

Analysis of Inguinal Herniorrhaphy with Mesh in Classic and Preperitoneal Method: An Institutional Based Study

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Abstract

Background: Most hernias occur when part of the bowel or peritoneum pushes through a gap in the abdominal wall. The peritoneum is the membrane that lines the abdominal cavity and (completely or partly) encloses most of the organs in the abdomen. Hence; the present study was conducted for evaluating and comparing the results of inguinal herniorrhaphy with mesh in classic and preperitoneal method. **Materials and Methods:** A total of 40 patients scheduled to undergo. Complete demographic and clinical details of all the patients were obtained. All the patients were broadly divided into two study groups as follows: Group A: Classic method and Classic. Surgery was scheduled and preoperative biochemical and haematological profile was evaluated. All the patients were recorded and analysed by SPSS software. **Results:** In the present study, mean age of the patients of the classic group and preperitoneal group was 29.5 years and 30.2 years respectively. Recurrence was seen in 5 patients of the classic group and 1 patient of the preperitoneal group. Paine after surgery was seen in 7 patients of group Preperitoneal. Postoperative seroma formation was seen in 4 patients of group A while it was seen in 1 patient of group B. **Conclusion:** Preperitoneal method is a more suitable method for inguinal herniorrhaphy than the classic. However further studies are recommended.

Keywords: Inguinal Herniorrhaphy, Mesh, Preperitoneal Method.

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Introduction

Most hernias occur when part of the bowel or peritoneum pushes through a gap in the abdominal wall. The peritoneum is the membrane that lines the abdominal cavity and (completely or partly) encloses most of the organs in the abdomen. The protruding pouch, called the hernia or hernial sac, may contain parts of organs such as the bowel or stomach. A bulge can usually be seen from the outside. Whether or not a hernia causes problems will depend on where it is and how big it is. These are the most common types of hernias: Inguinal hernias, Femoral hernias, Incisional hernias, Umbilical hernias and Epigastric hernias[1-3]. Prosthetic mesh has recently been used in the operative management of inguinal hernia and has been shown to significantly reduce recurrence as compared with traditional anterior hernia repair. Although recurrence rates remain the most important outcome parameter, other variables, such as postoperative pain and discomfort, have attracted more attention as interest shifts to the postoperative quality of life. Recently, discussions on inguinal hernia repair focus more on chronic pain,

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rather than the rate of recurrence. The number of studies reporting high incidences of postoperative chronic pain after open anterior mesh repair is increasing[4-6]. Hence; the present study was conducted for evaluating and comparing the results of inguinal herniorrhaphy with mesh in classic and preperitoneal method.

Materials & Methods

The present study was conducted in Department of General Surgery, Shri Shankaracharya Institute of Medical Sciences, Bhilai, Chhattisgarh (India) for evaluating and comparing the results of inguinal herniorrhaphy with mesh in classic and preperitoneal method. A total of 40 patients scheduled to undergo. Complete demographic and clinical details of all the patients were obtained. All the patients were broadly divided into two study groups as follows: Group A: Classic method and Classic. Surgery was scheduled and preoperative biochemical and haematological profile was evaluated. All the patients were recorded and analysed by SPSS software.

Results

In the present study, mean age of the patients of the classic group and preperitoneal group was 29.5 years and 30.2 years respectively. Recurrence was seen in 5 patients of the classic group and 1 patient of the preperitoneal group. Paine after surgery was seen in 7 patients of group Preperitoneal. Postoperative seroma formation was seen in 4 patients of group A while it was seen in 1 patient of group B.

Table 1: Age wise distribution of patient

Age group	Classic group	Preperitoneal
Less than 30 years	12	11
31 to 50 years	8	9
Total	20	20

Table 2: Distribution of recurrence

Recurrence	Classic group	Preperitoneal
Present	5	1
Absent	15	19
Total	20	20

Table 3: Distribution of pain after surgery

Pain after surgery	Classic group	Preperitoneal
Present	7	2
Absent	13	18
Total	20	20

Table 4: Distribution of postoperative seroma formation

Postoperative seroma formation	Classic group	Preperitoneal
Present	4	1
Absent	16	19
Total	20	20

Discussion

Mahmoudvand H conducted for evaluating and comparing the results of inguinal herniorrhaphy with mesh in classic and preperitoneal method. A total of 40 patients scheduled to undergo. Complete demographic and clinical details of all the patients were obtained. All the patients were broadly divided into two study groups as follows: Group A: Classic method and Classic. Surgery was scheduled and preoperative biochemical and haematological profile was evaluated[7,10].

In the present study, mean age of the patients of the classic group and preperitoneal group was 29.5 years and 30.2 years respectively. Recurrence was seen in 5 patients of the classic group and 1 patient of the preperitoneal group. Paine after surgery was seen in 7 patients of group Preperitoneal. Postoperative seroma formation was seen in 4 patients of group A while it was seen in 1 patient of group B. Alexander W Phillips et al assessed the technical feasibility of using fibrin glue for fixation of both mesh and peritoneum. Patients and methods: A total of 33 TAPP hernia repairs were carried out in 27 consecutive patients. In all the patients, both mesh and peritoneum were secured with fibrin glue (20 primary inguinal hernia repairs, 5 bilateral hernia repairs, 1 recurrent inguinal hernia, and 1 recurrent bilateral hernia repair). Patients were followed up at an outpatient clinic between the second and third week after surgery. Six patients were followed up through telephone. Patients were questioned on the following factors: residual postoperative pain (groin and port sites), unplanned GP or hospital visits, employment status and number of days between their surgery and return to both work and normal activities, and recurrence[8-10].

The present study was conducted for evaluating and comparing the results of inguinal herniorrhaphy with mesh in classic and preperitoneal method. A total of 40 patients scheduled to undergo. No patients had residual groin or port site pain at a median of 21 days after surgery. No patient required an unplanned follow-up appointment with their GP. In the present study, mean age of the patients of the classic group and preperitoneal group was 29.5 years and 30.2 years respectively. Recurrence was seen in 5 patients of the classic group and 1 patient of the preperitoneal group. Paine after surgery was seen in 7 patients of group Preperitoneal. Postoperative seroma formation was seen in 4 patients of group A while it was seen in 1 patient of group B. One patient (recurrent repair) developed a seroma postoperatively. Median time to normal activities was 10 days (range, 3 to 21 d). Total glue fixation of mesh and peritoneum is technically feasible and early results show low rates of postoperative complications and pain[11].

Conclusion

From the above results it can be concluded that preperitoneal method is a more suitable method for inguinal herniorrhaphy than the classic. However further studies are recommended.

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