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Littre Hernia in a 35 year old male: A case report

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Abstract
Meckel's diverticulum (MD) being present within a hernial sac characterises the uncommon clinical condition known as Littré's hernia (LH).Despite being the most frequent congenital abnormality of the intestinal tract, MD rarely causes symptoms.However, it might also show up as a number of complications.Since LH's anamneses are similar to those of any other hernia that involves the gut, a preoperative diagnosis is unlikely.Here, we describe the case of a 35-year-old man who had an incarcerated LH in the inguinal region. The diverticulum was successfully removed, and the hernia was then repaired.

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I. Introduction

With a reported incidence of0.6%–4%, Meckel's diverticulum (MD) is the most common congenital anomaly of the gastrointestinal tract [1].Usually found 30 to 90 cm from the ileocecal junction at the antimesenteric border of the ileum, it is a true diverticulum that contains all three layers of the gut.Its mucosa may contain ectopic colonic, pancreatic, or gastric tissue (in 5%–16% of cases, 23%–50% of cases, respectively). It is discovered mostly accidentally during a laparotomy procedure. When MD protrudes into the hernia sac, a condition know as Littre's hernia is one of its rare complications.

LH is a very uncommon condition that affects just 1% of all MD cases. The French surgeon Alexis de Littré, who discovered this condition in two of his patients in the 1700s, is credited with giving the condition its name. This type of hernia can present as an inguinal, femoral or umbilical hernia.

II. Case Presentation

A 35-year-old male patient who had severe pain that had suddenly started in his right groin and was accompanied by nausea for four hours presented to theemergency department. He had no past medical history of any lumps or hernias in this area.The patient was hemodynamically stable, with the exception of a mild tachycardia. The clinical examination revealed a swelling on the right inguinoscrotal region, which was irreducible. There were no peritonitis symptoms and the abdomen was soft and non-tender.With the exception of a mild leukocytosis (WBCs 12.500), the results of the preoperative biochemical and hematological investigations were within normal limits. The diagnosis was incarcerated right inguinal hernia, with no signs of possible strangulation. The patient went to the operation room, a inguinal incision was performed and a4-cm-long incarcerated nongangrenous Meckel's diverticulum was found when the hernial sac was explored.A decision was made to wedge-resect the diverticulum.After the inguinal wall was repaired using the Lichtenstein technique, the remaining portion of the bowel was reduced back into the abdomen. The post-operative period was normal, without complications and the patient was discharged on the 5th post-operative day. The diverticulum's histopathological report revealed ischemic changes to the ileal mucosa and ectopic gastric tissue.

III. Discussion

MD is a typical gastrointestinal congenital anomaly.The "rule of two" can be used to describe a typical MD. It states that the condition affects 2% of the population, is typically diagnosed before the age of two, is 2 inches and 2 cm in diameter, is located 2 feet from the ileocecal junction, is twice as common in men, and affects 2% of patients exhibiting symptoms. [2,3]

Even though 90% of cases are asymptomatic, it still has a wide range of potential side effects, the most common of which is intestinal obstruction.In a study of 1476 patients with MD, Park et al. discovered that obstruction and bleeding were the most typical clinical manifestations in children and adults, respectively.[4]

Littré's hernia, which contains the MD, Amyand hernia, which contains the appendix, and Richter's hernia, which contains the antimesenteric portion of the small intestine, are the three types of hernias that are frequently distinguished based on their contents.Rarely, hernial sacs can also contain the ovary or fallopian tubes. [5]

There are no distinctive clinical symptoms or signs that can distinguish an LH from other hernias.The possibility of LH can be based by a history of rectal bleeding, an incomplete manual reduction of the hernia, and fecal fistulas. [6]

The clinical presentation affects how MD is treated.Surgery is used as a treatment when it manifests symptoms.However, there is no agreement on the best course of action in asymptomatic cases because intraoperative inspection or palpation cannot be used to estimate the risk of complications with an incidentally discovered MD.Due to the potential for later life-threatening complications as well as the lower morbidity rates associated with the removal of a normal diverticulum as opposed to a pathological diverticulum, some surgeons prefer performing prophylactic resection of an incidentally discovered MD. [7]

All incidentally discovered diverticula should be removed if they meet the following criteria: Diverticulum length >2 cm, diverticulum broad-based, fibrous bands attached to the diverticulum, age 50 years, male gender, diverticulum length 2 cm, diverticulum broad-based, and histopathological examination demonstrating ectopic or abnormal tissue.[1]

It is typically done to proceed to a wedge resection of the diverticulum.However, complicated situations where ischemic inflammatory changes are reaching the base of the diverticulum and when the diverticulum is broad-based with palpable heterotopic tissue may necessitate segmental ileal resection with end-to-end anastomosis.Because the diverticulum in our case was longer than 2 cm, and had a broad base,we decided to perform a wedge resection of MD.

IV. Conclusion

Littré's hernia should always have the MD present removed.If the segment of the bowel bearing the diverticulum exhibits irreversible ischemic inflammatory changes, bowel resection should also be taken into consideration.

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