



POSTER ON A CASE REPORT AND REVIEW OF LITRATURE OF LEFT PARADEUODENAL INTERNAL HERNIA

General Surgery

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KEYWORDS

INTRODUCTION

Left Paraduodenal hernias are rare types of hernias which result from incomplete rotation of the midgut. They may cause acute abdominal pain, chronic digestive disorders, and nonspecific or mild symptoms such as nausea and vomiting. Therefore, because of its highly variable symptoms and signs, preoperative diagnosis of paraduodenal hernia is not always possible. This may be an incidental discovery at laparotomy or a rare cause of small bowel obstruction progressing to strangulation and perforation. Timely surgical intervention minimizes the mortality and morbidity associated with the acute presentation of this hernia.

CASE REPORT

A 55-year-old male patient was presented to the emergency department of our hospital after several days of severe and constant diffuse abdominal pain. There were no relieving or instigating factors. The pain was so sharp and was followed by non bilious vomiting consistent with gastric contents. The patient denied any history of weight loss, chronic abdominal pain, or other gastrointestinal symptoms. He was previously asymptomatic with no history of abdominal surgery.

On physical examination, the patient was moderately dehydrated with mild tachycardia (96 pulse / min) but had normal blood pressure. The abdominal examination showed signs of peritoneal irritation. The patient had generalized tenderness with epigastric and peri umbilical predominance. Laboratory studies were significant for an elevated white blood cell count of 17,200 with consistent hypokalaemia . Plain abdominal radiograph showed small fluid levels within bowel walls.

The patient was thus taken to the operating room urgently for exploratory laparotomy, which showed dusky but viable small bowel, twisted upon its mesentery and entrapped in a large left paraduodenal space Figure 3. Once the bowel was reduced from the paraduodenal space and the volvulus was untwisted, the blood flow was reestablished and the small bowel resumed a healthy appearance Figure 4. Upon inspection, the position of the ligament of Trietz was normal. In addition, there were resection and anastomosis of ileum at 40cm , 70 cm, 100 cm from ileo-cecum junction . The paraduodenal space was closed by approximating the mesocolon to the base of the mesentery, with care taken not to injure the inferior mesenteric vein. The patient's subsequent hospital course was uneventful. He was discharged in satisfactory condition 10 days postoperatively.

DISCUSSION

Left para duodenal hernia represents herniation of the mesentery of the small intestine in the left paraduodenal or Landzert's fossa in the posteroinferior direction . Restrictions of the paraduodenal fossa consist of the fourth segment of the duodenum (right), the left branches of the middle colic artery (anteriorly), the posterior parietal attachment of the descending colon mesentery (posteriorly), and the inferior mesenteric vein . The cause of this opening is an embryonic disorder in terms of lack of connection of both peritoneal folds from the sixth to the eleventh week of gestation. According to Schizas et al., the mean age of onset of paraduodenal hernia is 44.1 years (Schizas), and according to Muneer et al., it is between the ages of 40 and 60. It is three times more common in men than in women .

Clinical presentation of paraduodenal hernia is not unambiguous but ranges from asymptomatic to manifest (abdominal pain as the most common symptom, vomiting, nausea, symptoms of intestinal obstruction). Among the rarer symptoms that can be mentioned are

secondary pancreatitis, biliary colic and palpable tumefaction in the upper left part of the abdomen. In many cases, the patient has non-specific symptoms which last for years. This case report concerns such a patient, a 55-year-old man. The greatest difficulty in management of paraduodenal hernias lies in their diagnosis, especially in the case of asymptomatic patients or non-specific symptoms of a chronic nature. In such cases, with a well-taken medical history, clinical examination of the patient, abdominal X-ray, abdominal ultrasound and laboratory tests and possible angiography of the upper mesenteric artery (displacement of jejunal arteries in the upper left quadrant of the abdomen), contrast CT scan of the abdomen plays a crucial role (accuracy 95%, sensitivity 95–100%), and in most cases confirms the diagnosis . We must not forget that in a certain number of patients, definitive diagnosis is made during surgery .

Definitive treatment of Left para duodenal hernia involves surgery, which can be performed laparoscopically or openly. The procedure involves releasing the intestinal loops from the hernia sac and repairing the defect by closing or widely opening the hernia orifice, whereby the hernia sac becomes a part of the peritoneal cavity. With the laparoscopic approach, early recovery is faster, but long-term results are similar . In the case of our patient, Left para duodenal hernia was easily reduced, but partial stricture found at 40 cm, 70cm, 100cm so the primary closure of the hernia orifice with resection and anastomosis of ileum was sufficient.

Exploratory laparoscopy plays an important role in resolving an uncertain diagnosis, with an accuracy of >90%; The overall mortality rate may exceed 50% in cases of strangulated or ischemic bowel, even after appropriate and emergent surgery. All paraduodenal hernias should be repaired, including those that are asymptomatic.

CONCLUSIONS

In this case of a 55-year-old male patient with Left para duodenal hernia with non-specific symptomatology was presented. Due to the intensification of abdominal pain, nausea and vomiting after meals as a result of intestinal obstruction, we approached a detailed diagnostic treatment of the patient and arrived at the above diagnosis. We performed open surgery, which confirmed the formation of Left para duodenal hernia, and we resolved it in the usual way, by releasing the trapped loops of the small intestine and closing the hernia orifice with sutures. Computed tomography of the abdomen helps us make an accurate diagnosis and perform timely surgery, which was the case with our patient.



Fig.1.X RAY FINDING



Fig.2.Stricture of ileum



Fig 3.Derotation of ileum in Landzert's fossa



Fig.4.Healthy bowel

1. M.Y. Yun, Y.M. Choi, S.K. Choi, Kim Sj, S.I. Ahn, K.R. Kim Left paraduodenal hernia presenting with atypical symptoms *Yonsei Med J.*, 51 (2010), pp. 787-789, 10.3349/ymj.2010.51.5.787
2. B.A. Coakley, D. Froylich, R. Wong, S. Khaitov Repair of primary bowel obstruction resulting from a left paraduodenal hernia.
3. D. Schizas, K. Apostolou, S. Krivan, P. Kanavidis, I. Katsaros, M. Vailas, I. Koutelidakis, G. Chatzimavroudis, E. Pikoulis Paraduodenal hernias: a systematic review of the literature *Hernia*, 23 (6) (2019),
4. L. Barbosa, A. Ferreira, A. A. Póvoa, and J. P. Maciel, "Left paraduodenal hernia: a rare cause of small bowel obstruction in the elderly," *BMJ Case Report*, 2016
5. K. Shadhu, D. Ramlagan, and X. Ping, "Para-duodenal hernia: a report of five cases and review of literature," *BMC Surgery*, vol. 18, no. 1, p. 32, 2018.

REFERENCES