Left Paraduodenal Hernia: An Unusual Cause of Acute Intestinal Obstruction

Thiam O*, Toure AO, Gueye ML, Seck M, Cisse M, Foba ML, Ka O, Dieng M, Dia A, Toure CT

General surgery department, Aristide Le Dantec hospital of Dakar
*Corresponding author: o_thiam@hotmail.fr

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Abstract
Internal hernia is an unusual pathology. They are underestimated because it is usually asymptomatic. The diagnosis is usually done during a complication like the acute intestinal obstruction. We report a case of left paraduodenal internal hernia. He was received at the emergency in a clinical presentation of acute intestinal obstruction. The abdomino-pelvic CT scan could not confirm the diagnosis in preoperative. The laparotomy confirms the diagnosis. The treatment consisted in the reduction of intestines and the closing of the bag. The post-operative was simple after a year of follow-up.

Keywords: internal hernia, paraduodenal hernia, rare hernia, intestinal obstruction


1. Introduction
Internal hernia is an unusual pathology [1,2]. Its rarity is due to an under estimation because it is usually asymptomatic and discovered in intraoperative and during postmortems [3,4]. Paraduodenal hernia represent 53% of internal hernias [1,5]. It was first described in 1786 by Neubaur [3]. It emerges from a disorder of intestinal rotation. When it is symptomatic, it often appears in a clinical presentation of acute intestinal obstruction. We report a case of left paraduodenal hernia revealed by intestinal obstruction.

2. Observation
A 34 years-old man without particular history, received on 04/16/2014 for left upper abdominal pain during 15 days, in brutal installation then diffuse at the whole abdomen with early post-prandial vomiting and a stoppage of faecals and gas. The blood pressure was 120/60 mmHg, the temperature 36.5°C, the breathing frequency 22c/min and the pulse 88 c/mn. The abdomen was supple, with a painful bloating at the left upper abdominal quadrant. The rectal touch was normal. Blood cells count, blood ionogram and renal function were normal. The abdomino-pelvic CT scan showed an intestinal intussusception at the left upper abdominal quadrant (Figure 1). A midline laparotomy exploration discovered a left paraduodenal hernia with a collet of about 5cm enclosing almost the entire small bowel. However, there was an hyperemic strangulation zone going from 30cm to 60cm from Treitz angle (Figure 2 et Figure 3). A reduction of the small intestine by soft traction and a weak closure of the collet upon 1st jejunal handle with 6 vicryl 2/0 sutures. Post-operative course was simple. The patient was discharged on the 5th post-operative day. There were no particularities after one year follow up.

Picture 1. Abdomino-pelvic CT scans showing the agglutinating intestines and the attraction of the meso in the left upper quadrant

Picture 2. intraoperative view of the left paraduodenal hernia after reduction
3. Discussion

The internal hernia is an unusual pathology. In the necropsic series, it is found within 0.2 to 2% [4]. The paraduodenal hernia is the most frequent of internal hernias. Its frequency is estimated about 53% [1,5]. The left paraduodenal hernia is three times more frequent than the right paraduodenal hernia [6]. The rarity of internal hernias can be explained from the fact that they are usually asymptomatic and then their symptomatology is nonspecific [6]. It can be manifested by vague abdominal pains, nausea, vomiting, and abdominal postprandial pains [7]. It is caused by a wrong intestinal rotation within 0.2 to 0.5% [3]. The preoperative diagnosis is difficult. When it appears in clinical presentation of acute intestinal obstruction, the diagnosis has to be evoked when classical organic etiology is not found after the radiographic check-up. The risk of intestinal obstruction for a patient who carries a paraduodenal hernia is more than 50% and then the death rate caused by the obstruction is estimated between 20 and 50% [7]. The complications justify paraduodenal hernia surgery once the diagnosis is posed no matter his clinical symptoms [6]. The abdominal-pelvic CT scan can diagnose an organic intestinal obstruction without cause as in our case. This could be explained by a lack of experience of radiologists due to the rarity of the pathology. The posteriori analysis of our patient’s CT scan found signs of internal hernia with a distention and an agglutination of the intestinal loops with attraction of its meso behind the pancreas. We recommend to evocate this diagnosis in preoperative if an organic obstruction from an unusual cause is found at the CT scan. The certain diagnosis is usually made in intraoperative as in our case [4]. The surgical management can be made by laparotomy or laparoscopy [6]. The laparoscopic way presents diagnostic and therapeutic interests [8].

4. Conclusion

Unusual pathology, left paraduodenal hernia clinical manifestations are not specific. CT scan diagnosis can be made by a skilful radiologist. Laparoscopy and laparotomy can make the diagnosis. The treatment consists in a reduction of bag’s content and closure hernial orifice.

References