

Original Research

A Comparative Evaluation of Management of Incisional Hernia

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ABSTRACT:

Background: Hernias have been extensively studied over the years owing to their relative frequency worldwide. The present study was conducted to assess the cases of incisional hernia in given population. **Materials & Methods:** The present study was conducted on 56 cases reported to the department. All patients underwent either anatomical repair alone or mesh repair based on the size of defect and thus divided into 2 groups. Group I was treated with inlay and group II were treated with sublay technique. **Results:** Out of 56 patients, males were 30 and females were 26. Both groups had 28 patients each. Common complications was seroma seen in 2 in group I and 1 in group II, wound dehiscence 1 in group I and recurrence 2 in group I and 1 in group II. The difference was significant ($P < 0.05$). **Conclusion:** Authors found that incisional hernia is common nowadays. Common complications in both techniques were seroma, wound dehiscence and recurrence.

Key words: Incisional hernia, recurrence, seroma .

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INTRODUCTION

Hernias have been extensively studied over the years owing to their relative frequency worldwide. Over the years, hernia management has witnessed improvements with the development of several techniques. Most available studies on hernias are markedly skewed towards the assessment of the efficacy of these techniques with relatively fewer studies assessing other aspects of the subject of abdominal wall hernias.¹

Incisional hernia is defined as any abdominal wall gap with or without bulge in the area of a postoperative scar perceptible or palpable by clinical examination or imaging. Mankind is posed with the problem of hernia ever since its evolution. The problem of incisional hernia appeared with the development of abdominal surgery. It may be a small, even insignificant bulge, through the wound; it may be a large, unsightly and uncomfortable affair too.²

75% of abdominal wall hernias occur in the groin. Indirect hernia outnumber direct hernia by about 2:1. Femoral hernia constitutes a small proportion of groin hernias. Males are more commonly affected. Lifetime risk for inguinal hernia is around 27% for men and around 3% for women.³ Inguinal hernia repair is one of the most common operations in general surgery. The modern age of hernia repair began with the introduction of synthetic mesh to reinforce a previous sutured repair. Open pre-peritoneal mesh repair significantly reduced the recurrence rate.⁴ The present study was conducted to assess the cases of incisional hernia in given population.

MATERIALS & METHODS

The present study was conducted in the department of general surgery. It comprised of 56 cases reported to the department. The study protocol was approved from

institutional ethical committee. All were informed regarding the study and written consent was obtained. General information such as name, age, gender etc. was recorded. Routine investigations such as CBC, bleeding time, clotting time etc. was done. Ultrasound (USG) abdomen was done in all patients. All patients underwent

either anatomical repair alone or mesh repair based on the size of defect and thus divided into 2 groups. Group I was treated with inlay and group II were treated with sublay technique. Results were subjected to statistical analysis. P value less than 0.05 was considered significant.

RESULTS

Table I: Gender wise distribution of patients

Total- 56		
Gender	Males	Females
Number	30	26

Table I shows that out of 56 patients, males were 30 and females were 26.

Table II: Distribution of patients in groups

Technique	Group I Inlay repair	Group II Sublay repair
Number	28	28

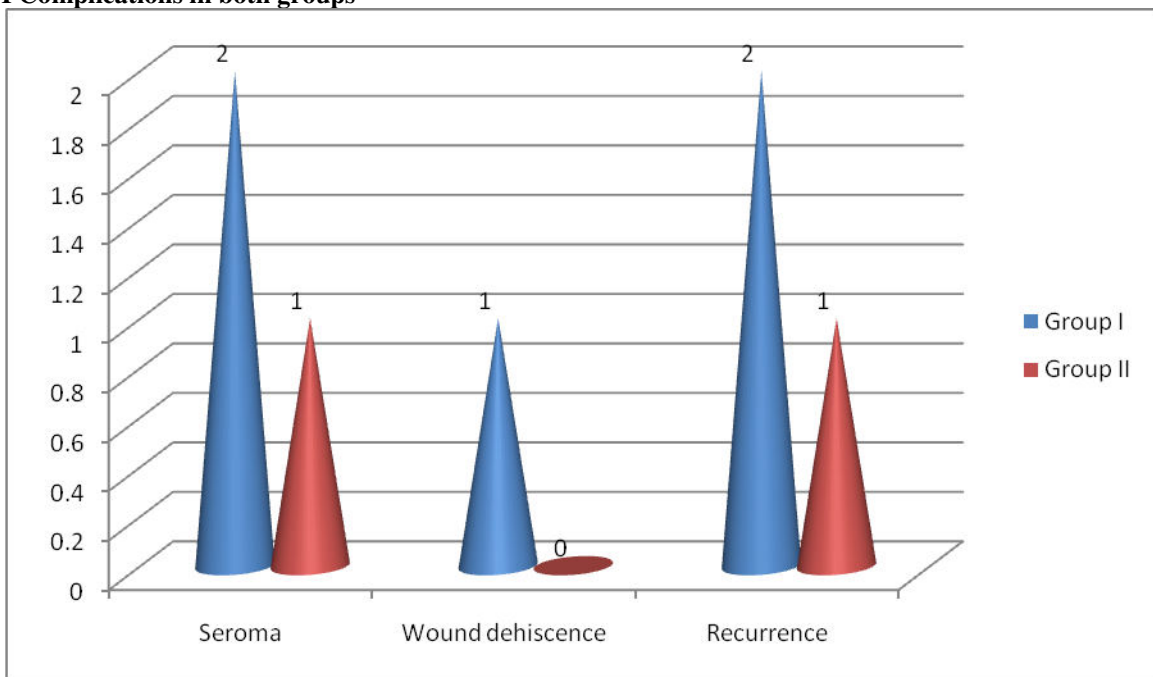
Tale II shows that both groups had 28 patients each.

