

## DISASTROUS SEQUELAE OF UNTREATED FEMORAL HERNIA

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### ABSTRACT

Femoral hernia contribute to the second most common abdominal hernia though it represents only a small 4% [1] incidence when compared to inguinal hernia. It is most commonly seen among females more in multiparous and elderly individuals. The peculiar feature of this hernia is high incidence of complication ( obstruction and strangulation) to the extent of 30 to 80%[2]. The case presented here is a untreated femoral hernia which led to frank fecal peritonitis, prerenal failure , burst abdomen ,wound infection and ileostomy repositioning.

Keywords: Femoral hernia, peritonitis

### INTRODUCTION

Femoral canal is a narrow space with rigid boundaries of pectineal ligament posteriorly, inguinal ligament anteriorly, femoral vein laterally and lacunar ligament medially. The cumulative probability of femoral hernia being complicated is 22% in the first 3 months and rising to 45% in the next 2 years[3,4]. Thus a femoral hernia repair is mandatory. The primary etiology of femoral hernia appears to be natural loss of tissue strength and tissue elasticity. There is no evidence of underlying embryonic etiology which contrasts with inguinal hernia.

### CASE REPORT

50 year old female was admitted in the emergency department in early morning with history of (h/o) swelling in the right groin [Fig. 1] for 1 week. She was experiencing lower abdominal pain for 1 week. She had vomiting, 5 episodes per day for a week. She had no constipation. The patient gives h/o swelling in the right groin 1week ago which was reducible and now irreducible. Examination on arrival revealed a thin built women who was in distress due to abdominal pain and distention . She was dehydrated, pale, tachypneic and tachycardic with hypotension. Per abdomen examination showed distended abdomen

with diffuse tenderness and swelling in the right groin 4 × 3cm. Diagnosis of femoral hernia was made.

Rest of the examination was normal. Patient was resuscitated with intravenous fluids and higher antibiotics was instituted. After adequate resuscitation femoral hernia release was attempted and once the sac was opened, only a part of the wall of small intestine was found to be gangrene without any contamination [Fig 2]. As the contents could not be completely freed, lower midline incision was made and exploratory laparotomy was done. About 2 litres of fecopurulent peritoneal fluid with extensive fecal matter contamination was present and perforation of size 2 X 2cm was found adjacent to the gangrenous bowel wall in the ileum through which intestinal contents were seeping into the peritoneal cavity [Fig.3].The gangrenous bowel was 50cm from ileocecal junction. Resection of gangrenous segment was done and ileostomy was constructed in right iliac fossa .Thorough peritoneal lavage was given and abdomen was closed after keeping drainage tube in hepatorenal pouch and pelvis. Femoral hernia was repaired with prolene stitch [Fig 4]. Patient was managed in ICU. Patients haematological parameters were reduced as the patient was in frank sepsis. Patient had hypoproteinemia which was

corrected with albumin . Patient was started on oral diet on the 6th POD(post operative day). During the 7th POD haematological parameters improved but patient started developing generalised edema but her renal parameters were normal. In spite of correction of hypoproteinemia and normal renal parameters generalised edema worsened. During 9th POD midline wound dehiscence was made out. A diagnosis of burst abdomen was made in 10th POD and emergency tension suturing was done approximating the skin alone without approximating the linea alba, as it was under tension and ileostomy was repositioned [Fig.5] . During 12th POD renal parameters started rising and a diagnosis of acute kidney injury was made and was treated with high dose of diuretics. From 13th POD generalised edema started decreasing. During the course of illness right groin wound was infected which was managed conservatively. After adequate resuscitation and nutritional supplementation patient recovered well and patient was eventually discharged on 32nd POD after suture removal. Patient was reviewed 1month later for ileostomy closure and the procedure was done without opening the midline wound. Patient recovered uneventfully and was discharged on 10th POD. Patient is in follow up for the past 6 months and has not developed any complications [Fig. 6].



Figure 2



Figure 3

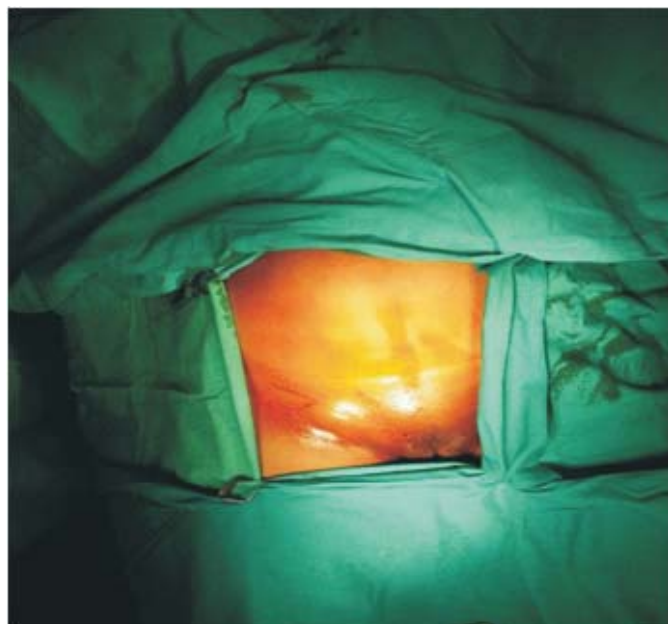


Figure 1



Figure 4



Figure 5



Figure 6

## DISCUSSION

Diagnosis of femoral hernia is often missed in setting of acute abdomen because of failure to examine the region below inguinal region. Differential diagnosis of lymph node, lipoma and saphena varix which are benign conditions interferes with early diagnosis[5]. The patient in the above setting, though she had vomiting was taking diet till the evening prior to her arrival to hospital and was having

bowel movements. The late presentation could be due to the fact that she was tolerating oral diet to some extent. Except for x ray abdomen erect no other imaging modality was carried out. Patient with severe peritoneal contamination should be resuscitated adequately before taking up for surgery. Resuscitation and adequate post operative nutritional support forms a mainstay in the management of intra abdominal sepsis. Burst abdomen by conventional method is closed by tension suturing involving the entire abdominal wall[6,7]. But it was not possible in the above case because of risk of abdominal compartment syndrome and ileostomy site was under tension due to abdominal wall edema. So it was decided to just approximate the skin by tension suturing. The procedure was attended without any complication.

Various procedures available for repair of femoral hernia includes Lockwood method, Lotheissen method and McEvedy method. Traditional teaching of repair for femoral hernia is low approach of Lockwood for elective surgery and high approach of McEvedy for emergency surgery. But systematic review of literature does not support this method. However transinguinal approach of Lothessien results in higher recurrence rate[8]. In elective surgery for femoral hernia plug repair is preferred because of low recurrence rate, however migration of mesh and infection has to be considered. Recently laproscopic approach to femoral hernia is tried but it warrants extensive dissection.

## CONCLUSION

Thus an high index of suspicion and adequate exposure to examine the patient is required in those presenting with acute abdomen. With adequate resuscitation pre operatively both the mortality and morbidity can be brought down but still remains higher in persons undergoing emergency femoral hernia repair[9,10].

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