

Case Report

Strangulated Littré Hernia Apropos of a Case in the Department of General and Visceral Surgery of the National Hospital Ignace Deen CHU Conakry

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Abstract: Littré's hernia is the presence of Meckel's diverticulum in the hernial sac. Meckel's diverticulum is the most common birth defect of the digestive tract. It results from the involution of the omphalomesenteric or vitelline duct which normally becomes obliterated around the sixth week of intrauterine life. Although this condition is common, its presence in the hernial sac during the cure of a hernial strangulation is an extremely rare case in our practice. We report a case concerning a 42-year-old sportsman, admitted to the general and visceral surgery department of the Ignace Deen National Hospital for painful, irreducible, non-impulsive and non-expansive right inguino-scrotal swelling on coughing in whom, at the end of the clinical examination the diagnosis of a strangulated right inguino-scrotal hernia was made, he benefited from a surgical management during which the exploration revealed a hernial sac containing hail with a formation oblong on the antemesenteric surface without necrosis with peritoneal fluid. We proceeded to a resection carrying the diverticulum followed by the end-to-end ileal-ileal anastomosis plus the cure of the hernia according to Desarda. The medium-term follow-up with a follow-up of six months did not note any particularity. The diagnosis of this condition is difficult and often arises intraoperatively and the treatment is surgical.

Keywords: Inguinal hernia, Meckel's diverticulum, Ignace Deen Hospital.

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INTRODUCTION

Littré's hernia is defined as the presence of Meckel's diverticulum in a hernial sac [1]. It is linked to a persistence of the omphalomesenteric or vitelline duct which normally becomes obliterated around the sixth week of intrauterine life. It represents the most frequent congenital malformation of the digestive tract and is generally discovered incidentally, being able to be responsible for various complications with variable clinical pictures, and potentially involving the vital prognosis [2,3]. Although Meckel's diverticulum is a common anomaly in the general population, its presence in a hernial sac is an uncommon situation [4]. The clinical diagnosis of a Littré hernia is difficult, often made fortuitously during surgery or imaging examinations or even in the event of a complication and poses a therapeutic problem for which there is currently no consensus: the resection plus anastomosis seems preferable to wedge resection and tangential stapling because of the risk of mucosal heterotopia that could be left in place [5]. The objective of this work was to report our experience in the management of a case of

Littré hernia treated in the general and visceral surgery department of the Ignace Deen National Hospital.

OBSERVATION

NP... 42 years old, footballer, admitted for a painful right inguino-scrotal swelling evolving for less than six (6) hours. The onset of the symptoms would be progressive, marked by the onset of hypogastric pain occurring on a pre-existing right inguino-scrotal swelling, accompanied by vomiting. Faced with this picture, the patient consulted our department for treatment. He has no particular history. Objectively ill seen conscious, with pain, normocolored teguments and conjunctivae with a satisfactory general state presenting the following parameters: BP = 134/86mmhg, FR = 24 cycles/min, pulse = 88 pulses/min, temperature = 36.9°C. On examination of the contact zone: right inguino-scrotal swelling was noted, non-impulsive and non-expanding on effort, painful and irreducible. The other hernial orifices were unremarkable. The examination extended to other devices and systems did not reveal any particularity. At the end of this clinical

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examination, the diagnosis of a strangulated right inguino-scrotal hernia was made.

After carrying out a biological assessment made of NFS, glycaemia, urea, creatinine, GS/FR, SRV and AgHbs which did not reveal any particularity. The patient was admitted to the block, we performed spinal anesthesia. We proceeded to a right inguinal approach of about 5cm straddling the swelling, hemostatic dissection of the subcutaneous cellular tissue with an electric bistoury, aponeurotomy of the external oblique muscle, section of the collar, release of the joint tendon and the crural arch, individualization of the spermatic cord, and of the hernial sac. Exploration revealed a hernial sac containing small loop with an oblong formation measuring approximately 3cm, located at the level of the antemesenteric face without necrosis with peritoneal fluid reminiscent of a Meckel's diverticulum without necrosis located 80cm from the ileocaecal junction.