Table III: Comparison of complications in both groups

Complications	Group I	Group II	P value
Seroma	2	1	0.01
Wound dehiscence	1	0	0.02
Recurrence	2	1	0.01

Table III, graph I shows that common complications was seroma seen in 2 in group I and 1 in group II, wound dehiscence 1 in group I and recurrence 2 in group I and 1 in group II. The difference was significant (P< 0.05).

Graph I Complications in both groups



DISCUSSION

Incisional hernias are very common. They are the second most common type of hernia after inguinal hernias. Approximately 4 million laparotomies are performed in the United States annually, 2-30% of them resulting in incisional hernia. Between 100,000 and 150,000 ventral incisional hernia repairs are performed annually in the United States. Incisional hernias after laparotomy are mostly related to failure of the fascia to heal and involve technical and biological factors.⁵ Approximately 50% of all incisional hernias develop or present within the first 2 years following surgery, and 74% occur within 3 years. Depending on size, the repair of an incisional hernia varies from simple suturing to major reconstruction of the abdominal wall with creation of muscle flaps and the use of large pieces of mesh. This can be done with an open approach or laparoscopy.⁶ The present study was conducted to assess the cases of incisional hernia in given population.

In present study, out of 56 patients, males were 30 and females were 26. Both groups had 28 patients each. A et al⁷ conducted a study to assess the cases of incisional hernia based on age, sex, parity, relative incidence, clinical presentation, nature of previous operation, site of previous scar, precipitating factors like obesity, wound infection, abdominal distension.

The incidence is around 7.5%. Patients in the age group of 30-60 years found to have highest incidence of incisional hernia. Females outnumbered the males with the ratio of 4:1. Incisional hernia was more common in patients with previous history of gynecological operation. Most of the patients presented with incisional hernia in the infra umbilical region.

We found that common complications was seroma seen in 2 in group I and 1 in group II, wound dehiscence 1 in group I and recurrence 2 in group I and 1 in group II. B et al⁸ conducted a study in which a total of 87 cases of different types of hernias were studied including ventral, inguinal, umbilical and diaphragmatic hernias. Among which ventral hernias were the most common including 42 cases and among them one case presented as obstructed hernia and the most common age of incidence was 31-40 years. The next most common presentation was inguinal hernia with total of 29 cases and the paediatric age group (0-10 years) was the most common presentation. The next common hernia was umbilical hernia and the most common age of presentation was 21-40 years. The least common presentation was that of diaphragmatic hernia with only 4 cases, age of the patients being 60 and above.

C et al⁹ found that the highest number of cases presenting with inguinal hernia were over 45 years and it was more common in males which constituted 96.3 percent of cases. It is more common on right side and indirect hernia is more common than direct hernia. The major possible risk factors are smoking and strenuous work. The commonest presenting mode was swelling followed by swelling with pain. The mean time taken for TAPP was 91.85±15.85

minutes and the median time was 87.50 minutes. There were no intra operative (neurovascular, visceral) complications in any of the patient and there was no conversion to open surgery.

CONCLUSION

Authors found that incisional hernia is common now a days. Common complications in both techniques were seroma, wound dehiscence and recurrence.

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