

Maydl's Hernia: An Unusual Cause of Strangled Inguinal Hernia, A Case Report

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2. Keywords

Maydl's Hernia; Intestinal necrosis; Surgical exploration; Ileo-ileal resection-anastomosis.

1. Abstract

Maydl's hernia is one of the few causes of strangled inguinal hernia. It is characterized by the presence in the sac of two intestinal loops connected by an intra-abdominal intermediate loop called retrograde, all drawing a "W" or an omega. The risk of this anatomical form is the necrosis of the intra-abdominal loop. Therefore, careful surgical exploration of the intra-abdominal loops is more than crucial. We report a case of complicated Maydl hernia of an intra-abdominal loop necrosis that had required a termino-terminal ileo-ileal resection-anastomosis.

3. Introduction

Strangled inguinal hernia is a surgical emergency characterized by the permanent striction of the contents of the hernia inside the sac. The latter is characterized, when it is a Maydl hernia, by the presence of two intestinal loops, connected by an intra-abdominal intermediate loop called retrograde, all drawing a "W" or an omega. The risk of this anatomical form is the necrosis of the intra-abdominal loop. Therefore, careful surgical exploration of the intra-abdominal loops is more than crucial. Severity is related to complications of acute intestinal obstruction, peritonitis by intestinal perforation, hydroelectrolytic disorders (acute dehydration, acute renal failure, etc.). The management is essentially surgical. The objective of our work was to report a case of Maydl's hernia complicated by intra-abdominal loop necrosis diagnosed in intraoperative and requiring a termino-terminal ileo-ileal resection-anastomosis.

4. Case Report

A 26-year-old patient, with no particular pathological history received for management of a right inguino-scrotal swelling having been evolving since 24 hours. This was associated with an episode of postprandial vomiting and a cessation of materials and gases. Moreover, the patient had been carrying a single inguino-scrotal hernia for 1 year, with no notion of herniated infatuation.

On admission, he was in good general condition. The abdomen was sensitive as a whole with no signs of peritoneal irritation. Locally, there was an painful, tense and irreducible inguino-scrotal swelling

in the right groin. At rectal touch, the rectal bulb was empty. The biology was normal. Faced with this symptomatology, the diagnosis of a strangled right inguino-scrotal hernia was made. A surgical exploration by oblique inguinal incision was performed. At the opening of the hernial sac, there was an indirect inguinal hernia, containing two ileal loops, one necrotized and the other healthy (Figure 1).



Figure 1: Maydl's "W" inguino-scrotal hernia with necrosis of a loop inside the sac

Through the collar, there was a necrotic ileal loop inside the abdomen. Therefore, an infra-umbilical laparotomy was performed. She found a necrotic intra-abdominal ileal loop over approximately 50 cm (Figures 2 and 3).

An ileal resection was performed carrying the necrosis zone. The restoration of digestive continuity was achieved by a termino-terminal ileo-ileal anastomosis. The repair of the parietal defense was carried out according to Bassini's technique after the closure of the

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hernial sac. The surgical suites were simple. There is no recurrence after a 10-month follow-up.



Figure 2: Maydl's 'W' Hernia with intra-abdominal loop necrosis



Figure 3: Maydl's "W" Hernia, presence of healthy handles interposed between necrosis zones

5. Discussion

In this observation, we reported a case of Maydl's hernia complicated by necrosis of intra-abdominal loop that had required a termino-terminal ileo-ileal resection-anastomosis and, a repair of the hernia by Bassini's technique.

Analysis of the literature shows the rarity of this condition, with a predominance in men. Most of the reported cases are in Africa, due to the high incidence of untreated simple hernias [1]. However, the long duration of the simple hernia was implicated as a major factor in the mechanism of occurrence of The Maydl's hernia. It is a variety of strangulated inguinal hernia, first described by surgeon Karel Maydl in 1895 [2, 3]. Indeed, the adhesions would predispose to the configuration in "W." This allows loops of moving intestinal loops to protrude further into the hernial sac [4]. In type 1, all loops are composed of small intestine, while type 2 contains both the small intestine and the colon. Type 3 contains only colon [5]. In our case, the hernia was essentially composed of ileal loops.

Clinically, the association of a simple long-lasting hernia which is complicated by strangulation and the presence of peritoneal irritation syndrome, is an element of strong presumption [4].

Maydl describes the strangulation of the intestinal loop in the ab-

dominal cavity, which is always ischemed independently or associated with one or both intestinal loops (afferent and efferent) of the hernial sac [3]. In our case, the intra-abdominal intestinal loop was necrotized associated with one of the loops of the hernial sac.

The major risk in Maydl's hernia is to miss a possible necrotized intra-abdominal loop at first inguinal approach [6]. Therefore, careful examination of the loops upstream of the collar is necessary in the face of any strangulated hernia. Faced with a high suspicion of Maydl's hernia, laparotomy is recommended for adequate surgical exposure [7]. In our patient, we performed laparotomy before the finding of a necrotized intestinal loop upstream of the collar.

The extent of intestinal resection depends on the intestinal segment concerned and the length of the necrotized loop [4]. For hernia repair, we used Bassini's technique. This is similar to most cases of strangulated hernias found in the literature [8,9].

6. Conclusion

Although rare, Maydl's hernia is a major surgical emergency due to its complications such as intestinal necrosis. The latter may be misunderstood and constitute a fatal error of judgment of the contents of the hernia. Therefore, careful examination of the intestinal loops upstream of the collar is essential to avoid leaving necrotized intestinal loops in the abdomen.

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