in young males.

Both the procedures were found to have comparable outcomes in terms of recurrence rates, post-operative pain, time to resume daily activities, and patient satisfaction.

TEP-Hy is a viable option for a select subset of patients

More studies with a larger sample size and a longer follow-up will help in further elucidating the place of this new procedure.