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Acute Bowel Obstruction Indicative of Meckel Diverticulum: About a Case at the National Hospital in Conakry

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Abstract: The aim of this study was to contribute to the study of Meckel's diverticula in the visceral surgery department of the national hospital of donka, Rare pathology and the diagnosis is difficult to make clinically. Observation: We report here a case of Meckel's diverticulum discovered in a 22-year-old girl who consulted for an occlusive syndrome; Meckel's diverticulum was incidentally discovered intraoperatively. We proceeded to the resection of the diverticulum followed by the ileo-ileal anastomosis. Conclusion: The diagnosis of DM is rarely evoked clinically because of the diversity of its clinical manifestations and is often of surgical discovery. It should be mentioned in any abdominal emergency.

Keywords: Acute Bowel Obstruction, Meckel's Diverticulum, Donka National Hospital

1. Introduction

Meckel's diverticulum (MD) corresponds to a single, one-eyed embryonic residue, resulting from a defect of involution of the primitive yolk-loop and communicating with the anti-mesenteric edge of the small intestine at the level of the termination of the superior mesenteric artery. Unique, it sits on the terminal ileum less than one meter from the Bauhin valve. [1]

Meckel's diverticulum is rare and is thought to be observed in approximately 2% of individuals. [2]

We report here a case of Meckel's diverticulum discovered in a 22-year-old girl who consulted for an occlusive syndrome.

2. Observation

This is a 22-year-old patient who consulted for: abdominal pain in the umbilical region; vomiting of food then liquid and stopping of matters and gases evolving for 3 days.

A Notion of umbilical hernia cure in 1996 is found in his antecedent.

The abdomen was generally painful, tympanic. Intestinal peristalsis was audible.

Its TA=110/80 mmHg, π=88pulsations / min, θ=37.5°C and FR=28cycles / min.

The examination extended to other devices did not reveal any particularities.

The emergency biological assessment revealed anemia

with a Hb level of 11.13g / dl and the abdomen without preparation objectified numerous hydro-aeric levels, central, wider than high, suggesting the diagnosis of acute bowel obstruction on flanges.

Admitted to the operating room under general anesthesia, a midline supra and sub-umbilical laparotomy was performed, which revealed a retro-distension of the small intestine from the Treitz angle to 60 cm from the ileocecal angle where an inflamed Meckel's diverticulum was located (Figure 1) responsible for the bowel obstruction picture. The rest of the intestine was flattened. In front of this picture, an ileal resection removing the diverticulum followed by an end-to-end ileo-ileal anastomosis was performed.

The patient died on D3 postoperatively in a picture of hypovolemic shock with clouding of consciousness.

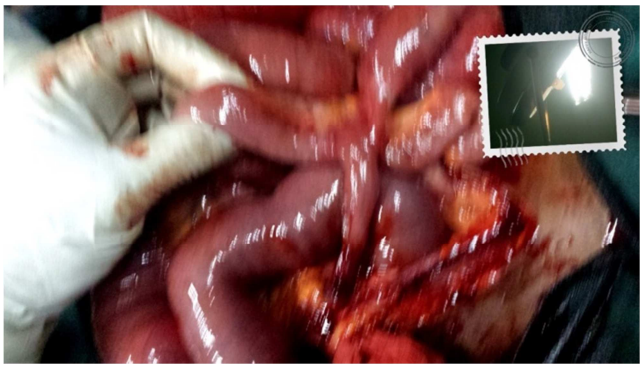

Figure 1. *Intraoperative view showing Meckel's diverticulum.*

3. Discussion

Meckel's diverticulum is the residue of incomplete involution of the omphalo-mesenteric duct during the fifth week of life in utero. [1, 2]

Meckel's diverticulum was first described in 1598 by Fabricius Hildanus, a German surgeon, and later named by German anatomist Johann Friedrich Meckel in 1809 [3, 4]

It is the most common congenital anomaly of the gastrointestinal tract, affecting, according to studies between 0.3 and 3% of the population, with a slight male predominance [1]. It is implanted on the anti-mesenteric edge of the ileum [3, 4]. A fibrous cord can be tied to the end of the diverticulum. Its other end may be free or attached to the posterior surface of the umbilicus, thus constituting the omphalo-mesenteric ligament, which would be present in 15% of cases [2, 5]. Its wall has all the layers of the normal small intestine, but is often the site of tissue heterotopias, mainly gastric. [4, 5]

The method of revelation is highly variable, causing diagnostic errors. Complications can occur at any age, especially in infancy, sometimes even before birth. They are observed preferentially in males (sex ratio reported from 1/1 to 8/1). [5]

Infectious complications are, along with obstructions and hemorrhages, the most common and account for about a third of complications. They may be due to acid irritation of the diverticular mucosa in associated gastric heterotopia. They can also be secondary to an obstruction by one or more enterolites or to stercoral stagnation. [1, 5, 6]

In our case, Meckel's diverticulum developed as a complication in this case, an occlusion. According to several authors [7, 8], occlusions are the main complication of Meckel's diverticula in adults. [7-9]

The diagnosis of DM was not made preoperatively and was discovered by chance, intraoperatively, this is due to the clinical polymorphism of DM. However, it should be noted that according to most of the authors that we consulted the diagnosis is rarely made preoperatively [3, 4, 10] performing an emergency abdominal CT scan could have established the etiological diagnosis of the occlusion by revealing the diverticulum.

The surgical nature of MD is unanimously recognized by all authors and can consist of a wedge resection, or a wide T-shaped resection followed by an end-to-end anastomosis in "open surgery". However, wedge resection should be abandoned because of the risk of a secondarily progressive heterotopic residue or of a peristaltic occlusive call point. [3, 6, 11]

In our case, it consisted of a wedge resection followed by a transverse suture in 02 planes. This gesture must be framed by a sheave before, during and after.

4. Conclusion

DM although rare, is the most common of digestive malformations.

The diagnosis of DM is rarely mentioned clinically because of the diversity of its clinical manifestations and is often discovered by operation. It should be mentioned before any abdominal emergency.

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