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Case Report

Uncommon Cause of Intestinal Obstruction: Umbilical Littré's Hernia

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ABSTRACT

Introduction: Meckel's diverticulum occurs in 0.3-3% of the world population. This is the embryological remnant due to the lack of obliteration of the omphalomesenteric duct at the fifth week of gestation. The complication of Meckel's diverticulum that protrudes through any hernial orifice is called Littré's hernia. In this case, it presents through an umbilical defect.

Objective: Report a case of umbilical Hernia Littré given its low incidence.

Case Report: A 26-year-old male with no significant history. The physical examination revealed an umbilical defect measuring 1 cm in diameter with no evidence of incarceration or strangulation. Conservative decompressive management was established, nasogastric tube with initial expenditure of 400 milliliters of gastrobiliary content; however, after 12 hours there was no clinical improvement. Surgical management was decided, an exploratory laparotomy was performed, as findings of little free fluid with an inflammatory appearance, 1 cm umbilical defect with a hernial sac containing a Meckel diverticulum.

Conclusion: The presentation of these clinical cases enriches the literature and gives us the opportunity to identify more of these rare clinical cases.

Introduction

Meckel's diverticulum occurs in 0.3-3% of the world population, presenting more frequently in men. This is the embryological remnant due to the lack of obliteration of the omphalomesenteric duct at the fifth week of gestation. Histologically, it can be composed of ileal tissue, or heterotopic tissues such as gastric, pancreatic, duodenal, jejunal, colonic, hepatobiliary, and endometrial. It occurs approximately 60 cm from the ileocecal valve, over the antimesenteric border, and measures an average of 2 cm in diameter by 5 cm in length. It was first described in 1598 by Fabricius Hildanaus and later named in the 18th century by Alexis de Littré. It was Gottlieb years later in 1785 who indicated that its origin was congenital, followed by Friedrich Meckel in 1809, who studied its embryology and development. The first publication was in the British Surgeon by Littler in 1924. The complication of Meckel's diverticulum that protrudes through any hernial orifice is called Littré's hernia. In this case, it presents through an umbilical defect [1-4].

Case Presentation

A 26-year-old male with no significant history, came to the emergency room with colicky abdominal pain, intensity 6/10, in the mesogastrium and hypogastrium, without radiation, accompanied by nausea and vomiting on multiple occasions of food content, later gastrobile, as well as intolerance to the oral route of 24 hours of evolution. The physical examination revealed an umbilical defect measuring 1 cm in diameter with no evidence of incarceration or strangulation. The abdominal X-ray showed air-fluid levels, the absence of distal gas, and a coin-pile image. He was admitted for intestinal obstruction. Conservative decompressive management was established – nasogastric tube with initial expenditure of 400 milliliters of gastrobiliary content; however, after 12 hours there was no clinical improvement, persisting abdominal pain, tension distension.

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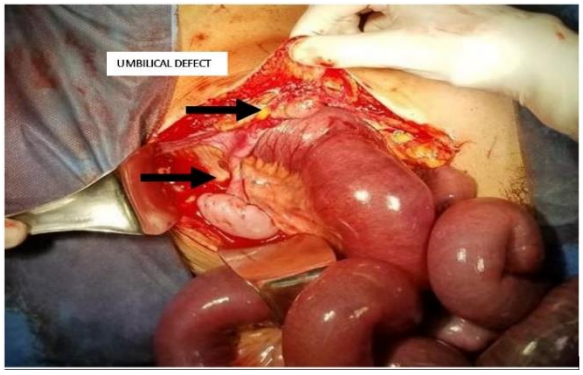

Figure 1: The insertion to the abdominal wall of the diverticulum (hernial sac) is observed on the upper date; on the lower date, the segment of the hernia can be seen with rotation (strangulation of the sac) on its own axis.

Figure 2: Meckel diverticulum 1 cm in diameter and 6 cm in length.

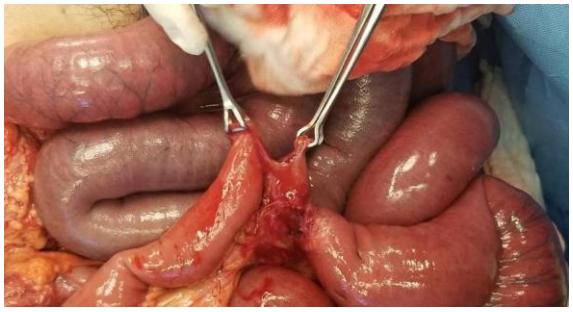

Figure 3: Meckel diverticulum resected 30 cm from the ileocecal valve.

In addition the expenditure through the nasogastric tube became characteristic fecaloids, for which surgical management was decided, an exploratory laparotomy was performed, as findings of little free fluid with an inflammatory appearance, 1 cm umbilical defect with a hernial sac containing a Meckel diverticulum 1 cm in diameter and 6 cm in length, attached to the defect (Figure 1), which was 30 cm from the ileocecal valve (Figure 2) and, on which loops of the small intestine turned, we proceeded to reduce the content of the hernial sac, devolvulate small intestine loops and resect diverticulum of Meckel with wedge incision (Figure 3) and subsequent closure in two planes, finally hernia defect repair. An aspiration drain was placed, which was removed due to low serous output. The histopathological study reported ileal tissue. He had a good clinical evolution in the postoperative period, he was discharged on the seventh day, tolerating the oral route adequately and evacuating normal characteristics. Follow-up was carried out up to 4 weeks after the surgical event, without complications.

Discussion

Only 4-16% of Meckel's diverticula complicate. They can be, in order of frequency, bleeding, obstruction, diverticulitis, and perforation. The second most common cause of complications is internal hernia obstruction. In this case, we speak of Littré's hernia, which is a Meckel's diverticulum in a hernial sac that occurs in 1% of the population. The most common is that it is present in the femoral region 39.6%, followed by inguinal 34%, umbilical 11.3%, obturator region 5.7%, and finally ventral. Of the umbilical Littré hernias, only 33.3% present with intestinal obstruction. In most cases, an intraoperative diagnosis is made since imaging studies generally only report hernia with contents of small bowel loops. The management of Littré's hernia is surgical with reduction of the hernia, repair of the hernial defect, and resection of the diverticulum [5-8].

Conclusion

Intestinal obstruction as a complication of Littré's hernia has been observed with a low incidence, and within this group, those that protrude through an umbilical defect present in an even lower percentage. All patients in this situation should be treated surgically. Due to its low frequency, the data published in the literature are limited.

Conflicts of Interest

None.

Funding

None.

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