

# A Clinical Study of E-TOP Repair for Inguinal Hernias in Adults

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**Abstract:** To study and evaluate E-TOP hernioplasty for inguinal hernia repair in adults in view of patient selection, operative procedure time, intraoperative complications, post operative complications, post operative pain, duration of stay in hospital, duration required to get back to normal activities and recurrence.

**Keywords:** inguinal hernia, E-TOP hernioplasty, postoperative complications, recurrence rate, patient recovery

## 1. Introduction

The rapid changes that have been witnessed in open approach surgeries, prosthetic materials and laparoscopic surgeries have made hernia surgery, a most interesting field of endeavor that demands renewed discipline and dedication. Though a variety of procedure are performed none can be termed as an ideal procedure as each one is accompanied by varied early late complications, the most significant being recurrence. In 1981, William Bull, one of the most prominent Surgeons, wrote of hernia repairs, "It is wise to estimate the value of given procedures by the relative proportions of relapses". Inguinal hernia affects both men and women but is much more common in men who comprise over 90% of operated patients. Considering both operated and non-operated inguinal hernias, the lifetime prevalence rate is 47% for men up to and including the age of 75.4 Repair of an inguinal hernia is one of the most common operations among adults today. The lifetime risk of undergoing such a repair is 27% for men and 3% for women.

## 2. Materials and Methods

**Study Type:** Prospective Study of 50 cases of inguinal hernia admitted in tertiary care center

**Duration:** August 23 to August 24

**Study place:** DR. V. M. G. M. C., and Hospital Solapur.

## Procedure:

In this study 50 cases for the purpose of study were selected on the basis of the non-probability (purposive) sampling method.

Patients with unilateral inguinal hernia with reducible and no obstructive and either primary or recurrent hernias are included in this study.

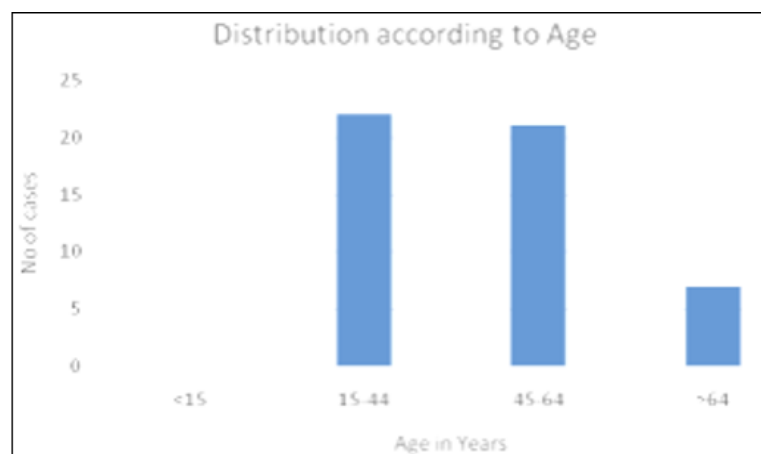
After appropriate workout Patients diagnosed as inguinal hernia were operated for E-TOP hernia repair under general anesthesia. All Patients were operated by expert faculty.

In post operative period Patients were studied in view of patient selection, operative procedure time, intraoperative complications, post operative complications, post operative pain, duration of stay in hospital, duration required to get back to normal activities and recurrence.

## 3. Observation and Results

**Table 1:** Distribution According to Age

Sr. No	Age (in yrs)	No. of Cases	Percentage
1	<15	0	0%
2	15-44	22	44%
3	45-64	21	42%
4	>64	7	14%
	Total	50	100%



