

**Original article:**

## **Study of clinical profile and management of Incisional hernia**

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### **Abstract**

**Background:** Incisional hernia refers to a hernia of the abdominal wall at the site of previous surgery. It is a type of ventral hernia. Midline incisional hernias are more common than other sites. It can be a straight hernia with all the components of a hernia of herniation, bag, and contents.

**Methods:** This prospective study was carried out in department of surgery at our hospital for three years duration. All the patients, regardless of age and gender, admitted with diagnosis of incisional hernia were included in the study. Depending upon the size of defect treatment was carried out. Postoperatively patients were followed up for detection of possible complications and their treatment.

**Results:** 100 patients of incisional hernia were studied. Mean age was 54 years with male to female ratio 4.8:1 wound infection in the post-operative period was the commonest etiology .

**Conclusions:** Wound infection following previous surgery was the most important risk factor associated with incisional hernia.

**Keywords:** Incisional hernia, Mesh repair

### **Introduction:**

Incisional hernia is a major postoperative complication of laparotomy. Incisional hernia is a widespread outgrowth of the peritoneum and abdominal contents with a weak surgical scar or a wound of the anterior abdominal wall, which occurs in areas other than inguinal, femoral or umbilical opening. The majority of these are postoperative hernias. Incisional hernia is a common surgical problem that results in failure of fascial tissue healing and closure following laparotomy.<sup>1,2</sup> Infection in the surgical area, leading to the development of excessive stress resulting in adequate healing is the most common cause of surgery. incision hernia. In addition to infection, obesity, pregnancy, old age, malnutrition, ascitic and other conditions that increase intra-abdominal pressure also contribute to an increase in the incidence of incisional hernia. Like any other hernia, it can lead to pain, intestinal obstruction, constipation, and choking.<sup>3-5</sup>

### **Material and methods :**

The present study was hospital based Prospective, Observational study. This study was performed in the Department of Surgery for three years duration. The subjects were selected using random sample technique.

All the patients, regardless of age and gender, admitted with diagnosis of incisional hernia were included in the study. Depending upon the size of defect treatment was carried out. Postoperatively patients were followed up for detection of possible complications and their treatment.

Inclusion criteria:

• Pain and Discomfort at the site of swelling. • Large Hernia with small opening and risk of strangulation. • History of irreducibility, recurrent sub-acute intestinal obstruction, incarceration. • Willing for cosmetic purposes.

Exclusion criteria included:

• Uncorrected extreme obesity. • Skin infection. • Ascites due to Cirrhosis, Heart Failure, Portal Hypertension, Pancreatic Cancer, Hepatitis, uremia. • Bed ridden patient with wide defect.

**Results:**

100 patients of incisional hernia were studied. Mean age was 54 years with male to female ratio 4.8:1 wound infection in the post-operative period was the commonest etiology .

**Table 1) Patients involved with previous surgeries**

| Previous surgeries Carried out | Number of patients (N=100) |
|--------------------------------|----------------------------|
| Hysterectomy                   | 42                         |
| Tubal ligation                 | 8                          |
| LSCS                           | 22                         |
| Laparoscopy                    | 5                          |
| Appendisectomy                 | 23                         |

**Table 2) Risk factors**

| Risk factors     | Number of patients (N=100) |
|------------------|----------------------------|
| Wound infection  | 12                         |
| Wound dehiscence | 8                          |
| Obesity          | 60                         |
| Repeat surgery   | 11                         |
| Constipation     | 9                          |

**Discussion:**

An incisional hernia represents a deterioration or loss of continuous fascial closure. These hernia are concerned not only with the high rate of occurrence but also with the challenges that follow. <sup>1</sup>It is known to occur in 11-23% of laparotomies. For full patient examination, preoperative skin repair, careful operation, use of non-invasive musculo-

aponeurotic tissue sutures, use of drain pulse, use of peri-operative broad spectrum antibiotics, nasogastric aspiration, early navigation and with chest physiotherapy, the levels of problems in our study were reduced.<sup>6</sup>

Incisional hernia can occur after abdominal surgery, due to weakness of one or more abdominal muscles caused by surgical cutting. Muscle weakness results in the opening of the muscles that tend to protect, support, and hold the abdomen.<sup>7</sup>

Incisional hernias is caused by weakness of the abdominal muscles as a result of surgical resection. Incisional hernia can occur for a number of reasons; people who engage in excessive or premature exercise after surgery, are overweight, become pregnant or have high abdominal pressure in any other way before the cut is completely healed are at greater risk of developing a hernia hernia. Incisional hernia may occur within three to six months after surgery but may occur at any time.<sup>4</sup>

#### **Conclusions:**

Wound infection following previous surgery was the most important risk factor associated with incisional hernia.

#### **References:**

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