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CASE REPORT

Obstructed obturator hernia

[1]Dr. Shshank Jain, [2]Dr. Shraddha Sharanbasappa Dama, [3]Dr. Jay Bindesh Nandani, [4]Dr. Abhishek Mahadik, [5]Dr. Abha Gune

[1,4]Assistant Professor, [2,3]Junior Resident, Department of General Surgery, Dr. D. Y. Patil Medical College & Hospital, Navi Mumbai, Maharashtra, India
[5]Consultant, Gune Hospital, Panvel, Navi Mumbai, Maharashtra, India

Corresponding author
Dr. Shraddha Sharanbasappa Dama
Junior Resident, Department of General Surgery, Dr. D. Y. Patil Medical College & Hospital, Navi Mumbai, Maharashtra, India

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ABSTRACT
An obturator hernia is a rare abdominal hernia with nonspecific symptoms and mild clinical signs, making it difficult to diagnose. An obturator hernia is characterized by the protrusion of intra-abdominal contents through the obturator foramen, which is physically prone to herniation due to its small size and weak surrounding tissues. This herniation mainly affects the small bowel, however, it can potentially affect other organs including the ovary or bladder. An obturator hernia is typically characterized by ambiguous symptoms such as intermittent groin pain, thigh discomfort, abdominal pain, nausea, and vomiting. An obturator hernia is commonly misdiagnosed due to its nonspecific character, resulting in treatment delays and a high fatality rate. and possible problems. Physical examination, imaging techniques like computed tomography (CT) scans or ultrasounds and laparoscopy are all used to diagnose obturator hernia. A CT scan with contrast enhancement is regarded as the gold standard for diagnosis because of its excellent sensitivity and specificity. An obturator hernia is treated surgically to reduce herniated contents and fix the defect. We report a case of an 85-year-old female with an obturator hernia.

INTRODUCTION

With a 1% incidence, obturator hernias are uncommon abdominal wall hernias. It happens when the intestine protrudes into the obturator canal through a defect in the obturator foramen. Due to the modest clinical presentation and vague symptoms of this form of hernia, diagnosis and treatment are frequently delayed. The confluence of the pubis and ischium bones forms the anatomical feature known as the obturator foramen, which is located in the region of the pelvis and is covered with the obturator membrane. This small, oval-shaped aperture serves as a passageway for the obturator vessels and nerves. The obturator foramen's narrowness makes it more prone to herniation, particularly when the tissues around it are weak or compromised.[1-3]

Obturator hernias can affect both men and women, but they are most common in elderly, thin, multiparous women. Other predisposing factors include disorders that increase intraabdominal pressure, such as persistent cough, constipation, or heavy lifting. Furthermore, factors like as malnutrition and chronic disorders can weaken pelvic floor muscles, increasing the risk of herniation. The clinical appearance of obturator hernia is sometimes ambiguous and can resemble other more prevalent disorders, making diagnosis difficult. Patients usually report vague symptoms including intermittent groin pain, thigh soreness, and bowel obstruction.[4, 5]

Physical examination may reveal a palpable mass in the obturator canal, as well as symptoms of bowel obstruction such as abdominal distension and reduced bowel sounds. Because of its excellent sensitivity and specificity, a contrast-enhanced CT scan is regarded gold standard. Early detection and surgical management are critical for avoiding complications related to obturator hernia, such as bowel strangulation and ischemia. Surgical repair often entails reducing the herniated contents and closing the defect with a variety of techniques, including open or laparoscopic procedures.[6] We present a case of obturator hernia in an elderly, frail, multiparous woman producing intestinal obstruction, which was identified by a CT scan and successfully operated on in an emergency.

CASE REPORT

An 85-year-old female patient reported vomiting for one day and constipation for two days, with no prior history of abdominal distention. There has been a history of comparable issues that were resolved on their own. She had a BMI of 16.5. Palpation of the abdomen revealed right iliac fossa discomfort without guarding or rigidity. On abdominal auscultation,

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hyperperistaltic bowel sounds were discovered. The patient was stabilised following initial resuscitation and placement of a nasogastric tube and Foley catheter. The erect X-ray abdomen revealed many air-fluid levels. Ultrasound of the belly revealed fluid-filled, fecal-loaded bowel loops with oscillating peristalsis.

Computed CT revealed a right obstructed obturator hernia, as well as a dilated stomach, first segment of the duodenum, jejunum, and ileal loops. The patient was transported for an emergency exploratory laparotomy. Intraoperatively, small bowel loops (ileal) were seen protruding through the right obturator foramen between the obturator externus and pectineus muscles. The intestinal loops were reduced with gentle traction, and Richter's form of occluded obturator hernia was discovered. The remainder of the bowel was unremarkable. The right obturator foramen was repaired using a free omental patch in two layers. The patient tolerated the procedure well and was kept on nil per oral for 24 hours afterwards. On postoperative day 2, the patient began taking oral sips as soon as bowel sounds and flatus appeared. Hypokalemia and hypoalbuminemia were rectified, and the patient was gradually introduced to a soft diet as tolerated. On the sixth postoperative day, the patient was discharged.

