Case Report Eurasian Journal of Critical Care

A Rare Cause of Intestinal Obstruction Obturator Herni

Uğur Özsoy¹, Murat Yıldırım¹, Sinan Cem Gül¹, Ahmet Erdur²

¹Tokat Gaziosmanpaşa University, General Surgery Department, Tokat

²Health Sciences University Kanuni Sultan Süleyman Training and Research Hospital, Emergency Medicine Clinic, Istanbul

Abstract

Obturator hernia is a rare type of hernia. It constitutes 0.05% to 1.4% of all hernias (1). It occurs when intraabdominal organs pass through the obturator canal in the anterior pelvis. Since the obturator canal is wider in women, it is more common than men. Advanced age, low body mass index, and multiparity are the most common causes of etiology (2). Because of its rarity compared to other hernias, its symptoms and signs are not specific, delay in diagnosis and treatment increases mortality and morbidity. In this case, we aimed to present our approach to the diagnosis and treatment of a 81-year-old female patient with both bilateral inguinal hernia and obturator hernia, who was admitted to the emergency department with the clinic of ileus.

Keywords: Hernia, Ileus, Obstruction

Introduction

Obturator hernia is a rare type of hernia. It constitutes 0.05% to 1.4% of all hernias¹. It occurs when intraabdominal organs pass through the obturator canal in the anterior pelvis. Since the obturator canal is wider in women, it is more common than men. Advanced age, low body mass index, and multiparity are the most common causes of etiology². Because of its rarity compared to other hernias, its symptoms and signs are not specific, delay in diagnosis and treatment increases mortality and morbidity. In this case, we aimed to present our approach to the diagnosis and treatment of a 81-year-old female patient with both bilateral inguinal hernia and obturator hernia, who was admitted to the emergency department with the clinic of ileus.

Case Report

81-year-old female patient was referred to us from an external center with complaints of abdominal pain, nausea, and vomiting for 5 days. On physical examination, there was abdominal distention and tenderness in the lower quadrants. There was no defense and no rebound. It was observed that there was a reduced direct inguinal hernia in both inguinal regions. In the rectal examination, the ampulla was empty. There were air-fluid levels in the small intestine in several areas on standing direct abdominal radiography. The patient was 156 cm in height and 55 kg in weight. Body mass index was 22.6 kg/cm2. Laboratory findings were WBC: 5.7 10³/ µl CRP: 9.18 mg/dl. Contrast-enhanced computed tomography (CT) was performed in the patient with normal creatine. Air-fluid levels were present in the small intestine on CT. In addition, a small intestine segment herniated from the left obturator canal was seen. Inguinal hernia was found in both inguinal regions. The patient was urgently operated. The abdomen was entered with a 10 mm camera trocar using the under-umbilical open technique. On exploration, large direct inguinal hernias were found in the right and left inguinal regions. It was also observed that there was a 1 cm defect in the obturator fossa and an incarcerated bowel loop within this defect. Two 5 mm working trocars were entered from the right and left middle quadrants. The bowel was drawn into the abdomen. There was no ischemia in the bowel. The proximal bowel loops were in a dilated appearance. A plug mesh was placed in the defect in between and peritonized. Upon the development of intraoperative bronchospasm and hypoperfusion in the patient, it was decided to open it after consultation with anesthesia. Trocar locations were duly closed. Bilateral inguianal hernia repair was performed using the Lichtenstein method. The patient who did not develop any complications was discharged with recovery on the 5th postoperative day.



Figure 1: Obturator hernia view on abdominal computed tomography.

Result

Obturator hernia is a very rare pelvic hernia with nonspecific symptoms, usually seen in older, thin, multiparous women. Mortality and morbidity are very high in elderly patients with additional diseases. Therefore, obturator hernia should be considered in the differential diagnosis of elderly patients who come to the emergency department with intermittent obstructive symptoms and imaging methods should be used for diagnosis. Laparoscopic approach is used today as a more effective approach than traditional methods in the diagnosis and treatment of obtrurator hernia in the appropriate patient group.

Discussion

Obturato hernia is an extremely rare type of hernia. Morbidity and mortality are very high due to the difficulty of diagnosis and delay in treatment. With aging, decreases in preperitoneal adipose tissue, enlargement of the pelvis, multiple births increase the incidence of obturator hernia³. Intestinal obstruction, seen in more than half of the cases, is the most common finding. It is usually accompanied by abdominal pain, distension, and vomiting. When the hernia sac contents are reduced spontaneously, the patient's clinic can recover spontaneously. In some studies, it has been reported that these symptoms can be seen intermittently before diagnosis in most of the cases⁴. Rarely, patients may experience pain on the inner side of the thigh due to the compression of the hernia sac on the obturator nerve. This condition, known as the Howship-Romberg sign, can be seen in 15-20% of the cases. In fact, these patients are evaluated by other branches considering the musculoskeletal disease. Since abdominal symptoms are ignored, delays in diagnosis and treatment may be experienced⁵. For diagnosis, barium radiographs, herniography, abdominal ultrasonography, and CT can be used. Generally, these examinations can be diagnosed. Laparoscopy or laparotomy may be required for definitive diagnosis in patients who cannot be diagnosed despite all these methods⁶. In the presented case, the diagnosis of the patient was made by CT performed in the preoperative emergency service.

Early surgical intervention should definitely be planned for patients with peritonitis, ileus and strangulation in the treatment of obturator hernias. In patients with uncertain clinical findings or nonspecific symptoms, imaging methods must be used to clarify the diagnosis⁷. Many procedures have been described, including defect repair in obturator hernias. In addition to intraabdominal, retropubic, preperitoneal or inguinal approaches, laparoscopic surgical approach is also commonly used today. The defect can be repaired using primary or grafts⁸. In the presented case, laparoscopic obturator hernia repair was performed using mesh. It was observed that there was no incarceration or strangulation by exploring the abdomen. Later, an open inguinal hernia was repaired.

References

- Somuncu E, et al. Diagnosisand Laparoscopic Repair of Obturator Hernia with Intestinal Obstruction. JAREM. 2014; 1: 31-4.
- Chang SS, Shan YS, Lin YJ, Tai YS, Lin PW. A review of obturator hernia and a proposed algorithm for its diagnosis and treatment. World J Surg 2005;29:450-454.
- **3.** Karasaki T, Nomura Y, Tanaka N. Long-term outcomes after obturator hernia repair: retrospective analysis of 80 operations at a single institution. Hernia. 2013 Sep 24.
- Mandarry, M, et al. Obturator hernia—a condition seldom thought of and hence seldom sought. Int J Colorectal Dis. 2012;27(2):133-41.
- **5.** Suresh A, et al. A masquerading and unconventional cause of dynamic intestinal Obstruction: Strangulated Obturator Hernia. Cureus. 2018; 10(1): e2124.
- Deeba S, Purkayastha S, Darzi A, Zacharakis E. Obturator hernias: A review of the laparoscopic approach. J Minim Access Surg 2011;7:201–4.
- Petrie A, Tubbs RS, Matusz P, Shaffer K, Loukas M. Obturator hernia: anatomy, embryology, diagnosis, and treatment. Clin Anat 2011;24:562–9.
- Hunt L, Morrison C, Lengyel J, Sagar P. Laparoscopic management of an obstructed obturator hernia: should laparoscopic assessment be the default option?Hernia 2009;13:313–5.