Spontaneous Enterocutaneous Fistula Resulting from Richter's Hernia

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ABSTRACT

Richter's hernia is due to the entrapment of a part of circumference of the bowel wall. As the bowel continuity is maintained, the patients usually do not have intestinal obstruction. Some patients with Richter's hernia may present with enterocutaneous fistula either spontaneous or due to surgical intervention mistaking the obstructed hernia to be inguinal abscess. This is more so in developing countries due to lack of awareness among the masses or due to the delay in seeking medical attention. Presenting here is a case of a 53-year-old male patient with enterocutaneous fistula which occurred spontaneously and sought medical attention only after about three years of repeated discharge of yellowish fluid from the left inguinal region. Magnetic resonance fistulogram confirmed the diagnosis of enterocutaneous fistula. Laparotomy with resection and primary anastomosis of the fistulous bowel was done. Patient recovered uneventfully without any complications or recurrence.

Keywords: Delayed presentation, Inguinal fistula, Strangulated hernia

CASE REPORT

A 53-year-old male patient presented with the complaint of yellowish discharge coming out from the left groin region on and off since the last three years [Table/Fig-1]. On eliciting further, the patient gave the history that three years back, a painful swelling appeared in the same location which burst after about a week. Since, then the discharge have been extruding intermittently. The patient did not seek any medical attention during the initial part of the disease, but since the last two years he had attended some primary care physicians who have been giving him various medications without any relief. Clinically a diagnosis of enterocutaneous fistula following Richter's herniation was made. Fistulogram with urograffin showed communication of the cutaneous opening with the jejunal loops [Table/Fig-2]. A Magnetic resonance fistulogram showed similar findings. Laparotomy with resection and primary anastomosis of the fistulous bowel was done [Table/Fig-3]. The patient recovered uneventfully and was discharged on the 10th postoperative day. At six months of follow-up, the patient was doing well. The highlight of the case was the delayed presentation leading to the fistula formation in the inguinal region.

DISCUSSION

Groin hernias may rarely present with spontaneous faecal fistula as a result of Richter's hernia in which a portion of the anti-mesenteric border of bowel wall is entrapped and incarcerated within the hernia sac leading to ischemic changes and bowel perforation [1,2]. Richter's hernia may occur in any hernia sites but is more commonly seen in femoral ring [3].

As only a part of the intestine is entrapped in Richter's hernia, the patients usually do not have obstructive symptoms and may present late with increased mortality [4]. Lack of awareness of the condition and non-accessibility to medical care may result in a relatively benign hernia to a complicated strangulated hernia [1].

Richter's hernia occurs in femoral rings (72-88%), inguinal canal (12-24%), incisional hernias (4-25%) and laparoscopic port insertion sites [5]. Distal ileum, caecum and sigmoid colon are most commonly involved in Richter's hernia, even though any part of intestine may get entrapped [4]. As only a part of circumference of the intestine is entrapped in Richter's hernia, luminal continuity is maintained with minimal clinical signs.



[Table/Fig-1]: Showing the external fistula opening in left groin region; [Table/Fig-2]: Showing jejunal loops in fistulogram.



Once the Richter's herniation has formed, it can have any of the several sequelae. It may present with obstruction as in other incarcerated hernia [6]. The involved intestine wall may perforate gradually with some unapparent local symptoms or peritonitis if it goes to the peritoneal cavity [2]. It may also lead to abscess formation, necrotising fasciitis and even enterocutaneous fistula due to infection and necrosis of the entrapped bowel wall perforating and rupturing through the external skin [7,8].

Diagnosing Richter's hernia clinically is challenging. Many of the previous cases [9] were confirmed during surgery. Detailed clinical history, thorough physical examination and radiology may help in the early diagnosis of the patients.

Fistulation will decompress the bowel and relieve intestinal obstruction. However, there is increased risk of septic complications and mortality in patients with Richter's hernia, urgent surgical exploration with bowel resection and primary anastomosis is usually mandated [10]. Similar cases have been reported by Ahi KS et al., Weledji EP et al., and Xia X et al., which were managed surgically [1,11,12].

Enterocutaneous fistula may close spontaneously as reported by Hildanus F which lasted for about two months [13]. The author also managed a similar case conservatively on an earlier occasion. However, the fistula may recur without further management [11].

CONCLUSION

Richter's hernia should be kept in mind while dealing with enterocutaneous fistula in the inguinal region. Delay in diagnosis and seeking medical attention may result in complications like enterocutaneous fistula.

REFERENCES

[1] 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.

- [2] Habib FS, Siddiqui B, Amanullah KM, Anees A, Ali SA. Suprapubic fecal fistula due to richter's inguinal hernia: a case report and review of literature. Iran J Med Sci. 2013;38:129-31.
- [3] Steinke W and Zellweger R. Richter's hernia and Sir Frederick Treves: an original clinical experience, review, and historical overview. Ann Surg. 2000;232:710-18.
- [4] Mou CY, Lu HE, Yen SJ, Su CJ, Tan KH, Ku ZA. Richter's hernia: report of six cases. J Med Sci. 2000;20(4):201–06.
- [5] Boughey JC, Nottingham JM, Walls AC. Richter's hernia in the laparoscopic era: Four case reports and review of the literature. Surgical Laparoscopy, Endoscopy and Percutaneous Techniques. 2003;13(1):55-58.
- [6] Sakai NS, Acharya V, Mansour S, Saleemi MA, Cheslyn-Curtis S. An unusual cause of small bowel obstruction caused by a Richter'stype hernia into the urinary bladder. Int J Surg Case Rep. 2014;5:358-60.
- [7] Koshariya M, Naik S, Rai A. Incarcerated inguinal hernia presenting as spontaneous scrotal fecal fistula. Hernia. 2006;10(5):434-35.
- [8] Ameh EA, Awotula OP, Amoah JN. Spontaneous scrotal faecal fistula in infants. Pediatr Surg Int. 2002;18 (5-6):524-25.
- [9] Rajiv J, Kollah V. Management of various rare and atypical hernias: experience at a tertiary care centre in central India. Int Surg J. 2016;3(1):146-52.
- [10] Malik P, Rathi M, Kumar K, Sharma R, Meena P, Arya A, et al. Scrotal enterocutaneous fistula: a rare initial presentation of inguinal hernia. J Surg Case Rep. 2014;2014(6):rju056.
- [11] Weledji EP, Puepi MA, Chichom AM. A rare spontaneous enterocutaneous fistula. J Surg Case Rep 2014;2014(11):rju121.
- [12] Xia X, Li WJ, Yin WM. Richter's femoral hernia with spontaneous enterocutaneous fistula: a case report. Int J Clin Exp Med. 2016;9(8):16901-03.
- [13] Hildanus F. Observationum et Curationum Chirurgicarum Centuriae. ed 1st Basileae: Sumptibus Ludovici Regis; 1606:159.

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