## **CASE REPORT**

# RICHTER'S HERNIA PRESENTING AS FAECAL FISTULA IN FEMALE; A RARE ENTITY

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Strangulated hernia in quite common in surgical practice and always present with its typical symptoms. In this hardly found unique case, a 76-year's old female with no co morbid presented to us with abdominal pain, vomiting and diarrhoea initially and later developed left groin abscess after 4 days of swelling. It was assumed to be inguinal lymphadenitis leading to abscess formation but after complete evaluation on digital examination, diagnosis of Strangulated Femoral hernia of Richter type was made. This distinguishing presentation among the list of all hernias has to be discussed for the differential diagnosis.

Keywords: Richter's hernia; Fecal fistula; Hernia

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#### INTRODUCTION

Richter's hernia occurs in small hernia rings strong enmesh enough to the partial circumference of the bowel wall, but limited enough to avert protrusion of a loop of the intestine, with firm margins. With bone (body of pubis medially) or ligament on three sides [inguinal ligament precedent, pectineal ligament of Astley Cooper on superior ramus of pubic bone posteriorly and the crescenteric fringe of the lacunar (Gimbernat's) ligament medially], the femoral canal is a stringent opening so that bowel is more supposed to be strangled if it is pushed through it.2

The misleading presentation of Richter's hernia with the lack of obstructive symptoms and tendency to early strangulation may result in delay of diagnosis and hence ultimately increased mortality.<sup>3</sup> Rarely inguinal Richter's hernia may present with an uncommon complication of spontaneous fistula.

Non-availability of appropriate medical care and crudeness of the condition are the dominant factors having potential for transformation of a relatively benign (start) condition of inguinal hernia into complicated end state of incarceration and strangulation. It is extremely occasional to have progression of strangulation towards the development of spontaneous fistula.

This 76-year-old female patient with unnoticed inguinal hernia presented to us with a complication (fistula) as a first symptom. In view of the extreme uniqueness of this presentation of an inguinal hernia, a unique case report pertaining to a spontaneous fistula in an adult is presented here.

#### CASE

76 years old female admitted under care of General Physician in private (Non-Government set up) hospital with complain of abdominal pain, Vomiting and Diarrheal for four days. Patient also has history of left groin swelling for last six months. After four days of treatment, patient didn't improve and developed Purulent discharge from left groin swelling which was presumed to be inguinal lymphadenitis leading to Abscess formation. Surgeon received a call for that socalled abscess and on examination patient was clinically and biochemically unstable with distended abdomen and absent Bowel sounds. There was a discharging wound in left inguinal region below and lateral to pubic tubercle with greenish discharge. On digital examination of wound, Strangulated knuckle of bowel constricted at femoral ring was felt. Clinical diagnosis of Strangulated Femoral Hernia of Richter type was made. Patient was referred to government setup but due to unavailability of ventilator support, she was referred back to primary hospital. Exploratory laparotomy was performed. On Exploration, there was a strangulated knuckle of ileum 40cm proximal to ileocecal junction with retrograde impending strangulation of ileum. Loop of ileum released from constriction ring and myopectineal orifice closed with prolene in spite of conventional femoral hernia repair in order to reduce the anaesthesia time. Strangulated bowel wall at antimesenteric border of ileum was excised and segment exteriorized as Loop Ileostomy. Inguinal wound was washed with saline and dressing placed over it to safe guard exposed femoral vein.



Figure-1: Purulent discharge near pubic tubercle



Figure-2: Exploratory Laparotomy



Figure-3: Strangulated Knuckle of Ileum



Figure-4: Myopectineal orifice closing



Figure-5: Loop ileostomy

## **DISCUSSION**

Richter's hernia is named after the German surgeon, August Gottlieb Richter, who presented the first description of this type of hernia in 1778.<sup>4</sup> Earliest known case of Richter's hernia was reported in 1598 by, Fabricius Hildanus.<sup>5</sup>

Richter's hernia is a rare condition in which only a circumference of the antimesenteric bowel wall is strongly incarcerated within the hernia sac leading to ischemia, gangrene and perforation of the hollow viscus.<sup>5</sup> Femoral ring (72–88 %)being the most common site, followed by inguinal canal (12–24%) and the abdominal wall incisional hernias (4–25%). Several cases of laparoscopic port site hernia have been also reported recently.<sup>1</sup> Any part of intestine may get incarcerated but most commonly involves distal ileum, caecum and sigmoid colon.<sup>3</sup>

Onakpoya *et al.*<sup>6</sup> from Nigeria reported the case of a neglected Richter's inguinal hernia presenting with perforation and ultimately Fournier's gangrene. More than three cases of spontaneous perforation of Richter's inguinal hernia with Fournier's gangrene were reported by Guzzo *et al.*<sup>7</sup> in 2007 from the United States of America.

According to presentation of disease Gillespie in 1956, classified Richter's hernia into 3 clinical groups. The obstructive group characterized by nausea, vomiting, peritonitis and constipation leading to shock if untreated. The second group was post necrotic group characterized by strangulation with necrosis and perforation causing enterocutaneous fistula. The dangerous third group includes patients with minimal abdominal signs. Owing to delay in diagnosis, this group has the maximum morbidity and mortality. Our patient belongs to third group.

The signs and symptoms of intestinal obstruction are absent, when less than two thirds of the circumference or ambit of the bowel wall is involved; leading to late diagnosis or even

misdiagnosis, and thus it allows bowel necrosis to develop.<sup>9</sup>

Following open abdominal surgery, unusual occurrences occurs at the insertion spot of the drainage tube as a Spigelian's hernia, through the sacral foramen.<sup>9</sup>

Formation of an abscess with secondary development of entero-cutaneous fistula may occur in an untreated Richter's hernia. 10

A 'high' approach surgically, gives more generous access than does the 'low' (Lockwood) approach.<sup>2</sup> In this case exploratory laparotomy was performed, loop of ileum was released from constricting ring and myopectineal orifice closed, strangulated bowel wall was resected and segment exteriorized as loop ileostomy.

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