

# Spontaneous inguinal enterocutaneous fistula, as an exceptional complication of incarcerated Richter's hernia: A case report

## Spontan inguinal enterokutan fistül, hapsedilen Richter fitiğının istisnai bir komplikasyonu: Olgu sunumu

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### Abstract

Richter's hernia may be defined as an abdominal hernia in which only part of the circumference of the bowel wall is entrapped and strangulated in the hernial orifice. It occurs at various positions with femoral ring being the most common. As the bowel continuity is maintained, the patients usually do not have intestinal obstruction. The spontaneous enterocutaneous fistula is a rare complication of inguinal Richter's hernia. We report a case of a 75 year old female patient with enterocutaneous fistula which occurred spontaneously in the right inguinal region. Abdominal computed tomography scan confirmed the diagnosis of enterocutaneous fistula. We performed a right celiotomy with resection and primary anastomosis of the fistulous bowel. Patient recovered uneventfully without any complications or recurrence.

**Keywords:** Enterocutaneous fistula, Femoral ring, Inguinal, Richter's hernia, Spontaneous

### Öz

Richter fitiği, bağırsak duvarının çevresinin sadece bir bölümünün fitik deliğinde sıkışıp boğulduğu karın fitiği olarak tanımlanabilir. Femoral halka en yaygın olanı olup, çeşitli pozisyonlarda ortaya çıkabilir. Bağırsak devamlılığı korunduğundan, hastalarda genellikle bağırsak tıkanıklığı yoktur. Spontan enterokutan fistül, inguinal Richter fitiğinin nadir görülen bir komplikasyonudur. Bu çalışmada sağ inguinal bölgede spontan olarak ortaya çıkan enterokutan fistülü olan 75 yaşında bir kadın hasta sunuldu. Abdominal bilgisayarlı tomografi taraması enterokutan fistül tanısını doğruladı. Rezeksiyon ve sağ bağırsakta primer anastomoz ile sağ seliotomi yapıldı. Hasta herhangi bir komplikasyon veya nüks olmadan sorunsuz bir şekilde iyileşti.

**Anahtar kelimeler:** Enterokutan fistül, Femoral halka, İnguinal, Richter fitiği, Spontan

### Introduction

Richter's hernia is an incarceration of the antimesenteric circumference of bowel wall is within the hernia sac. This situation is responsible for the occurrence of ischemia, gangrene and perforation of the bowel [1]. It occurs at various positions with femoral ring being the most common. [2]. It is a more common disease in developing countries because of the delay in diagnosis [3].

We report a case of a 75 year old female patient with enterocutaneous fistula which occurred spontaneously in the right inguinal region. Abdominal computed tomography (CT) scan confirmed the diagnosis of enterocutaneous fistula.

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## Case presentation

A 75 years old female admitted to surgery emergency for fecal fistula in the right inguinal region since 20 days. She developed 5 weeks ago a painful swelling of the right groin whose evolution is marked by the appearance of a fistula.

The clinical examination found an altered patient, dehydrated. Abdomen is soft and not painful. No symptoms of intestinal obstruction. The examination of the inguinal region finds a fistulous orifice with a fecal matter discharge (Figure 1). On CT scan showed communication of the cutaneous opening with a small gut loops (Figure 2).

The patient was admitted to the operating room for an emergency surgery and right inguinal region explored with a right celiotomy which confirmed a right sided Richter's femoral hernia with part of the small bowel wall as content which was gangrenous and opened up (Figure 3). Resection of gangrenous segment and end to end anastomosis was done in one layer. Mac VAY technique was performed to repair the femoral hernia. The fistulous tract was laid open and curetted. Post-operative period are uncomplicated.



Figure 1: Image of the right groin showing opening of the enterocutaneous fistula

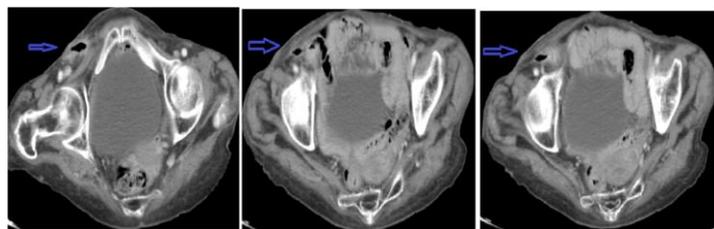


Figure 2: Abdominal computed tomography scan showing enterocutaneous fistula (arrow)



Figure 3: Image showing necrosis and perforation of small bowel

## Discussion

Femoral hernias are diagnosed in more than 50% of cases during strangulation [4]. It is a more common pathology in women. Diagnosis of femoral hernias is difficult due to the configuration of the Femoral ring. The potential severity of a strangulated hernia is related to the risk of acute intestinal obstruction and intestinal gangrenous. Enterocutaneous fistula can complicate neglected groin hernia [5].

A Richter's hernia progresses more rapidly to gangrene due to constricting ring that exerts direct pressure on the bowel

wall and hence compromised blood supply [6]. Making the diagnosis of Richter's hernia may be difficult because of the apparently innocuous initial symptoms and sparse clinical findings; the diagnosis may remain presumptive until clearly confirmed at surgery [7].

The CT scan with ingestion of gastrografin allows the diagnosis of a fistula [8]. Most of these spontaneous fecal fistulas have been reported from developing countries like India and Nigeria [9] and is usually the result of poverty, lack of knowledge, neglect, late presentation and lack of proper management [10].

In conclusion, an enterocutaneous fistula revealing a Richter's femoral hernia demonstrates a significant diagnostic delay. The treatment is surgical and should be adapted to local and parietal conditions.

## References

- Steinke W, Zellweger R. Richter's hernia and Sir Frederick Treves: an original clinical experience, review, and historical overview. *Ann Surg.* 2000;232 :710–18.
- Ahi KS, Moudgil A, Aggarwal K, Sharma C, Singh K. A rare case of spontaneous inguinal faecal fistula as a complication of incarcerated Richter's hernia with brief review of literature. *BMC Surg.* 2015;15:67.
- Elenwo SN, Igwe PO, Jamabo RS, Sonye US. Spontaneous entero-labial fistula complicating Richters hernia: Report of a case. *Int J Surg Case Rep.* 2016;20:27-9.
- Hajong R, Khongwar D, Komut O, Naku N, Baru K. Spontaneous Enterocutaneous Fistula Resulting from Richter's Hernia. *J Clin Diagn Res.* 2017;11(8):5-6.
- Talukder S, Gupta A, Singh BN, Kaman L, Reddy PA. Fistulating Richter's Hernia of Groin with Necrotizing Soft Tissue Infection: A Lethal Combination. *J Clin Diagn Res.* 2017;11(7):5-7.
- Yeboah MO. Entero-scrotal fistula in a Ghanaian adult: a case report of the Spontaneous rupture of a neglected strangulated inguinal hernia. *Hernia* 2011;15(4):455–7.
- Koshariya M, Naik S, Rai A. Incarcerated inguinal hernia presenting as Spontaneous scrotal faecal fistula. *Hernia.* 2006;10(5):434–5.
- Malik P, Rath M, Kumar K, et al. Scrotal enterocutaneous fistula: a rare initial presentation of inguinal hernia. *J Surg Case Rep.* 2014;2014(6):56.
- Rajamanickam S, Yadav A, Singh D, Sonkar AA. A complicated true sliding hernia presenting as a spontaneous enteroscrotal fistula in adults. *J Emerg Trauma Shock.* 2010;3:62–5.
- Horbach JM. Invagination for Richter-type strangulated hernias. *Trop Doct.* 1986;16:163–8.

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