

# **Original Research Paper**

# **General Surgery**

# TENSION FREE INGUINAL HERNIA REPAIR: COMPARATIVE STUDY BETWEEN OPEN (Lichtenstein method) AND LAPROSCOPIC TOTALLY EXTRAPERITONEAL MESH REPAIR IN THE TREATMENT OF INGUINAL REPAIR (TEP)

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ABSTRACT To compare the results of onlay (Lichtenstein) and laparoscopic totally extraperitoneal mesh repair in the treatment of inguinal hernia in patients who presented to the department of general surgery, Meenakshi Medical College Hospital and Research Institute, Kanchipuram in the past two years.

# **KEYWORDS**: Hernia, TEP, TAPP, Lichtenstein tension free, repair

### **INTRODUCTION:**

Inguinal hernia repair is one of the corner stone of a general surgery practice and is one the most commonly performed procedure owing to a significant life time incidence and variety of successful treatment modalities. The most significant advances to impact inguinal hernia repair have been the addition of prosthetic materials to conventional repair and the introduction of laparoscopy to general surgical procedures.

The tension free repair has become dominant method of inguinal hernia repair. Recognizing that tension in a repair is the principal cause of recurrence. The era of tissue based repair was supplanted by tension free repairs with wide spread acceptance of prosthetic material for inguinal floor reconstruction. Initially described by Lichtenstein, the repair involved placement of a marlex mesh over the entire floor of the inguinal canal. Refinements in approach and technique have led to the development of the intraperitoneal onlay mesh (Fitzgibbons and Toy 1990), the transabdominal preperitoneal (TAPP) repair (Arregui 1991), and the totally extraperitoneal (TEP) repair (Duluq 1991).

Thus the need of the study is to compare open tension free inguinal hernia repair (Lichtenstein) with laparoscopic totally extraperitoneal inguinal hernia repair on recurrence rates and complications at 2 years.

## **METHODS AND RESULTS:**

Between Jan 2015 to Dec 2016, over a period of two years 40 patients presenting inguinal hernia were studied – 20 patients undergoing onlay mesh repair and 20 patients undergoing laparoscopic mesh repair in Meenakshi medical college hospital and research institute, Kanchipuram .Data on patients demographies, types of hernia, operative aspects, postoperative recovery, complications were collected.

In direct inguinal hernia (patient undergoing onlay mesh repair – 35 % and TEP - 40%).In Indirect hernia (patient undergoing onlay 60 %and TEP 50 %) most common sides involved in direct hernia is right side – 57.5%.Patients divided into two age groups < 40 (15 patients) >40 (25 patients).Complication encountered in onlay mesh is orchitis (about 20%) and cord edema (about 15%).Recurrence was about 5 % in onlay mesh repair. TEP mesh herniorrhaphy is safe and efficacious method of herniorrhaphy with a low rate of recurrence and chronic pain.

### **DISCUSSION:**

Laparoscopic inguinal hernia repair originated in the early 1990s as laparoscopy gained a foothold in general surgery. Inguinal hernias account for 75% of all abdominal wall hernias, and with a lifetime

risk of 27% in men and 3% in women. Repair of these hernias is one of the most commonly performed surgical procedures in the world. The term laparoscopic inguinal herniorrhaphy can refer to any of the following three techniques: Totally extra peritoneal (TEP) repair, Transabdominal preperitoneal (TAPP) repair, Intraperitoneal onlay mesh (IPOM) repair.

### **CONCLUSION:**

Tension free repair has become dominant method of inguinal hernia repair, recognizing that the tension in a repair is the principle cause of recurrence. Tension free repair can be done by both open Lichtenstein method and he laparocscopy TEP. In this study laparoscopic TEP is found to be superior than the open Lichtenstein method in terms of complications and recurrence.

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