CASE REPORT

Bilateral obstructed femoral hernia with sub acute intestinal obstruction due to Bilateral Richters Hernia

Sheikh Muddassir, Fayez Al-Saffar, Dauda Bawa, Suhail Khuroo, Saleem Abdul Sattar Khan

Received:
4th January, 2018

Accepted:
17th July, 2018

Abstract

Introduction: Femoral hernia is a rare entity and femoral hernias are famous for atypical presentations like painless groin swelling, groin cellulites or necrotizing fasciitis. Likewise diagnosing Ritcher's femoral hernia is often difficult especially in obese patients. Delay in diagnosis may occur, especially because of late symptoms of intestinal obstruction. Femoral hernia is relatively uncommon, making up to 2-8% of all adult groin hernias.

Case Report: We present a 41-year old female who was admitted on 17-11-2017 via ER with abdominal pain, vomiting, along with constipation. Her vitals at admision are within normal limits. Her abdominal revealed soft abdomen, with mild tenderness peri umbilical area, there is small swelling present in the left inguinal region, she has positive bowel sound. Her x-ray abdomen revealed multiple fluid levels. CT scan abdomen with oral contrast showed bilateral femoral hernia. She underwent lower midline laporotomy, the findings at laparotomy were dilated bowel loops proximally and bowel loops seen entering femoral canal orifice, there was collapsed small bowel found distal to obstruction, the femoral hernia was delivered in the wound. We found half of circumference was entering in the femoral ring findings consistent with Richter Hernia. Fortunately on both sides the bowel trapped was not gangrenous, therefore patient did not required any resection. The hernial orifice was repaired with intrupted proline. Post-operatievly the patient recovered smoothly. She was allowed oral fluids on 2nd post-operative day and the patient was discharged home on 6th post-operative day in good condition.

Keywords: Femoral hernia, Richters hernia, sub acute intestinal obstruction, painless groin sewlling, necrotizing fasciitis

King Abdullah Hospital, Bisha.
S Muddassir
F Al-Saffar
D Bawa
S Khuroo
SAS Khan

Correspondence:
Dr Sheikh Muddassir,
Specialist General Surgery,
King Abdullah Hospital,
Bisha, KSA.
Cell: +966 0502993951
sheikhmuddassir2@yahoo.com

Introduction:

Femoral hernia is extremely a rare entity. The femoral hernia are the most common incarcerated abdominal hernias with strangulation of viscous carrying significant mortality. Femoral hernias are known for atypical presentations like painless groin swelling, groin cellulites/necrotizing fasciitis. Diagnosing Ritcher's femoral hernia is often difficult especially in obese patients. Delay in diagnosis may occur, especially because of late symptoms of intestinal obstruction. The earliest known reported case of Ritcher's hernia occurred in 1598 and was described by Fabricius Hildanus. The first scientific description of this particular hernia was given by August Gottlob Ricther in 1778. Occasional case reports or small series of retrospectively collected Ritcher's hernia have been published.[1]

Femoral hernia is relatively uncommon, making up to 2-8% of all adult groin hernias. Incarcerated femoral hernias, however, are most common incarcerated abdominal hernias with strangulation of viscous carrying up to 14% mortality. It is twice common in parous women than nonparous women. Approximately 60% of femoral hernias are found on the right side, 30% in left side and 10% are bilateral.[2] Factors predisposing

Figure1: Photograph of patient showing swelling in the left inguinal region.

Figure 2: laparotomy finding the dilated and collapsed bowel is clearly seen in the this picture

Figure 3: The dilated and collapsed bowel can easily be seen in the photograph

Figure 4: Rechters hernia soon after reduction seen during laparotomy

Figure 5: CT scan bilateral obstructed hemoral hernia

Figure 6: CT of leterial viewsuggestive of obsructed hemoral hernia

to femoral hernia include pregnancy, obesity, pelvic mass, urinary retention and constipation.

Case Summary:

41-year old female saudi who was admitted via emergency room as sub-acute intestinial obstruction for management. She presented with abdominal pain and persistent vomiting, along with constipation on examination patient looks ill and dehydrated. Her vitals at admision temperature 37 degrees, B.P 130/70, pulse 95/min. Her abdominal examination revealed soft abdomen, with mild tenderness peri-umbilical region. There is small swelling present in the left inguinal region as shown in figure-1. She has positive bowel sound. Her, x-ray abdomen should multiple fluid levels. CT scan abdomen with oral contrast showed bilateral obstructed femoral hernia as shown in figure-2 & 3.(Picture CT abdo). She underwent lower midline laparotomy, the findings at laparotomy were dilated bowel loops proximally and bowel loops seen entering femoral canal orifice, there was collapsed small bowel found distal to obstruction as shown in figure-4.(in stomach) Both femoral hernia reduced fortunately on both sides we have found partial intrapment of bowel (Richter's hernia), after reduction, the bowel loop were found little congested on application hot sponges the bowel loop became pink as shown in figure-5. Subsequently repair of bilateral femoral hernia performed. Post-operatievly she recovered smoothly. She was discharged from hospital on 6th post-op day.

