

Strangulated Richter's femoral hernia presenting as an enterocutaneous fistula

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Introduction

Femoral hernias are elusive conditions that despite having life-threatening complications are often misdiagnosed or underdiagnosed in asymptomatic patients. Anatomically they represent herniation of the peritoneal sac through the femoral ring into the femoral canal. A Richter's hernia is one in which only a part of the circumference of the bowel is entrapped in the hernia orifice often leading to ischaemia, gangrene and perforation of the bowel. When less than two-thirds of the circumference of the bowel wall is involved, the signs and symptoms of intestinal obstruction are absent. This leads to late diagnosis or even misdiagnosis leading to bowel necrosis. However, a spontaneous faecal fistula is a rare complication in a long standing abdominal wall hernia. In view of its rarity, a case of spontaneous faecal fistula secondary to strangulated Richter's femoral hernia is reported.

Case report

A 70 year-old woman from a distant hill district presented with an ulcer over the upper medial aspect of right thigh with discharge of faecal matter for 1 month. She gave history of a swelling which appeared on and off for 4-5 years at the site where the ulcer had developed. One month prior to development of the ulcer, the swelling became constant and did not disappear and she had moderate pain over the swelling. On examination the patient was emaciated and anaemic. There was an ulcer measuring approximately 7cm x 5cm on the upper medial aspect of the right thigh with discharge of faecal matter and inguinal lymphadenopathy of the same side. Ultrasonography showed herniated bowel in the right inguinal region.

Mantoux test was negative. X-ray chest was normal. Biopsy from the ulcer margin showed chronic non-specific inflammation. Contrast-enhanced computed tomography (CECT) of the abdomen revealed a femoral hernia on the right side with enterocutaneous fistula with surrounding inflammatory changes. A fistulogram showed a tortuous tract about 8 cm long extending from the right inguinal region into the ileum, the dye passing freely to the caecum. The patient had atrial fibrillation which was controlled after cardiology consult. After pre operative preparation the patient underwent an exploratory laparotomy under spinal anaesthesia via a lower midline incision. A part of the circumference of a segment of ileum about 30cm from the ileo-caecal junction was found entering the femoral ring. The ileal loop was adherent to the surrounding tissues without any peritoneal contamination. It was pulled out of the femoral ring by gentle blunt finger dissection. A single perforation of 1.5cm x 1.5cm was found over the incarcerated part of the ileum with unhealthy necrotic tissue around the perforation. The perforation along with the surrounding unhealthy tissue was excised and a primary end-to-end anastomosis was done in two layers. The femoral ring was very friable and no attempt was made to close it. The groin wound was allowed to heal by secondary intent with regular dressing. The postoperative period was uneventful and the patient was allowed oral feeds on the 5th postoperative day. She passed stool on the 7th postoperative day and was discharged on the 10th postoperative day.

Discussion

Despite the fact that femoral hernias account for only 2-4% of all groin hernias, their timely and correct

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Figure 1. Ulcer in the upper right thigh discharging faecal matter.

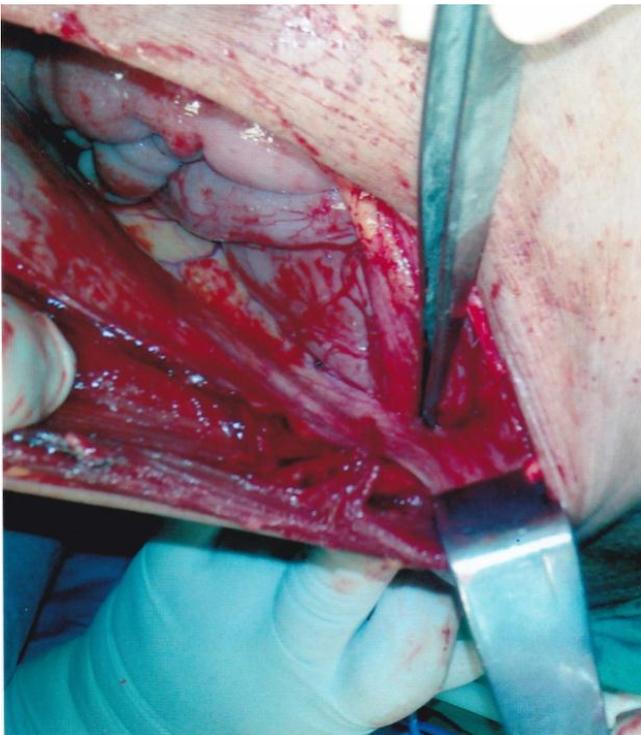


Figure 2. Loop of ileum prolapsing into the femoral ring.

diagnosis is vital due to the increased mortality associated with emergency surgery for their complications[1]. 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 ten-fold[2].

The common sites of Richter's hernia are the femoral ring and trocar sites after laparoscopic procedures[3]. Trocar site is closed routinely nowadays to prevent the development of hernia. Unusual occurrences are at the site of insertion of the drainage tube following abdominal surgery, as Spigelian hernia and through the sacral foramen. However it is extremely rare to have progression of strangulation to the development of spontaneous faecal fistula. Siddique et al[4] encountered a case of supra-pubic faecal fistula due to Richter's inguinal hernia and they also reported it for its rarity and paucity of published literature.

This case report highlights the need for an early and accurate diagnosis which may not be very easy in some cases. Besides, illiteracy, poverty and non-availability of proper medical care are also the factors, as in this case, having potential for transformation of relatively benign condition of groin hernias into a complicated state. Unless treated promptly, unexpected complications may occur, as our case shows, which may make the diagnosis and treatment even more difficult.

References

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Key Points:

- Richter's hernia is one in which only a part of the circumference of the bowel is entrapped in the hernia orifice.
- Femoral ring is a common site for Richter's hernia and strangulation leading to gangrene and perforation of the bowel is a common complication.
- Progression of strangulation to the development of spontaneous entero-cutaneous fistula is extremely rare.
- Unless diagnosed and treated promptly, Richter's femoral hernia may lead to unexpected complications making the diagnosis and treatment even more difficult.

Answers to images in surgery (Page 32)

Diagnosis – Marjolin's Ulcer

Marjolin's ulcer arise in burned or chronically inflamed skin. Classically described in relation to burn scar it has multiple potential causes including osteomyelitis, decubitus ulcers , chronically traumatized skin, chronic fistula and skin graft sites. In 70-80 % cases, histologically, Marjolin's ulcer is a squamos cell carcinoma (SCC) , followed by basal cell carcinoma (BCC) in 10% and rarely melanoma and soft tissue sarcomas[1]. There is a lag period between the appearance of Marjolin's ulcer in a scar tissue and the time of initial injury, average mean time being 36 years. Lower extremities are the most commonly affected sites followed by head and neck region. Treatment is usually surgical excision and reconstruction[2]

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