**Graph 1:** Age Incidence

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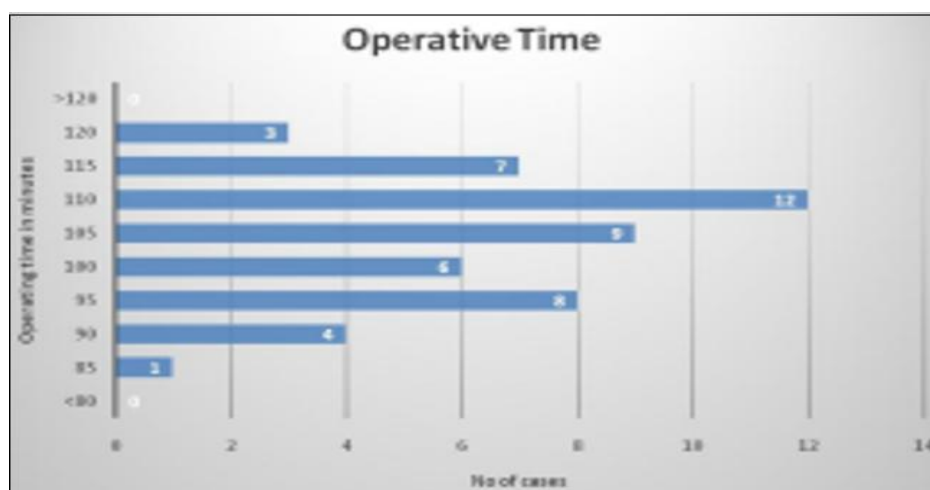
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The age distribution of the subjects ranged from 19 to 73 years. Out of the total 50 cases, 22 cases (44%) were in the age group of 15–44 years, 21 cases (42%) were in the age

group of 45–64 years, and 7 cases (14%) were in the age group of >64 years.

**Table 2:** Distribution According to Operative Time: Operating Time Distribution

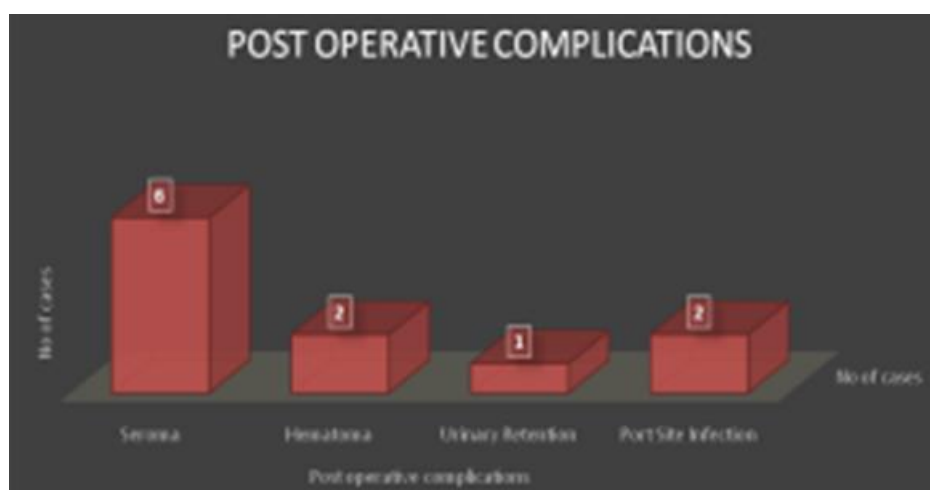
No	Operating Period Time (in minutes)	No. of Cases	Percentage
1	<80	0	0%
2	85	1	2%
3	90	4	8%
4	95	8	16%
5	100	6	12%
6	105	9	18%
7	110	12	24%
8	115	7	14%
9	120	3	6%
10	>120	0	0%
	Total	50	100%



The average time for TEP repair was between 105 to 115 minutes. The time duration can vary depending on the experience of the surgeon.

**Table 3:** Distribution According to Post Operative Complications

S. No.		No. of Cases	Percentage
1	No Compilations	39	78%
2	Seroma	6	12%
3	Hematoma	2	4%
4	Urinary Retention	1	2%
5	Post Site Infection	2	4%
	Total	50	100%

