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Left Paraduodenal Hernia: An Unusual Cause of Acute Intestinal Obstruction

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Abstract Internal hernia is an unusual pathology. They are underestimated becauseit 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- pelvicCT 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*

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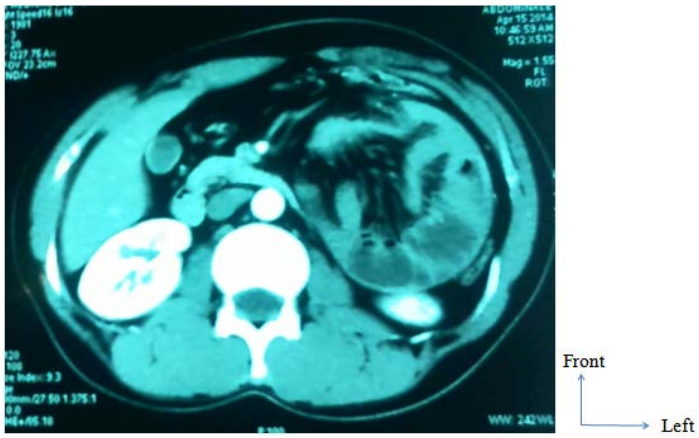
1. Introduction

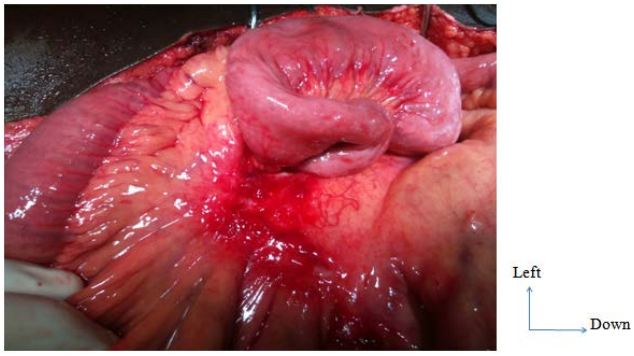
Internal hernia is an unusual pathology [1,2]. Its rarity is due to an under estimation because it is usually asymptomatic and discovered in intraoperative and during postmortems [3,4]. Paraduodenal hernia represent 53% of internal hernias [1,5]. It was first described in 1786 by Neubaur [3]. It emerges 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

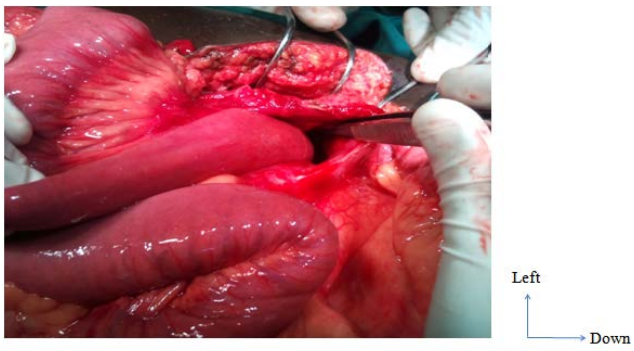
A 34 years-old man without particular history, received on 04/16/2014 for left upper abdominalpain during 15 days, in brutal installation then diffused at the whole abdomen with early post-prandial vomiting and a stoppage of faecals and gas. The blood pressure was 120/60 mmHg, the temperature 36,5°C, 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 intusseption at the left upper abdominal quadrant (Figure 1). A midlinelaparotomy 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 scanshowing the agglutinating intestines and the attraction of the meso in the leftupper quadrant



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



Picture 3. Intraoperative view of the left paraduodenal orifice 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 notspecific [6]. It can be manifested by a vague abdominal pains, nauseas, vomitings 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 inclinical presentation of acute intestinal obstruction, the diagnosis has to be evocated 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 secomplications justify paraduodenal hernia surgery once the diagnosis is posedno matter his clinical symptoms [6]. The abdomino-pelvic CT scan can diagnosis 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 anorganic 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]. The type of internal hernia is difficult to specify in intraoperative, especially by junior surgeons [4]. The recognition of anatomical variety of internal hernia needs a good knowledge of the surgical anatomy. The treatment consists in a reduction of herniated viscera and a closure of the collet as made to our patient. Bag resection is not recommended because it is difficult and dangerous [4,6]. It presents risks of injury of the inferior mesenteric venous, of left colic artery and the duodenum [9]. Postoperative complications described are reflex ileus and local recurrence if the hernia orifice is not closed. With our patient, we didn't notice any postoperative complications or recurrence after one year.

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

[1] Blachar A, Federle MP. Internal hernia: an increasingly common cause of small bowel obstruction. Semin Ultrasound CT MRI 2002; 23: 174-83.

[2] Huang YM, Chou AB, Wu YK, Wu CC, Lee MC, Chen HT, et al. Left paraduodenal hernia presenting as recurrent small bowel obstruction. World J Gastroenterol 2005;11(41):6557-9.

[3] Shailendra S, Anupam D, Chawla AS, Arya SV, Jasneet C. A rare presentation of midgut malrotation as an acute intestinal obstruction in an adult: Two case reports and literature review. International Journal of Surgery Case Reports 2013; 4: 72-75.

[4] Cisse M, Konate I, Ka O, Ka I, Dieng M, Toure AO, Dia A, Toure CT. Abdominal internal hernia: 5 cases at Aristide Le Dantec Hospital. The Internet Journal of Surgery 2010; 24(2):1-7.

[5] Brigham RA, d'Avis JC. Paraduodenal hernia. In: Nyhus LM, Condon RE, editors. Hernia. 3rd ed. Philadelphia: Lippincott; 1989. p. 481-6.

[6] So-Hyun Nam, Kwan Woo Kim, Jin Soo Kim, Ki Hoon Kim, Sung Jin. Laparoscopic treatment of left paraduodenal hernia in two cases of children Park International. Journal of Surgery Case Reports 2012;3:199- 202.

[7] Tong RSK, Sengupta S, Tjandra JJ. Left paraduodenal hernia: case report and review of the literature. ANZ J Surg 2002; 72: 69-71.

[8] Moon CH, Chung MH, Lin KM. Diagnostic laparoscopy and laparoscopic repair of a left paraduodenal hernia can shorten hospital stay. JSLS 2006;10(1):90-3.

[9] Fukunaga M, Kidokoro A, Iba T, et al. Laparoscopic surgery for left paraduodénale hernia. J Laparoendosc Adv Surg Tech A 2004;14:111-5.