



## CASE STUDY

### RICHTER'S TYPE FEMORAL HERNIA

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#### ABSTRACT

Femoral hernias are relatively uncommon but are most common incarcerated abdominal hernias with strangulation of viscous carrying significant mortality. Femoral hernia has often been found to be the cause of unexplained bowel obstruction. Delay in diagnosis may occur, especially because a strangulated femoral hernia doesn't always present with typical groin swelling and signs of strangulation. We report a case of 65 yr old female presenting with vomiting since 7 days, with a non tender swelling in right groin without signs of strangulation. On exploration, Richter's femoral hernia with part of small bowel wall as content which was viable and reduction of ileum with hernia repair was done.

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## INTRODUCTION

A 65 years woman presented to outpatient department with history of swelling in the right groin region since 10 years. The swelling was gradually progressive in size and was non painful and irreducible. She complained of vomiting for last 7 days which was non projectile, profuse about 5 to 6 episodes per days watery mixed with food contents, non foul smelling, non bilious, no blood contained. She had also not passed stool since 4 days but had passed flatus. She denied fever, burning micturation or loss of weight and appetite. She denied previous surgery and her medical history was non contributory. She was ill-looking, dehydrated with clinically notable pallor and afebrile with bilateral basal crepts on chest auscultation with unremarkable abdominal examination. On digital rectal examination findings were unremarkable except for impacted stool. Right groin examination demonstrated 3cm x 2 cm, firm, nontender, irreducible swelling. Laboratory data were unremarkable and ultrasound guided imaging of the abdomen and swelling demonstrated a right femoral hernia with protrusion of the bowel loops in the hernia sac. Bowel loops proximal to herniated segment was dilated and impacted with fecal matter. An emergent inguinal exploration with Lotheissen

trans inguinal approach revealed an ischemic segment of anti-mesenteric segment of ileum strangulated at the right femoral canal with approx 30ml serous fluid. the ischemic segment of the ileum was viable and covered with warm mob and gradually notifiable pink colour change was noticed and it was pushed back to peritoneum. Defect of the femoral canal was closed by approximating inguinal ligament anteriorly with ileopectineal ligament posteriorly. Later modified meloney darn repair was done approximating conjoint muscle superiorly and inguinal ligament inferiorly. The patient had uneventful post operative course and was discharged on 7<sup>th</sup> post operative day after stitch out.

## DISCUSSION

Richter's hernia was first reported by Fabricius Hildanus in 1598, and August Gottlob Richter provided its first scientific description in 1778 (Richter, 1785). The classic features of Richter's hernia include entrapment of part of the intestinal circumference and strangulation at the hernia orifice which can result in rapid onset of gangrene often in the absence of intestinal obstruction. Approximately 5%–15% of strangulated hernias are Richter's hernias, with an increasing incidence at sites of laparoscopic port insertion (Steinke et al., 2000; Kadirov et al., 1996). Richter's hernia usually contains distal ileum, and a tight constricting ring is a prerequisite for strangulation.

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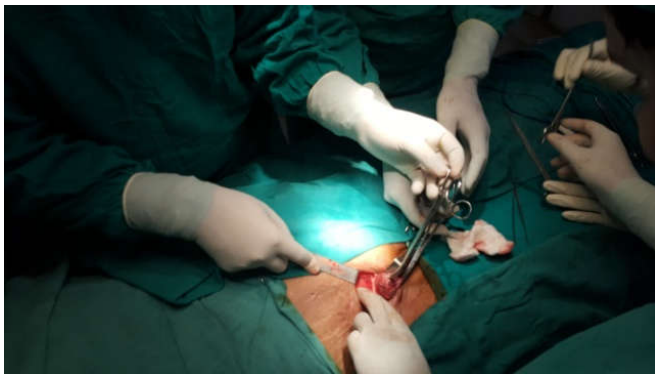


Figure showing a part of small intestine partially trapped and bulge outside



Fig: Ultrasound finding of bowel trapped Fig: Viable loop of trapped segment

The most common sites of involvement are femoral (36-38%) and inguinal (12-36%); furthermore of all strangulated femoral hernia 6.3% are Richter's type. However, spontaneous Richter's hernia may occur through other defects in abdominal wall (Pualwuan, 1958; Keynes, 1956; MC.Donnell and Adas, 2006) Femoral hernia is relatively uncommon, making up 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. Differential diagnosis of femoral hernia includes pseudohernia, Femoral artery pseudoaneurysm, Saphenous vein varicosity, Soft tissue masses and lymphadenopathy which can be differentiated by proper clinical examination and imaging (Treves, 1887). Definitive preoperative diagnosis and strategic planning for surgery are thus important as it can be easily mistaken with other differential diagnosis of groin swellings and most importantly it doesn't always present with typical features of strangulation (as in our case)

### Conclusion

Femoral hernia has often been found to be the cause of unexplained bowel obstruction. If female patient with bowel obstruction need to do further investigation however Diagnosis is largely a clinical one. In obese it is difficult, imaging in the form of USG abdomen & CT/MRI may help in diagnosis. The entrapped small segment of bowel wall would be difficult to visualize on computed tomography, and contrast studies would be unrevealing in the early stages, when there is still patency. Therefore, awareness during the clinical examination remains the key for proper diagnosis and timely surgery. Correct preoperative diagnosis of femoral hernia and strict operative strategy are of utmost importance to prevent undue morbidity and mortality.

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