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Left Paraduodenal Hernia: A Rare Cause of Intestinal Obstruction

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Abstract **Case Report**

We report the observation of a patient with acute intestinal obstruction by left para-duodenal hernia without necrosis of the incarcerated small intestines for one patient, treated by reduction of the incarcerated small intestine and resection of the hernial sac. We discuss in this case the diagnostic and therapeutic features of this rare condition.

Keywords: Internal hernia, para duodenal hernia, intestinal obstruction.

INTRODUCTION

Internal hernias are rare [1]. Their diagnosis is most often made intraoperatively [2]. The anatomical forms of internal hernia are numerous, some being very rarely reported. However, the knowledge of the different varieties of internal hernias is fundamental to consider a preoperative diagnosis. The left para duodenal hernia of the adult is a rare form of internal hernia 53% in general and 75% in particular [3-5]. We present an observation of acute intestinal occlusion by left paroduodenal internal hernia treated in the general surgery department of the Fousseyni Daou Hospital in Kayes, in order to contribute to the knowledge of the clinical particularities of this entity.

OBSERVATION

A 14-year-old female patient was admitted in emergency with diffuse abdominal pain of sudden onset. She had a history of intermittent abdominal pain for 3 years with no history of abdominal surgery or trauma. The physical examination revealed diffuse abdominal defense. The diagnosis of acute generalized peritonitis was evoked. The radiography of the abdomen without preparation revealed the presence of hydro-aerosic levels of the greaves type.

The preoperative diagnosis evoked was acute generalized peritonitis. A laparotomy was therefore indicated as an emergency. General anesthesia with orotracheal intubation was performed and the approach was a median. On opening, the peritoneal cavity was dry. Exploration noted the incarceration of a segment of jejunum in a para duodenal defect, bordered on the right by the inferior mesenteric vein, The incarcerated ileum was healthy and passed to the left of the treitz angle. The treatment consisted of jejunal decarceration without necrosis. The postoperative course was simple. Liquid feeding was allowed on the second day and discharge from the hospital was on the seventh postoperative day.

Fig-1: Bag containing the small intestine

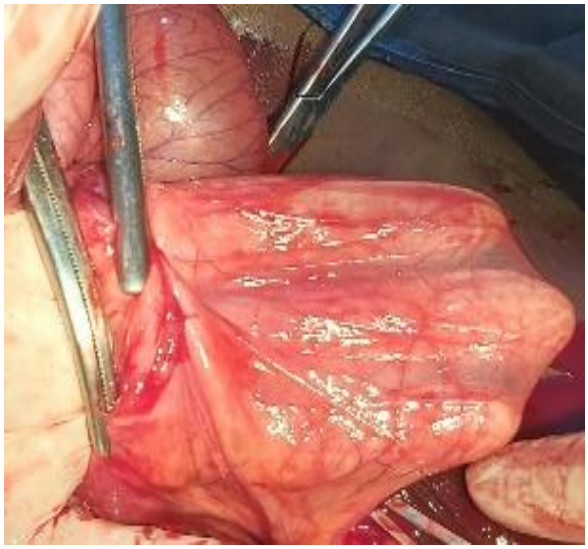

Fig-2: Bag after extraction of the intestine

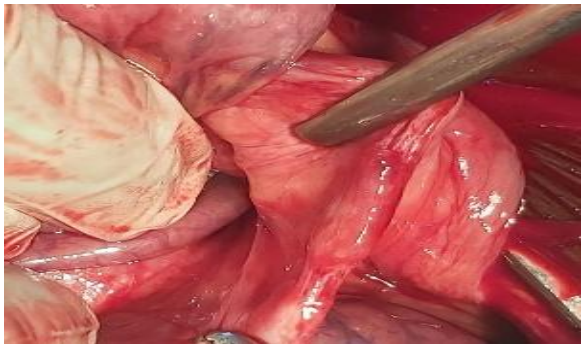

Fig-3: Neck of the sac after extraction of the intestine

DISCUSSION

Para-duodenal hernias: are the most frequent internal hernias, they affect men three times more often than women [2, 3]. Duodenal fossae are peritoneal folds that can be caused by three mechanisms, a defect in the peritoneal attachment, a vascular fold (the vessels lift the peritoneal sheets, thus creating the fossae), or a combination of these two mechanisms. There are then five duodenal dimples that may be of surgical interest [4]. Left para duodenal hernias are defined by a protrusion of an intra abdominal viscera through the para duodenal fossa described by Landzert [1, 4]. In the face of an occlusion in a young subject with no history of surgery or abdominal trauma, the diagnosis of internal hernia may be evoked, especially when the interrogation reveals a long history of recurrent abdominal pain. Their diagnosis is usually made intraoperatively [2, 5]. However, with the development of medical imaging and in particular CT and MRI, preoperative diagnosis is now possible [6]. The diagnosis of a left para duodenal hernia, which can be difficult, requires the identification of the hernial orifice, the neck is located between the duodeno-jejunal angle at the top and the inferior mesenteric artery at the bottom, whereas the free edge of the neck contains the inferior mesenteric vein and its identification also participates in the diagnosis [1, 2]; the sac is then retro mesocolic. The majority of these hernias have a wide, loosely constricted neck, allowing complete reduction of its contents by simple traction, and the hernial orifice must be closed with absorbable or non-absorbable sutures. However, any attempt to excise the hernia sac must be avoided [2, 8].

CONCLUSION

Left paroduodenal hernia is a rare but possible cause of acute intestinal obstruction in adults. It should be considered in the presence of episodes of sub-occlusion that regress spontaneously. Late diagnosis can lead to complications such as loop necrosis.

CONFLICTS OF INTEREST

The authors declare no conflict of interest.

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