

Femoral Incarcerated femoral hernia treated with conventional hernioplasty: a case report

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I. INTRODUCTION

Femoral hernias are less frequent than inguinal hernias. Recognition of a femoral hernia is an important factor in the workup and evaluation of a patient who presents with a groin bulge as the options and urgency of repair may differ from that of a more common inguinal hernia.

A hernia is defined as an abnormal protrusion of an organ or tissue through a defect in its surrounding walls. Hernia defects may occur in various locations of the abdominal wall, but most commonly occur in the inguinal region. Hernias can occur at sites where the aponeurosis and fascia are not covered by striated muscle. As a result, the peritoneal membrane or hernia sac may protrude from the orifice or neck of a hernia.

Lifetime occurrence of a groin hernia is 27% to 43% in men and 3% to 6% in women.[1] Femoral hernias occur less commonly than inguinal hernias and typically account for about 3% of all groin hernias. While inguinal hernias are still most common, regardless of gender, femoral hernias have a female-to-male ratio of about 10:1. Femoral hernias are rare in men. There may be other co-existing defects present at the time of diagnosis, as 10% of women and 50% of men with a femoral hernia either have or will develop an inguinal hernia. The prevalence of a femoral hernia increases with age as does the risk of complications including incarceration or strangulation.[1] femoral hernias caused a surgical emergency with high rates of laparotomy and bowel resection. Therefore, accurate diagnosis and early surgical treatment are important in treating patients with femoral hernia. We report a case of

incarcerated femoral hernia containing greater omentum and small bowel that was treated with emergency open femoral hernioplasty repair.

II. CASE REPORT

An 80-year-old woman visited our hospital with a 2-day history of lower abdominal pain and bulging from a left groin lesion. Her physical examination showed a left inguinal bulge and pain. Her abdomen was mildly distended with rebound tenderness and muscular defense. However, the bulge in the left groin lesion could not be reduced manually. Contrast enhanced computed tomography showed a hypodense rounded lesion medial to the left femoral vessels (Fig.) with ileal loop. Based on these physical and radiological findings, the patient was diagnosed as having a left strangulated femoral hernia containing small bowel loop.

As there was a clear sign of obstruction emergency conventional open femoral hernia mesh repair was done following preoperative evaluation on her general condition. A transverse incision was taken parallel to the inguinal ligament over the palpable mass in the medial thigh, just below the inguinal ligament. The hernia sac was identified and separated from surrounding adhesions. The sac was opened and the ileal loop and greater omentum were seen. However, there were no findings of abscess formation or small bowel necrosis. As there were clear findings of intestinal obstruction emergency open femoral hernia repair was done following preoperative evaluation on her general condition. A transverse incision, parallel to the inguinal ligament over the palpable mass in the medial thigh, just above the inguinal ligament.

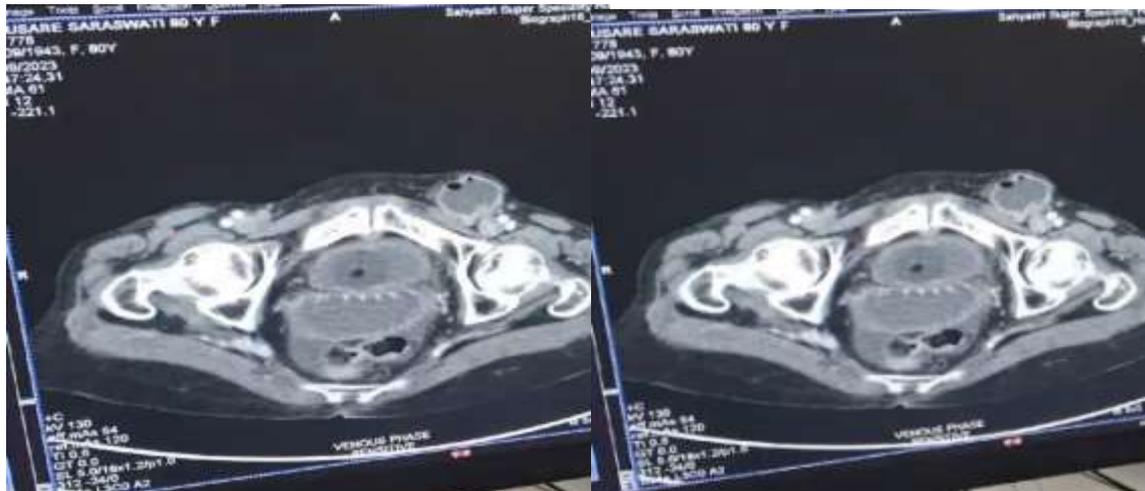


Figure 1: Contrast-enhanced computed tomography showed a hypodense rounded lesion in left femoral region medial to femoral vessel

