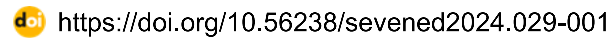
RICHTER'S HERNIA: A CASE REPORT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ABSTRACT

Introduction: Richter's hernia is a rare condition characterized by the protrusion of part of an intestinal loop with entrapment or strangulation of the antimesenteric border through a small defect in the abdominal wall. Case report: An elderly patient with an acute obstructive abdomen due to an incarcerated femoral hernia, diagnosed as an intraoperative Richter's hernia. The case highlights the importance of early diagnosis and rapid treatment to avoid complications.

Keywords: Richter's hernia. Rare condition. Antimesenteric border.

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INTRODUCTION

Richter's hernia is a rare clinical condition, accounting for 5-15% of all strangulated hernias[1]. In this condition, only part of the circumference of the intestinal wall is strangled (most commonly antimesenteric border), without complete obstruction. However, due to the atypical presentation, its evolution can occur quickly to ischemia, necrosis, and intestinal perforation. This type of hernia occurs most frequently in elderly women, between 60 and 80 years of age; however, they can manifest at any age; femoral hernia being the most common site. In this report, we describe a case of Richter's hernia in an elderly patient who presented with signs of partial intestinal obstruction at the Maria Aparecida Pedrossian University Hospital (HUMAP).

METHODOLOGY

The information presented in this case report was obtained through a review of medical records, interviews with the patient, records of the diagnostic methods to which the patient was submitted, and a literature review.

CASE REPORT

A 71-year-old female patient sought the emergency services of the HUMAP complaining of constipation and elimination of flatus for five days, associated with inappetence, nausea and vomiting, including reports of fecaloid vomiting. The patient reported significant diffuse abdominal pain before the administration of intravenous analgesia, but at the time of care, she reported attenuation of this pain. She denied urinary complaints or significant weight loss. His history of comorbidities included only systemic arterial hypertension, he denied previous surgeries. Upon entry, it was necessary to use vasoactive drugs (after an attempt at volume expansion) and passage of a nasogastric tube.

On physical examination, the patient was in a regular general stage, regular nutritional status, emaciated, lucid and oriented in time and space. She had signs of dehydration (2+/4+) and pale (1+/4+), with no jaundice, cyanosis, or fever. In vital signs, she presented tachycardia and hypotension, even after the use of noradrenaline. On abdominal physical examination, the patient was flat, flaccid, with reduced bowel sounds, painless on superficial and deep palpation, and reduced nasogastric tube output.

The imaging method chosen was non-contrast tomography, which showed a herniated small intestine segment with adjacent fat blurring (Figures 1 and 2).

Figure 1 – Herniated small intestine segment with adjacent fat blurring

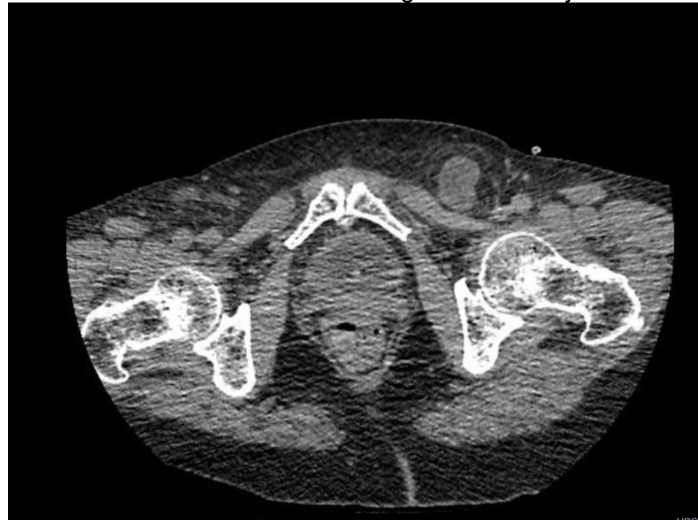

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Figure 2 – Herniated small intestine segment with adjacent fat blurring

