

Comparative analysis of the effectiveness of a modified fixation method in endoscopic hernioplasty for treating patients with primary inguinal hernia

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Introduction and Aim

Introduction

Endoscopic inguinal hernioplasty is a common repair procedure. Standard mesh fixation methods can cause chronic pain and recurrence.

Modified fixation aims to reduce these complications and improve outcomes.

Aim of the Study

Evaluate the effectiveness of a modified mesh fixation method versus the standard EHS technique.

Primary outcomes: incidence of chronic postoperative pain and recurrence rates.

Materials and Methods

Study Design & Groups

- Prospective cohort study
- Modified Fixation Group (MFG): 40 patients (2018–2024)
- Standard Fixation Group (SFG): 150 patients (2002–2017)

All patients received a 10x15 cm polypropylene mesh.

Modified Fixation Technique

Longitudinal trimming of mesh to create branches.

Suturing mesh branches around spermatic cord in preperitoneal position.

- Inclusion: primary inguinal hernias ≤ 3 cm, ASA II-III, mean BMI 29.5
- Statistical analysis: Chi-square test for complications and recurrence



Results: Chronic Postoperative Pain

Modified Fixation Group (MFG)

0% incidence of chronic postoperative pain (0/40 patients).

Standard Fixation Group (SFG)

3% incidence of chronic postoperative pain (2/150 patients).

Summary

The modified method significantly reduced chronic pain compared to the standard technique.

Conclusions and Future Directions

Conclusions

The modified fixation method reduces chronic postoperative pain effectively.