Discussion:

Formation of Richter's hernia depend on size and consistency of the hernial orifice, it must be big enough to accomodate the bowel wall, but small enough to prevent protrusion of an entire loop of the intestine, and the margin of the hernia ring must be firm.[2] According to others the presence of a tight constricting ring is a pre-requisite for strangulation and compromised blood circulation, which finally leads to ischemia and gangrene.[3,4] Richter's hernias tend to progress more rapidly to gangrene than ordinary strangulated ones. This may be explained not only by the firm constricting ring that exerts direct pressure on the bowel wall, but also by the anatomical peculiarity. This insidious pathologic feature of Richter's hernia often leads to late diagnosis or even misdiagnosis, thus allowing time for bowel necrosis to develop.

Differential diagnosis of femoral hernia are Saphena Varix (sepnous vien varicosity), Lymadenopathy, Femoral artery pseudo aneurysm, pseudo-hernia and soft tissue masses.[5] The femoral hernia should always be repaired to avoid complications like obstruction, incarceration and strangulation. The femoral hernia can be repaired via inguinal, infra-inguinal or pre-peritoneal approach.[6]

Clinical and radiologic signs of an ileus are present in approximately 10% of patients; in the absence of a complete mechanical obstruction, this can be due to paralysis. A small femoral canal, the most common site of Ritcher's hernia, is sometimes masked by body fat or an enlarged lymph node or is mistaken for acute lymphadenitis. If surgery is performed too late or not at all, natural healing may occur in the form of drainage through an enterocutaneous fistula. Under certain conditions (a self-limiting septic process low-output fistula, and free intestinal passage), the fistula may spontaneously close, as observed by Fabricius Hildanus, but it may also persist for months, as reported by others.[8,9] Perforation

into another compartment, such as the scrotum, vulva, thighs, or peritoneal cavity.[10] Gangrene has been found as early as the third day of strangulation.[11]

Therefore femoral hernia should be operated as early as possible to avoid grave complication.

Conclusion:
Femoral hernia should always be considered in the differential diagnosis of intestinal obstruction specially in female. As Richter's hernia may be present in femoral hernial content therefore early exploration is advised.

Conflict of interest: None

Funding source: None

Role and contribution of authors:
Dr Sheikh Muddasir, collected the data, references and wrote the initial menuscript.

Dr Fayez Al-Saffar, collected the data, references went through the article and made useful changes

Dr Dauda Bawa, critically review the article and advised severeal changes.

Dr Suhail Khuroo, collected the data, references and helped in discussion and introduction writing.

Dr Saleem Abdul Sattar Khan, critically went through the article and made the final changes.

References:
1. Ann Surg 2000 Nov 232(5):710-718PMCID: PMC 1421226.
2. Richters Type Femoral Hernia: Diagnostic Difficultyical , J Janardhan, KS Rao et al Jour of Dent& Med Sci(14) :6 II Jun 2015 25-28.
3. Richter AG Abhandlung von den Bruchen. Gottingan: Johann Christian Dieterich; 1785
4. PualwuanF. Operative aspect of Richter,s hernia.Surg Gynaecol Obstet 1958;106:358-362 (Pubmed)
5. Dahlstrand U,Wollert S et al, Emergency Femoral Hernia Repair. A study based on National Register Ann Surg;2009;249:672-676.
6. Durari M etal Srangulated Femoral Hernia containing caecum &Base of Appendix. Post Grad Med J, 1996;42;(493)726-728.
7. Keynes WM Richter,s Hernia .Surg Gynaecol Obstet 1956;103:496-500 (Pubmed)
8. Udofot SU. et al. Multiple Faecal &urinary fistulae as a complication of native treatment of Inguinal Hernia Trop Geogr Med 1990;43: 195 Pub Med.
9. Fuckiger R,Huber A et al Die Richter,sche Hernie, Der Chirurg 1993;64:822-826 ,Pubmed
10. Limjoco UR,Grubbs JM etal,Richter Hernia with Bowel perforation Am Fam Physician 1998;58:352-354 (Pub Med)
11. Treves Fet al Richter,s Hernia or Partial Enterocele Med Chir Tr 1887;17:149-167 (PMC free Article)(PUB Med)