

Bilateral Femoral Hernia with Strangulation on Right Side Containing Small Bowel Masquerading As a Groin Abscess

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Abstract: Femoral hernias are challenging conditions, not only because their diagnosis is often missed, but also because if left undiagnosed and untreated, their complications are severe and often life-threatening. The authors present a case of a femoral hernia of the small intestine and omentum, following strangulation, manifested as a groin abscess.

Keywords: Strangulation, femoral hernia, abscess

I. Introduction

Femoral hernias are elusive conditions that despite having life-threatening complications are often undiagnosed in asymptomatic patients (1,2). They are less common than inguinal hernias and occur more frequently in females (2,3). Anatomically, they represent herniations of the peritoneal sac through the femoral ring into the femoral canal, lying postero-inferiorly to the inguinal ligament. The hernia sac commonly contains small bowel or omentum, but uncommon cases have been reported, where the herniating structures were caecum, appendix, colon, Meckel's diverticulum, ovaries, testes, stomach and kidneys (2,4).

We present a case of undiagnosed femoral hernia containing small bowel and omentum that following strangulation, manifested as a groin abscess. The only other similar reported case was in 1966 (5). The rarity of this manifestation prompted this report.

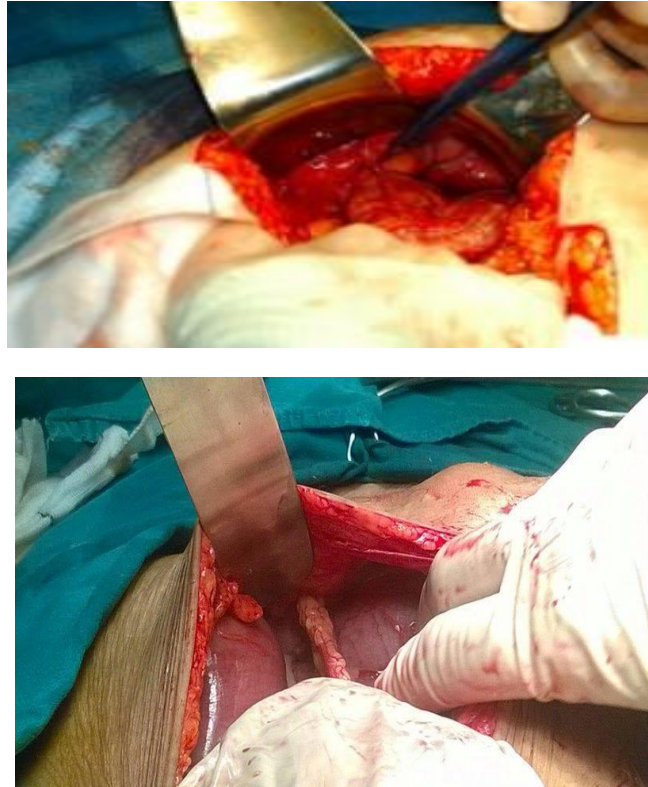
II. Case Report

A 80- year old female patient was referred to our hospital from local hospital, due to an abscess in her right inguinal region. She noticed a swelling in the Rt. Inguinal region 6 years back was gradually increasing in size over the time and has abruptly increased in size from last 7 days .Pain in the swelling from 5 days which was throbbing, continuous, severe and more on straining and touching the swelling. Constipation from 4 days, with no significant past history.

O/E Bp-104/76 mm of hg, Pulse- 100/min, Temp- 99.6 F, Spo2 -99%. **P/A-** tenderness in lower abdomen, soft, distended, no organomegaly bowel sound absent. **L/E-** globular swelling over Rt. inguinal region of size 4cm x 5cm, starting from the mid inguinal point to just proximal to labia majora, overlying skin red in color with blacking in the center of swelling, tender, with central fluctuation no cough impulse present, no visible peristalsis. There was a small swelling of peanut size in Lt. inguinal region, overlying skin normal, no cough impulse present, non tender

The patient was systemically well with a slightly elevated white cell count with neutrophilia. A diagnosis of groin abscess was established and the patient underwent incision and drainage under local anesthesia, Incision was given over the maximum fluctuating point of swelling and pus was drained. On breaking the loculi omentum was found in the vicinity. So the diagnosis of femoral hernia became apparent and pt was shifted in OT for exploration under anesthesia.

After taking high risk consent surgery was done under general anesthesia. Incision was extended, remaining pus was drained which was foul smelling, omentum and gut were gangrenous and were freed up to the neck. Sheath was opened and inguinal ligament was cut. A lower midline incision was given and the small bowel and omentum were found herniating through the right femoral ring(fig.1) ,on left side only omentum(fig.2), the content were reduced back to the abdominal cavity and gangrenous patch of ileum was present about two feet proximal to IC junction , whole gut was inspected and found healthy . A local resection anastomosis was done on right side and on the left side omentum was freed from the femoral canal. The femoral ring defect was repaired internally by approximation of the inguinal ligament to Cooper's ligament. No mesh was required.



The patient's recovery and postoperative course was uneventful. She was discharged eight days following surgery, by which time her wound was healthy and well on its way towards recovery. No recurrence of the hernia or the enterocutaneous fistula has been found to date.

III. Discussion

Despite the fact that femoral hernias account for only 2-4% of all groin hernias, their timely and correct diagnosis is vital due to the increased mortality associated with emergency surgery for their complications (3). This, however, is not always easy. Femoral hernias are commonly missed or misdiagnosed as less serious conditions, leaving surgeons to deal with their complications in the acute setting, where mortality has been found to be 10fold (1-3). According to Dahlstrand et al, who published the largest series of femoral hernia repairs to date (3), out of 3,980 femoral hernia repairs 1430 (35.9%) were emergencies, compared to just 5.4% for inguinal cases. Furthermore, 22.7% of the emergency procedures for femoral hernias required bowel resection compared to 5.4% for inguinal hernias, whereas that percentage of bowel resection in elective femoral hernia repairs was only 0.6%. Dahlstrand et al also demonstrated that women were more likely than men to require surgery for femoral hernias (5:3 ratio). The risk for emergency surgery for women was also significantly higher (40.6 vs 28.1%). Strangulated femoral hernias vary significantly as to the contents and pattern.

In the case of our patient, a cascade of events led to the development of the groin abscess: hernia with part of the small bowel and omentum was created, which subsequently became strangulated; and accumulation of fluid and pus in subcutaneous planes, where the abscess was established.

The only other similar case reported in literature is from Duari in 1966 (5). He presented the case of a 79-year old man with a right groin abscess that was incised by his GP and found to contain "evil-smelling pus". Duari obviously did not have access to modern abdominal imaging at the time and performed exploratory laparotomy on the patient, during which he discovered a femoral hernia containing part of the caecal wall and the base of the appendix. Duari had to expose and debride part of the hernia sac both externally through a groin incision and internally. He repaired the femoral ring using "one purse-string suture of catgut from above". His patient has a good recovery.

Our case, and that described by Duari, appear to be the only two of their kind, separated by almost half a century. Despite that, the presenting symptoms, diagnosis and surgical management of both patients are remarkably similar, with the exception perhaps of the use of CT-imaging in our patient, which still wasn't entirely conclusive. This attests to the fact that despite the advances in medicine and surgery, femoral hernias still remain insidious in their nature and should be repaired as a priority to avoid their many, life-threatening complications.

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