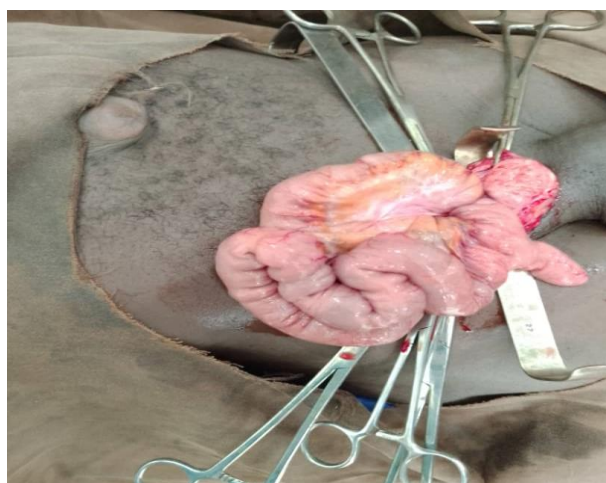


Figure 1: Diverticule de Meckel en per opératoire

Gestures: we proceeded to an ileal resection removing Meckel's diverticulum followed by an end-to-end ileal ileal anastomosis, treatment of the hernia sac and cure of the hernia according to Desarda, parietal closure plane by plane + dressing. The surgical specimen was sent to the anatomy pathology department. Postoperatively, he received ceftriaxone 1g every 12 hours and infusable paracetamol 1g as needed for seven days. The patient was discharged on postoperative day 7 with marked improvement. On day 28 of his operation, the anatomopathological examination concluded in the absence of heterotopic tissue at the level of Meckel's diverticulum. And eight months later, the patient was seen again without any complications.

DISCUSSION

Meckel's diverticulum is the most common embryonic anomaly of the digestive tract. The frequency is estimated at 0.3% to 2.9% of the general population [6]. Some authors noted a male predominance [6, 7]. Incarceration of a Meckel's

diverticulum within a strangulated hernia is a rare anatomoclinical form [8]. Of all the sites of this hernia, the inguinal location remains the most frequent (50%), especially on the right, with a tendency for the diverticulum to adhere more to the hernial sac [9]. This was also found in our study. Littre's hernia is usually discovered incidentally during surgery, and its diagnosis is very difficult preoperatively in the absence of complications; it can manifest clinically as abdominal pain and vomiting [10]. Concerning our patient, the diagnosis was fortuitous during the operation, and the clinical picture was made of abdominal pain and vomiting as a reason for consultation, on physical examination, there was a right inguinal swelling, non-impulsive and non-expanding at cough, painful and irreducible. The treatment of this condition is surgical and is based on two situations: the first situation concerns a symptomatic Meckel's diverticulum and the second the asymptomatic diverticulum discovered incidentally.

In the first situation, surgical resection is the rule [11]. This may involve simple excision of the diverticulum or resection with automatic forceps, or even ileal resection removing the diverticulum, followed by end-to-end ileal ileal anastomosis [3]. The choice of this second technique is implied by the possibility of ectopic tissue extending beyond the diverticulum. Our patient was in the first situation and underwent ileal resection removing Meckel's diverticulum followed by end-to-end ileal-ileal anastomosis plus repair of the hernia according to Desarda. In the literature it is noted that Meckel's diverticulum is located on the anti-mesenteric border of the ileum approximately 30 to 90 cm from the ileocaecal valve, measuring 3-6 cm long and 2 cm in diameter [4]; in our clinical case, Meckel's diverticulum measured approximately 3cm and was located 80cm from the ileocaecal junction. Meckel's diverticulum has the same histological structure as the ileum [11]. However, areas of ectopic mucosa can develop within it, most often gastric, but also pancreatic, duodenal, colonic, endometrial, Brunner's glands and rarely hepatobiliary tissue [12]. The histological structure in our patient was the same as that of the normal ileum. Several factors have been associated with a greater risk of complications, including male sex, age (less than 10 years), size of the diverticulum (>2 to 4 cm), the presence of gastric or pancreatic heterotopic tissue. Our study found the male sex and a size of Meckel's diverticulum of 3 cm.

CONCLUSION

Strangulated Littre hernia is an infrequent complication of Meckel's diverticulum. Its diagnosis is fortuitous and is often made intraoperatively and whose therapeutic attitude consists of resection of the diverticulum + suture or resection / anastomosis plus cure of the hernia.

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Conflicts of interest

The authors declare no conflict of interest.

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