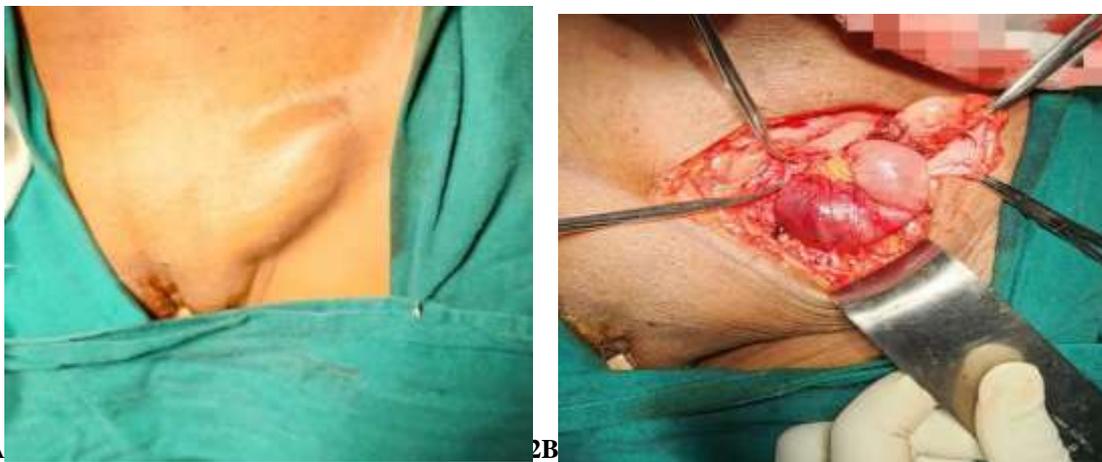


Figure 2: Intraoperative findings. A: strangulated femoral hernia, B: strangulated ileal loop in femoral hernia sac

Hernial sac exposed by removing surrounding adhesions, ileal loop and greater omentum was seen after opening sac. Ileal loop inspected for vascularity, as there was no ischemic change seen. Omentum appear ischemic, non-viable portion removed. contain reduced in abdominal cavity. Sac transfixed. Poly propylene mesh fixation done. Negative suction drain kept

inside wound skin approximation done. Intraoperative observation was not performed because we considered it unnecessary to confirm the presence of intestinal damage. The patient's postoperative course was uneventful, and she was discharged from our hospital 3 days after surgery. Presently, at 1 month after surgery, the patient is doing well without recurrence or mesh infection.

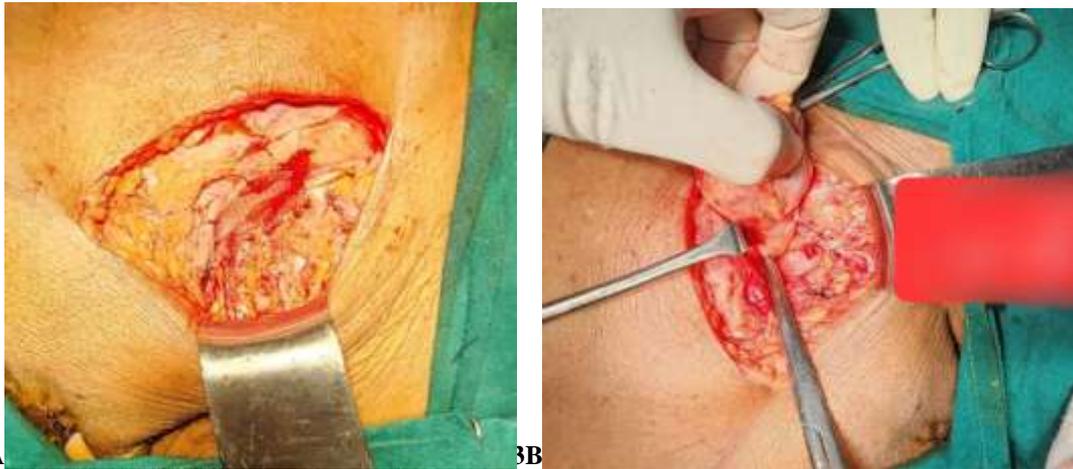


Figure 3: Intraoperative findings. A: Prolene mesh fixation over femoral canal B: Femoral hernia sac with neck seen at femoral canal

III. DISCUSSION

In this case our patient was diagnosed as having a left incarcerated femoral hernia, the hernia content was small bowel and greater omentum based on contrast-enhanced computed tomography findings. Also, there were findings of intestinal obstruction. s. Therefore, we performed emergency surgery after evaluation of her general condition. In general, there are higher rates of postoperative complications and mortality with emergency surgery than elective surgery. Especially, it has been reported that the incidence of postoperative complications in conventional emergency repair of incarcerated groin hernia ranges from 21 to 39%, with a mortality rate of 4–5% [2, 3]. We selected emergency conventional open hernia repair in this case and observed good recovery without complications of mesh.

The use of polypropylene mesh for incarcerated groin hernia also remains controversial. Several recent retrospective studies have shown that the use of mesh can be safe and effective in patients with an incarcerated groin hernia and that it reduced the recurrence but did not increase the opportunity for mesh infection [2, 3]. Dai et al. [4] reported that the use of mesh did not increase the infection rate in their cohort study. To determine whether mesh is a safe and effective treatment for incarcerated groin hernias, more patients as well as randomized controlled studies are required.

IV. CONCLUSION

We consider emergency conventional open hernia repair for incarcerated femoral hernia

to be an effective procedure for selected patients who have been diagnosed accurately.

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