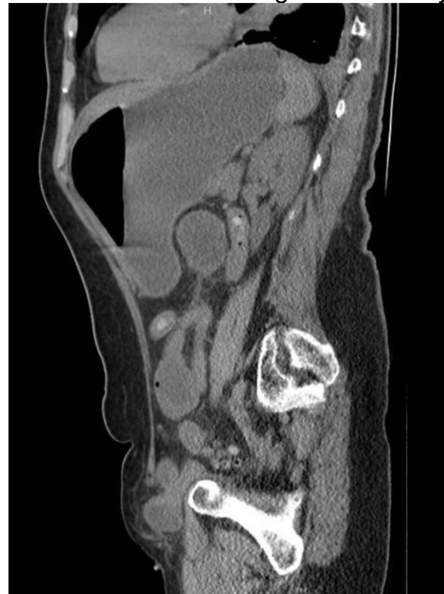

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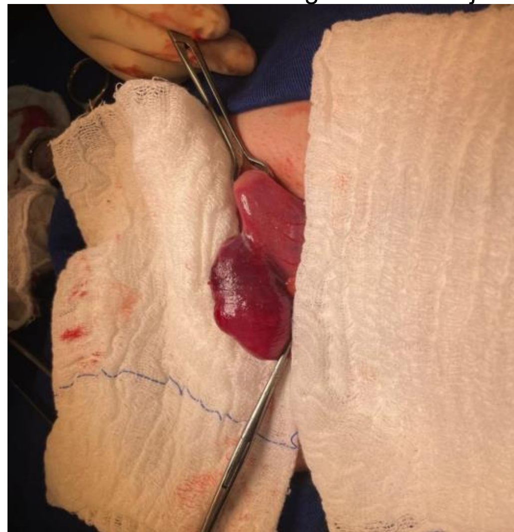
Figure 3 - Herniated small intestine segment with adjacent fat blurring



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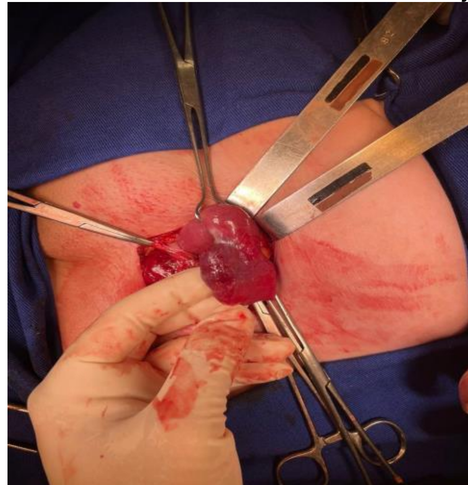
The best conduct taking into account the patient's clinical practice and physical examination was urgent surgery. An oblique incision was chosen, parallel to the inguinal ligament, in order to identify the herniated intestinal segment and its viability. The left femoral hernia was visualized incarcerated with a segment of the small intestine, characterized as a Richter's hernia (Figures 3 and 4). The herniated segment was surgically treated with polypropylene mesh, without the need for intestinal resection and without other complications.

Figure 4 - Segment of herniated small intestine with adjacent fat blurring



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The patient remained intubated for six days after the procedure. During his hospitalization, he developed flu-like symptoms and tested positive for COVID-19. Despite this, the patient evolved satisfactorily, with clinical stabilization, and was discharged after 31 days of hospitalization.

DISCUSSION

Richter's hernia is a rare but potentially serious condition characterized by the entrapment or strangulation of a portion of the antimesenteric border of the small intestine through a small hernia defect. It is more common in older women.

This type of hernia differs from others in that it involves only part of the circumference of the intestine, without causing total obstruction, which presents a diagnostic challenge. However, despite the absence of complete obstruction, intestinal ischemia can occur rapidly due to vascular compromise, which increases the risk of perforation and peritonitis if there is no immediate intervention (Anson et al., 2018).

The rapid evolution of severe complications in Richter's hernia highlights the need for early diagnosis and surgical treatment. Due to the often insidious clinical presentation, with

mild symptoms such as localized abdominal pain and absence of abdominal distension, early recognition can be challenging. However, delays in intervention significantly increase mortality, especially when intestinal necrosis occurs, which reinforces the importance of the emergency surgical approach as soon as the diagnosis is suspected (Aydin et al., 2017).

Urgent surgical management is critical to avoid catastrophic outcomes, such as perforation and diffuse peritonitis, which increase mortality and complicate patient prognosis. Clinical studies indicate that the rate of serious complications, including the need for extensive bowel resections, can be significantly reduced when the intervention occurs in the first hours after diagnosis (Strang et al., 2020) 7. Thus, the speed of diagnosis and treatment of Richter's hernia is essential to optimize the prognosis and prevent fatal complications.

CONCLUSION

Richter's hernia should be considered a diagnostic hypothesis, especially in elderly patients with symptoms of intestinal obstruction. Early diagnosis and prompt surgical treatment are key to preventing serious complications and improving prognosis.

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