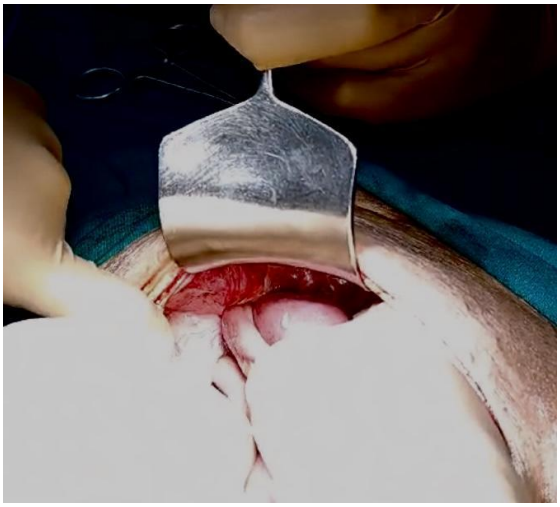

Figure 1: Small bowel loops seen protruding in the obturator foramen

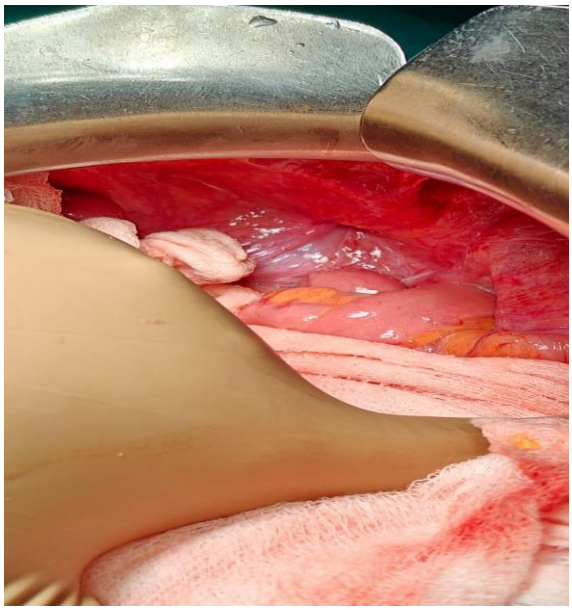

Figure 2: Obturator foramen after reducing the protruding small bowel

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Figure 3: Two-layer repair of obturator foramen

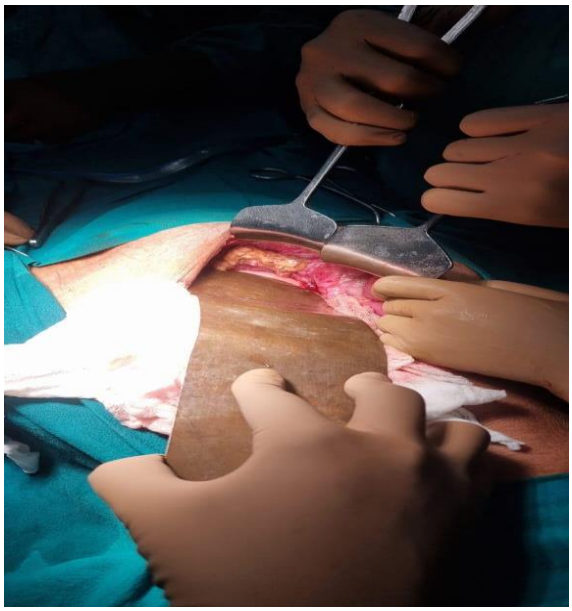

Figure 4: Omental patch placement on two layered repair of the obturator foramen

DISCUSSION

Obturator hernias are uncommon and difficult to diagnose. They frequently present with vague abdominal discomfort and symptoms of intermittent bowel obstruction due to a high proportion of Richter's herniation of the bowel. They can also appear with medial thigh pain (HowshipRombergs sign) caused by hernia sac irritation of the obturator nerve, with no hernial mass found on clinical examination. Preoperatively, a CT scan is the gold standard for diagnosing an obturator hernia, which is then treated with a laparotomy or laparoscopic surgery.[7- 10]

CONCLUSION

Obturator hernia, though rare, is a potentially life-threatening form of external abdominal hernia. Its signs and symptoms are often vague, making diagnosis challenging. It typically occurs in elderly, thin women, who present with intermittent or acute small bowel obstruction, often visible on abdominal X-rays. A key diagnostic indicator on CT scans of the abdomen and pelvis is the small bowel herniating through the obturator foramen, positioned between the pectineus and obturator muscles. Due to the high risk of bowel incarceration, prompt diagnosis and early surgical intervention are crucial to reduce morbidity and mortality.

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