



A STUDY OF ONLAY MESH REPAIR IN INCISIONAL HERNIA

Dr Hemant Kumar Das

Assistant Professor, Department Of Surgery, Jawahar Lal Nehru Medical College, Bhagalpur, Bihar

Dr Pravin Kumar*

Junior Resident, Department Of Surgery, Jawahar Lal Nehru Medical College, Bhagalpur, Bihar *Corresponding Author

ABSTRACT Incisional hernia is a quite common disease met in surgical outdoor as well as in surgical emergency. It remains a very frequent postoperative complication. The two most common technique performed worldwide are onlay and sublay mesh repair. This study aims at onlay mesh repair in incisional hernia and find the result in terms of time taken for surgery, wound infection and recurrence.

KEYWORDS : Incisional Hernia, Onlay, Sublay, Seroma

INTRODUCTION –

After abdominal incision, incisional hernia is a well known complication and the incidence varies between 10 to 15 Percent. The risk increases upto 23% in those patients who develop surgical site infection. Incidence further rises upto 69% in high risk patients. The incisional hernia can occur after any abdominal incision but highest incidence is seen with midline incision. The incidence is more if it is performed for an emergency cases. Several methods for repair of incisional hernia have been described including open mesh repair and laparoscopic repair. Now a days mesh repair has become the gold standard treatment for incisional hernia. And now it is recommended that all cases of incisional hernia should be repaired using mesh irrespective of the size of the defect. Mesh can be placed as an underlay, inlay, onlay or sublay repair.

MATERIAL AND METHOD-

This study was conducted from 1st June 2018 to 30th November 2019 in surgery department, Jawaharlal Nehru Medical College, Bhagalpur, Bihar. A total of 72 cases were included in our study. After proper counseling and informed consent, the patients were subjected to the required surgery. All the preliminary investigations, diagnosis and preanaesthetic checkup were performed before shifting the patients to operation theatre.

EXCLUSION CRITERIA-

Emergency surgery, Massive ventral hernia, High risk patients (COPD, Uncontrolled diabetes, HIV, Hepatitis B etc).

METHOD-

An incision was given through the skin and fascia. Hernial sac dissected free of surrounding adhesion for a distance of 10cm laterally and along the full length of original incision. Sac opened, contents reduced to peritoneal cavity and excess of hernia sac and scar tissue excised out. The fascial defect closed using continuous polypropylene suture. A prolene mesh was cut to the approximate size with a must 5cm overlap of the defect. Mesh was sutured in place with prolene 2-0 suture to the anterior sheath laterally. Additional suture applied to the cranial and caudal edges of the mesh. Few stitches applied to the central part of the mesh. A suction drain was placed over the mesh.

All patients were given 1gm ceftriaxone 60 min before surgery. Postoperatively ceftriaxone 1gm given 12 hourly and metronidazole 100ml 8hourly for a period of 5 days. Diclofenac injection 75mg was given 12 hourly for first 24 hours, followed by SOS for next 48 hours. Drain was removed in 24 hour provided discharge was insignificant. Wound inspection was done on daily basis and dressing was applied as per requirement. Alternate sutures removed on 8th postoperative day. Rest of the sutures taken out on 10th day. The patients were discharged on 10th postoperative day.

RESULTS-

In our study, total 72 patients were undergone onlay mesh repair. The age of the patient ranged from 25 to 55 years. Out of 72 patients female to male ratio was 58 to 14. The operation time ranged from 45min to 90min with a mean of 50±14min. Seroma observed in 09

patients (12.5%). All the cases of seroma managed conservatively. Superficial surgical site infection observed in 16 patients (22.2%). One of the male patient required mesh extrusion. Haematoma was observed in 04 patients (5.5%), who were managed conservatively. The patients were followed up for a period of 06 months. There was not even a single recurrence during that period.

DISCUSSION-

There are so many surgical techniques for incisional hernia repair, mesh repair being the most effective and widely accepted operation. However, the best technique and best place for mesh placement remains debatable. Wound infection and recurrence are the two most common marker for successful surgery.

The study of Saber et al. found the mean operation time 93.26±24.94 min (range 60 to 140min) for sublay repair. In our study, the mean operation time was 50±14min (range 45 to 90min). Saber et al. reported 3% recurrence in sublay repair whereas many other studies reported no recurrence. In our study no recurrence was found in 06 months follow up period. Gordara et al. reported 04% incidence of wound infection in sublay repair. In our study the incidence was found to be 12.5% that is attributable to the more extensive dissection in onlay repair method.

CONCLUSION-

There are so many studies indicating mesh repair for incisional hernia repair. What should be the ideal position for mesh application has not been established yet. Although incidence of wound infection is more in onlay method, it seems to be a better alternative to sublay repair in terms of shorter time period to perform and quite comparable recurrence rate. So I would like to conclude that onlay mesh repair is a better and acceptable technique compared to other technique.

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