



Comparative study of mesh fixation with fibrin glue versus tackers in laproscopic totally extraperitoneal inguinal hernia repair

Authors

Dr Kislay Kant¹, Dr H N Singh Hariaudh²

¹JR Dept of Surgery PMCH

²Asso Prof Dept of Surgery NMCH Patna

Introduction

- TEP laproscopic hernioplasty is a popular choice for inguinal hernia. Fixing the mesh to the underlying tissues with tackers is associated with risk of surgical trauma and nerve injury. As an alternative fibrin glue can reliably keep the mesh in place without the complications of stapling 1'2'3
- Fibrin glue has two components -sealant, freeze dried component of fibrinogen, transglutaminase and fibronectin inhibits tissues fibrinolysis and Catalyst which is thrombin dissolved with calcium chloride.

Keywords: TEP (totally extraperitoneal)

Aims and Objectives

- To compare the use of fibrin glue and tackers for mesh fixation in laproscopic TEP inguinal hernia repair.

Materials and Methods

- Between November 2017 to March 2019, 60 patients having inguinal hernia, randomised into two groups underwent laproscopic TEP hernia repair.

All of them underwent repair with same surgical protocols except the method of mesh fixation and were followed up for 6 month.

Inclusion Criteria

- Patient aged 18-60years
- U/L inguinal hernia
- Hernia defect between 2-5centimeters

Exclusion Criteria

- Complicated inguinal hernia
- B/L inguinal hernia
- Femoral hernia

Results

- Mean operating time was comparable between both the groups (78 minutes in tackers and 80.17 minutes in fibrin glue)
- The average hospital stay was 60.07 hours in tackers and 51.27 hours in fibrin glue group (p value <0.05)
- The incidence of seroma formation was significantly higher in tackers groups on the 30th day and 2nd month follow up (p value <0.05)
- There was no recurrence in either group

Table 1 Comparison of outcomes in two groups

Outcomes	Tackers (n=30)	Fibrin glue (n=30)	P value
Operating time	78 +_4.07	80.17+_ 4.64	0.059
Average hospital stay	60.07+_6.97	51.27+_3.62	0.0001
Seroma formation till day 30	10 (33.33%)	2 (6.67%)	0.021
Seroma formation till 2 nd month	9 (30%)	2 (6.67%)	0.042
Groin pain till 3 rd month	8 (26.67%)	0	0.005
Return to work in 15 days ;	12 (40%)	21 (70%)	0.02

- Significantly more number of cases complained of groin pain post operatively in tackers groups (p value <0.05)70% of patients returned to work at 15th day follow up from the fibrin glue group while 40% from tackers group.
- Other parameters such as incidence of post operative urinary retention, incidence of haematoma formation did not differ significantly at subsequent follow up

Conclusion

TEP repair of inguinal hernia using mesh secured with fibrin glue offer better post operative outcome, lesser incidence of haematoma and seroma formation and shorter duration of hospital stay with lesser pain and faster return to usual activities.