

## **ABSTRACT**

### **BACKGROUND AND OBJECTIVE**

Inguinal hernia repair dates back to 1500 b.c earliest record. During this period abdominal wall hernias were treated with bandage and trusses. Surgery for inguinal hernia was started during 1<sup>st</sup> century A.D .tissue repairs were started and popularized by bassini, shouldice&Mcvay. All these techniques were primarily aimed at reducing recurrence rate. Recurrence rate was about 10 –30% unless or otherwise done by special surgeons or in specialized centres. Darn repairs were introduced to reduce wound tension by using either autologous tissue or synthetic suture material to bridge the gap between fascial tissues.

The addition of prosthetic materials to conventional tissue repairs is the evolution in treatment of inguinal hernias. New concept of post hernioplastypain syndrome is attributed to the use of mesh and entrapment of nerves during fixation of mesh.

Parietexself gripping mesh do not require sutures to fix the mesh, except for a single suture point at the insertion of anterior rectus sheath to the pubic tubercle. This study is to evaluate the benefits of self gripping mesh versus sutured mesh in lichtenstein's inguinal hernia repair.

### **METHODS:**

About 50 patients who attended general surgery out-patient department in our hospital with inguinal hernia were enrolled in study after getting informed consent. Routine preoperative evaluation and assessment were done. During surgery in about half of patients posterior wall strengthening was done with polypropylene mesh being fixed with polypropylene sutures. In another half of the patients ,self gripping mesh(parietex mesh) was used with fixation at pubic tubercle. Both the patients and the observer were double blinded during the study duration of surgery was noted for both groups.

Patients were observed in terms of immediate post operative pain, wound complications such as infection, seroma& hematoma. Follow up of patients were done at 1 month & 3 months time period.

## **RESULTS:**

The use of parietex mesh had shown a significant improvement in terms of pain, wound infection and hematoma formation when compared to sutured mesh. The intra-operative time duration was reduced in parietex self-gripping mesh. There was decreased postoperative complications , acute pain was reported as mild in 28%, moderate in 32% and severe in 12% of patients in parietexself gripping mesh, when compared to mild pain in 28%, moderate in 40% and severe in 32% in

sutured mesh groups. Pain at 1 month interval 24% in self adhesive mesh group, 40% in sutured mesh groups.

Pain at 3<sup>rd</sup> month was reported in 12% in self gripping mesh group, compared to 28% in sutured mesh group.

## **CONCLUSION:**

Duration of surgery, postoperative complications, acute and chronic pain were significantly reduced with parietexself gripping mesh compared to Lichtenstein repair with polypropylene mesh. The efficiency of gripping effect.

***Key words*** - inguinal hernia, parietexself gripping mesh, sutured mesh, acute pain, postoperative wound complications.