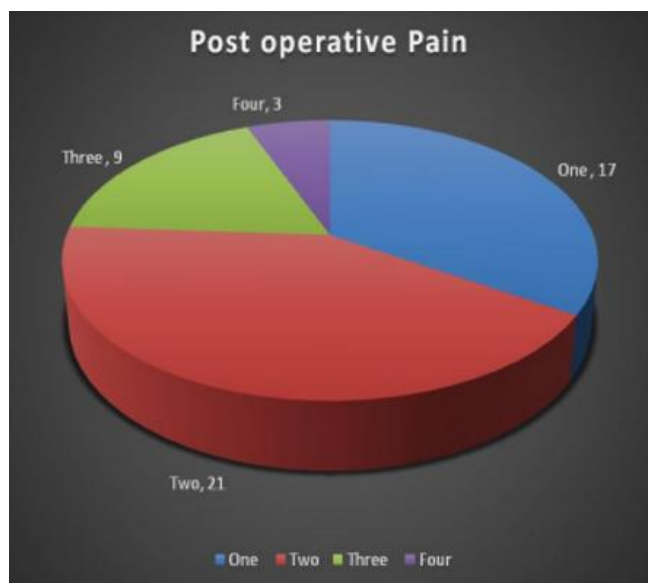


In our study, 11 cases out of total 50 cases presented with post-operative complications, of which 6 cases (12%) had seroma, hematoma, as well as port site infection. Port site

infection was seen in 2 cases (4%), whereas urinary retention was seen in 1 case (2%) following TEP repair.

**Table 4:** Distribution According to Post Operative Pain

S. No.	Post Operative Pain	No. of Cases	Percentage
1	Zero	0	0%
2	One	17	34%
3	Two	21	42%
4	Three	9	18%
5	Four	3	6%
6	Five	0	0%
	Total	50	100%

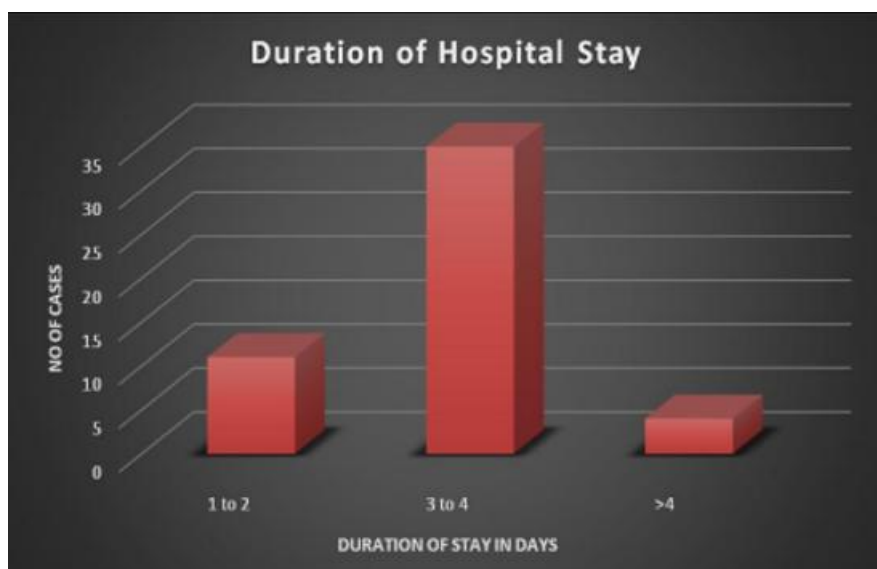


The post-operative pain was measured using Visual Analog Scale (VAS) 6 hours after the surgery. Out of total 50 cases, 17 cases (34%) had mild pain, 21 cases (42%) had moderate

pain, 9 cases (18%) had severe pain, and 3 cases (6%) had extreme pain.

**Table 5:** Duration of Hospital Stay

Sr No	Duration of Hospital Stay (in days)	No of Cases	Percentage
1	1 to 2	11	22%
2	3 to 4	35	70%
3	>4	4	8%
	Total	50	100%



In our study, 35 (70%) cases were discharged on post-operative day three or four, 11 cases (22%) were discharged on post-operative day one or two, and 4 cases (8%) were discharged after day four. Duration of stay can be variable depending on post-operative pain and associated complications.

#### **4. Conclusion**

- 1) In our study the incidence of hernia was common in the younger age group. greatest in the 15-45 yrs of age and is more common in males than females.
- 2) The mean duration of hospital stay was 3.12 days.
- 3) Post operative wound infection developed in 2 Patients.
- 4) Mild post operative pain developed in 17 and sever pain developed in 2 Patients.
- 5) 40 Patients resumed their normal activities within one week.

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