Left Paraduodenal Hernıa: A Report of A Case

Sol Paraduodenal Herni: Bir Olgu Sunumu

Fatin Rüştü Polat, Hasan Dinelek

Toyota Acil Yardım ve Travma Hatanesi

Presented as a poster at the National Surgery Meeting, Ankara, TURKEY, 2010.

Abstract

Paraduodenal hernia are an unusual cause of small bowel obstruction. It is classified as either right or left. Clinical symptoms may be intermittent, non-specific, and sometimes acute small bowel obstruction or ischemia. In this paper; we report a case of left paraduodenal hernia admitted to the emergency department with an acute abdomen pain and nausea.

Keywords: Paraduodenal hernia, Abdominal pain, Bowel obstruction.

Aplication: 01.06.2011 **Accepted:** 30.07.2011

Özet

Paraduodenal herni ince barsak obstrüksiyonlarının nadir bir nedenidir. Sağ ve sol olarak ikiye ayrılır. Klinik semptomlar değişken, nonspesifik ve zaman zaman akut ince barsak obstrüksiyonu veya iskemisi şeklinde olabilir. Biz bu yazıda akut abdominal ağrı ve bulantı ile acil servise kabul edilen sol paraduodenal herni vakasını sunuyoruz.

Anahtar Kelimeler: Paraduodenal herni, abdominal ağrı, barsak obstrüksiyonu

Başvuru Tarihi: 01.06.2011 **Kabul Tarihi:** 30.07.2011

Introduction

Paraduodenal hernia is a rare internal congenital hernia due to an embryological abnormality. It is often associated with non-specific abdominal symptoms, as nausea, distension and abdominal pain or sometimes acute small bowel obstruction or ischemia.[1] It is classified as either right or left, depending on anatomic features, and embryologic origin. Left hernias are three times more common than right.[2]

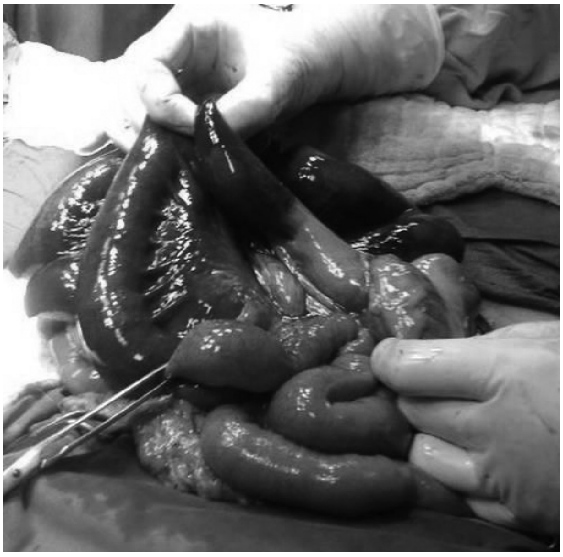
Case Presentation

Our case was a 25 year-old man admitted to the emergency department with an acute abdomen pain and nausea. In the physical examination there was tenderness and rigidity on her right upper and lower abdominal quadrants. In the laboratory evaluation the values of emocromocitometric examen, hydroelectrolytic parameters, blood gas analysis and CPK were minimal high. İnitial abdominal x-ray revealed multiple air fluid levels.

Yazışma Adresi/Corresponding to: Fatin Rüştü Polat, Toyota Acil Yardım ve Travma Hastanesi, Sakarya - Türkiye
GSM: 905323961224 [SMS], e-mail: polat22@hotmail.com

A diagnostic laparotomy was performed. A left paraduodenal hernia with small bowel strangulation was discovered (*Figure 1*). Nonviable jejunum was identified and resected. End to end anastomosis was performed and obliterated of the hernia defect by simple closure. The patient was discharged home on postoperative day 4, tolerating a regular diet.

Figure 1: A left paraduodenal hernia with small bowel strangulation was discovered.



Discussion

Paraduodenal hernia is an uncommon cause of small bowel volvulus. It can be suspected by clinical and radiological findings, surgery is always required to prevent small bowel necrosis and to repair the defect.[4]
The paraduodenal hernia is the most common type of intraabdominal hernia. There exists a right and left variety, both of them with their own specific pathogenesis. There are wide variations in the frequency and etiology of bowel obstruction throughout the world depending on ethnicity, age group, dietary habits, and geographic location, among other factors.3 Paraduodenal hernia is a rare internal congenital hernia due to an embryological abnormality. About 80% of bowel obstructions occur in the small intestine; the other 20% occur in the colon.[3]

The clinical course can be asymptomatic, cause chronic or intermittent abdominal pain, or present with acute abdomen.[5]

The clinical manifestations range from intermittent and mild digestive problems to acute intestinal obstruction. An exact preoperative diagnosis is seldom made. The knowledge of their pathogenesis and the anatomical characteristics is very important for a successful surgical treatment.[6] A correct preoperative diagnosis of left paraduodenal hernia was made on computerised tomography (CT), and the patient was managed by laparoscopic surgery. The role of imaging in preoperative diagnosis is being highlighted with a brief review of literature.[7] The goals when managing a small bowel obstruction are to identify the cause, relieve the obstruction, and ensure bowel viability. Often, a definitive preoperative cause cannot be determined.[8] Essential components of treatment include bowel reduction and obliteration of the hernia defect by simple closure or by wide opening of the sac.[9] Internal hernia is a rare but lethal condition. Early diagnosis and prompt surgical intervention provide the only chance of a successful outcome.

References

1. Amodio PM, Alberti A, Bigonzoni E, Piciollo M, Fortunati T, Alberti D. Left paraduodenal hernia: a case report and review of the literature. Chir Ital. 2008;60(5):721-4.
2. Andreani S, Cimbanassi S, Pugliese R, Chiara O. An unusual cause of small bowel obstruction in the elderly Ann Ital Chir. 2006;77(6):513-6.
3. Jack pickleman. Small Bowel obstruction. Michael J. Zinner, Editors. Abdomınal operatıons. Tenth edition. London: Prentice Hall International ınc, 1997: 1159-1172.
4. Ghorbel S, Chouikh T, Chariag A, Nouira F, Khemakhem R, Jlidi S, Chaouachi B. Volvulus of the small intestine associated with left paraduodenal hernia: a case report. Tunis Med. 2011 Feb;89(2):192-4.
5. Omland SH, Hougen HP. Left Paraduodenal Hernia: An Autopsy Case. Am J Forensic Med Pathol. 2010 Dec 6. ???
6. Vanclooster P, Willemsen P, Lerut T, Gruwez JA. Paraduodenal hernia: an unusual cause of intestinal obstruction. Acta Chir Belg. 1988;88(6):384-7.
7. Parmar BP, Parmar RS. Laparoscopic management of left paraduodenal hernia. J Minim Access Surg. 2010;6(4):122-4.
8. David B. Tashjian, Kevin P. Moriarty. Laparoscopy for treating a small bowel obstruction due to a Meckel's diverticulum.jsls. 2003;7:253-255.
9. Brigham RA, Fallon WF, Saunders JR, Harmon JW, d'Avis JC. Paraduodenal hernia: diagnosis and surgical management. Surgery. 1984;96(3):498-502.