

Original Research Article

Mesh needs fixation in Laparoscopic Groin Hernia Repair: An Observational Study

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Abstract:

Background & Method: The aim of this study is to Mesh needs fixation in Laparoscopic Groin Hernia Repair. 40 cases were operated with Laparoscopic groin hernia repair. The cases were evaluated through proper history taking, clinical examination, operative procedure and post-operative follow ups.

Result: Post-operative complications in laparoscopic repair was port site infection-2.5%, seroma collection-2.5%, The duration of stay in hospital was 4 days for Laparoscopic repair. The recurrence rate nil recurrence with Laparoscopic repair. The return to daily activities was 7 days in Laparoscopic repair, The patient's feedback was good with Laparoscopic repair.

Conclusion: Less complication and 0 recurrences in Laparoscopic repair. Cost was reduced as we used a single fixation device and closure was done using barb sutures / vicryl. The short term results clearly favour laparoscopic repair regarding post-operative pain, sick leave and resumption of normal physical activities.

Keywords: Mesh, Laparoscopic, Groin & Hernia.

Study Designed: Observational Study.

1. INTRODUCTION

A hernia is defined as an abnormal protrusion of an organ or tissue through a defect in its surrounding walls. Although a hernia can occur at various sites of the body, these defects most commonly involve the abdominal wall, particularly the inguinal region[1]. Abdominal wall hernias occur only at sites at which the Aponeurosis and fascia are not covered by striated muscle. These sites most commonly include the inguinal, femoral, and umbilical areas, linear alba, lower portion of the semilunar line, and sites of prior incisions. So-called neck or orifice of a hernia is located at the innermost musculoaponeurotic layer, whereas the hernia sac is lined by peritoneum and protrudes from the neck[2]. There is no consistent relationship between the area of a hernia defect and the size of a hernia sac.

Groin hernia repair is one among the most commonly performed operation in India, owing to a significant lifetime incidence and variety of successful treatment modalities[3]. Advancements in perioperative anaesthesia and operative technique have made this an outpatient ambulatory operation with low recurrence rates and morbidity. Given this success, quality of life and the avoidance of chronic pain have become the most important considerations in hernia repair[4].

Approximately 75% of abdominal wall hernias occur in the groin. The lifetime risk of groin hernia is 27% in men and 3% in women .Of groin hernia repairs, 90% are performed in men and 10% in women[5]. The incidence of groin hernias in males has a bimodal distribution, with peaks before the first year of age and after age 40. Abramson demonstrated the age dependence of groin hernias in 1978. Those age 25 to 34 years had a lifetime prevalence rate of 15%, whereas those age 75 years and over had a rate of 47%.Approximately 70% of femoral hernia repairs are performed in women; however, groin hernias are five times more common than femoral hernias[6]. The most common subtype of groin hernia in men and women is the indirect groin hernia.

2. MATERIAL & METHOD

This study conducted at Atal Bihari Vajpayee Government Medical College, Vidisha, Madhya Pradesh from Jan 2022 to Dec 2022, includes 80 patients presenting with groin hernia.

Inclusion Criteria

1. Patient diagnosed as having groin hernia aged 18 years and above giving valid informed consent.
2. Patient with unilateral or bilateral groin hernias.

Exclusion Criteria

1. Patients with bleeding diathesis
2. Patients with complicated groin hernias.
3. Age more than 75 years with cardiovascular abnormalities
4. Patient with pace makers or any cardiac devices

The material for the study is taken from the cases admitted in the surgical ward of the Department of General Surgery, who are diagnosed to have groin hernia.

Follow up done for a period of six months following surgery as follows:

One week after surgery.

Once a month for three months and at the end of six months after surgery.

3. RESULTS

TABLE 1: CO MORBIDITIES OF THE PATIENTS

	LAPROSCOPIC REPAIR
BA	0.0%
COPD	0.0%
DM	7.5%
DM, B/L IH	0.0%
DM, SHT	0.0%
NIL	80.0%
SHT	12.5%

TABLE 2: POST OPERATIVE COMPLICATION

	LAPAROSCOPIC REPAIR
NIL	95.0%
PSI	2.5%
SEROMA	2.5%
WOUND INFECTION	0.0%

TABLE 3: RECURRENCE

	LAPAROSCOPIC REPAIR
NIL	100.0%
RECURRENCE	0.0%

TABLE 4: RECURRENCE

	LAPAROSCOPIC REPAIR
I	92.5%
II	7.5%
III	0.0%

Post-operative complications in laparoscopic repair was port site infection-2.5%,seroma collection-2.5%, The duration of stay in hospital was 4 days for Laparoscopic repair. The recurrence rate nil recurrence with Laparoscopic repair. The return to daily activities was 7 days in Laparoscopic repair, The patient's feedback was good with Laparoscopic repair.

4. DISCUSSION

Out of 80 patient of groin hernia operated in our study, all patients were male incidentally as groin hernias are more common among male patients.

In our study the duration of surgery (operation procedure time) was calculated for each patient at the time of surgery, the mean duration of surgery for laparoscopic groin hernia repair was 80 minutes [7].

In our study the post-operative pain in each group, laparoscopic groin hernia repair and Lichtenstein's groin hernia mesh repair was analysed through visual analogue scale and patient's complaints and inference. Laparoscopic groin hernia repair in spite of adequate analgesics[8].

Among 80 patients of groin hernia included in our study the duration of stay in hospital following surgery were calculated and found to be 4 days for laparoscopic repair[9]. In this comparative study including 80 patients of groin hernia operated, the mean days of return to daily activities was 7 days for laparoscopic groin hernia repair.

Intraoperative complications were analysed in our study and 2 cases of vascular injury (1 inferior epigastria vessel –in scrotal abdomen case, 1 Pampniform plexus injury in huge hernia) no intra operative complications with laparoscopic hernia repair.

5. CONCLUSION

Less complication and 0 recurrences in Laparoscopic repair. Cost was reduced as we used a single fixation device and closure was done using barb sutures / vicryl. The short term results clearly favour laparoscopic repair regarding post-operative pain, sick leave and resumption of normal physical activities.

6. REFERENCES

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