

# **INCARCERATED LITTRÉ'S HERNIA: A CASE REPORT**

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*Flávia Medeiros Lima*

*Diego Henrique de Oliveira*

*Ana Flávia Alvarenga Soares*

*Vanessa Condori Leandro*

*Victoria Gabarron Castello Branco*

*Michele Andreza Fidelis Siqueira*

*Eliseu Gabriel Santos Lima*

*Renato Bayma Gaia*

*Wilker Benedeti Mendes*

*Bernardo Teixeira Pentagna*

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**Abstract:** The presence of a Meckel's diverticulum centrally to a hernia sac is called Littre's hernia, which is a case with few published reports in the literature. It is usually asymptomatic, however, when it causes symptoms, the clinical appearance is variable and the diagnosis is often made during the intraoperative period. This present study exposes a case of Littre's hernia incarcerated in a 77-year-old male patient treated at the Hospital Escola de Valença, with the outcome of the case through the analysis of the medical record and bibliographic research.

**Keywords:** Hernia, Meckel's Diverticulum, Gastrointestinal Anomaly.

## INTRODUCTION

Littre's hernia is defined by the presence of Meckel's diverticulum inside the hernia sac, being described in 1700 by the French surgeon Alexis Littre. Its preoperative diagnosis is very difficult and rare, in most cases it is performed intraoperatively<sup>2</sup>.

Meckel's diverticulum represents the most common congenital anomaly of the gastrointestinal tract, occurring in about 2% of the population<sup>5</sup>. It is an intestinal diverticulum that results from the failure of the vitelline duct to obliterate during the fifth week of fetal development<sup>1</sup>.

Patients with this anomaly are usually asymptomatic, when they present symptoms, they are usually bleeding, infection or intestinal obstruction, due to adherence to a segment of the intestine or because it is in a hernia sac (Littre hernia)<sup>1</sup>.

Laparoscopy can be helpful in diagnosing and treating Meckel's diverticula. In addition to using a laparoscope to remove incidentally discovered diverticula<sup>5</sup>.

This report describes a 77-year-old patient diagnosed with incarcerated inguinal hernia of the small intestine with the presence of Meckel's diverticulum, who underwent right

hemicolectomy at Hospital Escola de Valença-RJ.

## METHODOLOGY

This is a descriptive study of a case report of Littre's hernia incarcerated in a patient treated at the Emergency Room of the Hospital Escola de Valença (HEV), based on medical records and interview with the patient, based on structured bibliographic research in journals, articles and monographs (in LILACS and Scielo databases). Number of the ethical review presentation certificate (CAAE): 33238220.4.0000.5246, the project being approved by the Research Ethics Committee (CEP) on June 28, 2020.

## CASE REPORT

Male patient, 77 years old, hypertensive using captopril 25 mg, ex-smoker and alcoholic, was admitted to the Adult Emergency Room of Hospital Escola de Valença-RJ with a complaint of stopping the elimination of flatus and feces for 4 days, distension and mild diffuse abdominal pain, associated with inappetence, nausea and vomiting. He reported diarrheal stools in the morning. He denied weight loss and fever. On examination, the abdomen was distended, hypertympanic, peristaltic, painful on deep palpation, without peritoneal irritation. Presence of inguino-scrotal hernia on the right, reducible. On digital rectal examination, there was no fecaloma and bleeding.

The patient was hospitalized and imaging tests were ordered. Radiological routine of acute abdomen showed the presence of air-fluid levels and central dilation of the intestinal loops. Total abdominal tomography showed right inguinal hernia with signs of incarceration and signs of intestinal subocclusion.

The patient underwent surgery and, during the operation, the presence of an incarcerated

inguinal hernia of the small intestine with the presence of Meckel's diverticulum was diagnosed.

The patient progressed in the postoperative period without intercurrents, being discharged 5 days after the procedure, being referred for outpatient follow-up, in which, so far, there are no complaints.



Fig. 1 and 2: Radiological routine of acute abdomen with the presence of air-fluid levels and central dilation of the intestinal loops.

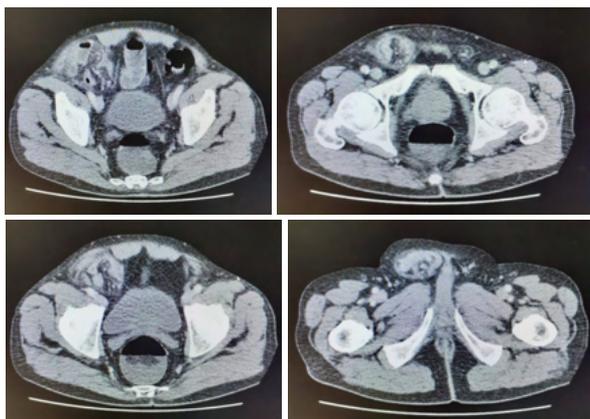


Fig. 3 to 6: Tomography of the entire abdomen with right inguinal hernia, signs of incarceration and signs of intestinal subocclusion.



Fig. 7: Image of the surgical procedure, showing an incarcerated inguinal hernia of the small intestine with the presence of Meckel's diverticulum.



Fig. 8: Surgical specimen obtained after resection of Meckel's diverticulum and affected intestinal loop.

## DISCUSSION

Meckel's diverticulum has all layers of the intestinal wall and is usually present in the intestine at the antimesenteric border, in half of the cases it contains ectopic tissues, for example, gastric and pancreatic tissue <sup>7,9</sup>.

Meckel's diverticulum has all layers of the intestinal wall and is usually present in the intestine at the antimesenteric border, in half of the cases it contains ectopic tissues, for example, gastric and pancreatic tissue <sup>5</sup>.

This anomaly occurs in the same way between the sexes, however, it can cause more frequent complications in males and, therefore, is more frequently diagnosed in this population. <sup>3</sup>.

The number of complications decreases with age<sup>10</sup>. Malignancies account for up to 4.9% of Meckel's diverticulum complications, with sarcomas being the most common neoplasms, followed by adenocarcinomas.<sup>6</sup> Other possible complications are intestinal obstruction, hemorrhage, intussusception, diverticulitis and perforation<sup>5</sup>. Meckel's diverticulum can evolve with complications typical of hernias such as entrapment, strangulation, enterocutaneous fistulas and obstruction.<sup>2</sup>.

The finding of Littre's hernia is uncommon, with the most frequent sites being the inguinal, umbilical and femoral regions<sup>4</sup>. Its presentation is the same as any other hernia and, therefore, its approach is surgical, especially when presenting as an incarcerated hernia<sup>13</sup>.

Its therapeutic approach is to remove the Meckel's diverticulum (a "V" cut, either mechanically or manually, is performed to ensure removal of any remaining ectopic mucosa). Small bowel resection and primary anastomosis is also an option that can be performed, but this procedure may present more complications compared to the first approach mentioned<sup>13</sup>. Resection must be performed according to the presence of complications and intraoperative findings

such as strangulation, fistulas, bleeding, infection, perforation and obstruction or the option for conservative treatment when such situations are not present<sup>8</sup>. Hernia repair must be performed with a mesh whenever possible, there is not much contamination in such a technique<sup>1</sup>.

## CONCLUSION

Littre's hernia is characterized by the presence of Meckel's diverticulum inside the hernia sac, being a rare finding in the population.<sup>2</sup>.

Patients are usually asymptomatic, when they present symptoms such as the intestinal obstruction, they must undergo surgical treatment with the removal of Meckel's diverticulum and consequent hernia repair.<sup>1,13</sup>.

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