

Atypical Presentation of Obturator Hernia with Bowel Perforation: A Case Report and Review on Diagnostic Challenges

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Introduction

An obturator hernia (OH) is a rare but potentially life-threatening type of pelvic hernia, accounting for less than 1% of all hernias. It most commonly affects elderly, thin, multiparous women. Unlike more typical hernias, obturator hernias often present with atypical symptoms, such as medial thigh pain. This nonspecific presentation combined with the rarity of the condition often leads to diagnostic challenges and increased risk of complications.

Presentation

A 68-year-old frail female with a medical history notable for chronic obstructive pulmonary disease (COPD), diverticulitis, prior femoral hernia, hyperlipidemia, osteoporosis, active tobacco use and remote small bowel resection (15 years prior) presented to the emergency department with acute right lower extremity pain. The pain had an abrupt onset while she was in a seated position and was described as sharp and cramping, localized to the right quadriceps, iliotibial band, and hamstring region. The pain was severe, persistent, and rendered her unable to ambulate. She denied any recent trauma or falls. Initial evaluation included femur and pelvic radiographs, which showed no evidence of fracture.

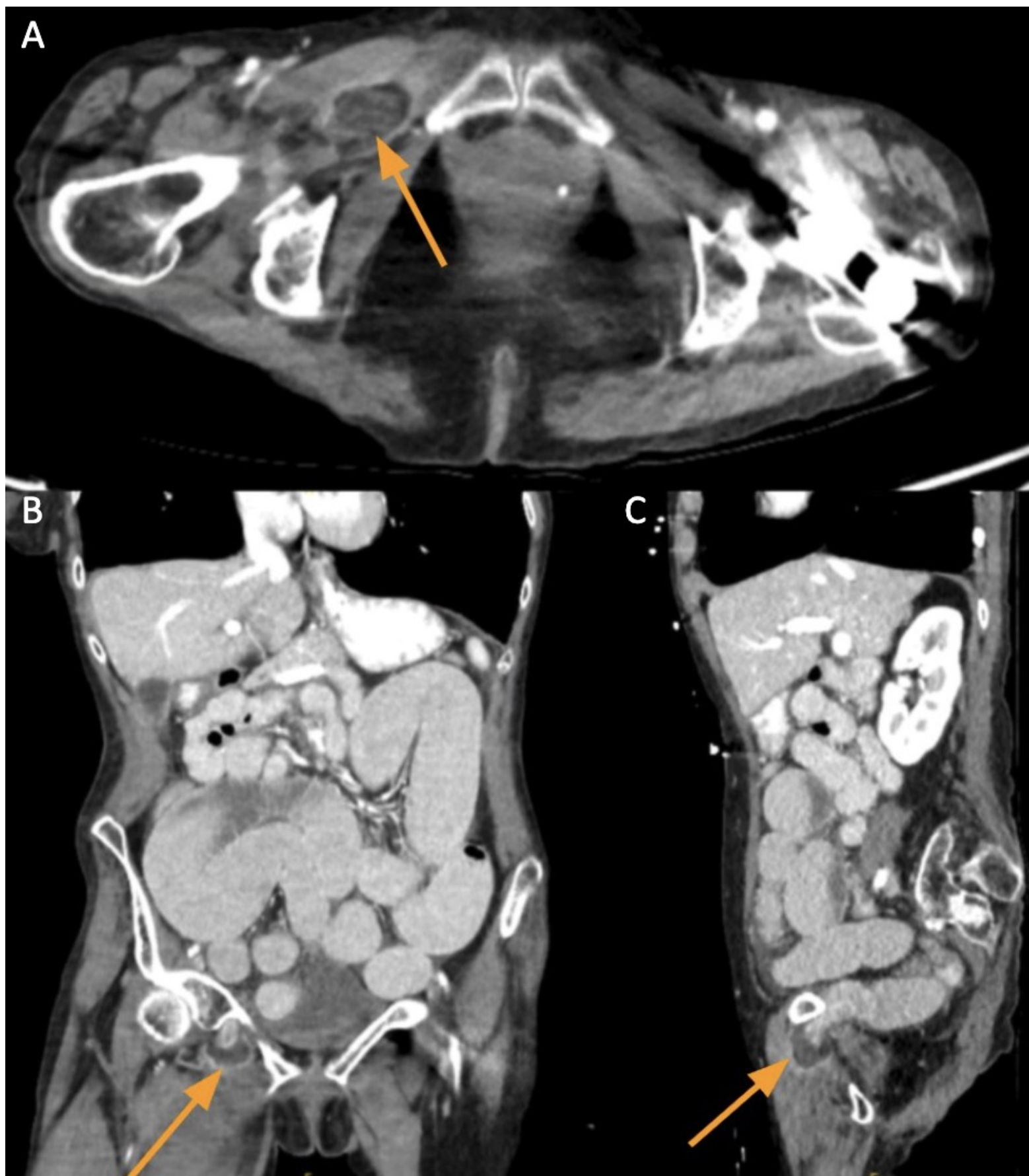


Figure 1. Contrast-enhanced computed tomography (CETC) axial(A), coronal(B), and sagittal(C) sections. Orange arrows showing right-sided obturator hernia with small bowel herniating through the right obturator canal.

Hospital Course

Over the subsequent days, the patient continued to report significant right leg pain and developed multiple episodes of non-bloody emesis, accompanied by nausea and diffuse abdominal discomfort. She reported decreased oral intake, inability to tolerate food, and absence of flatus or bowel movements during this time. She denied chest pain, shortness of breath, lower extremity swelling, or diarrhea. By hospital day 5, a nasogastric tube (NGT) was placed for symptomatic management. Abdominal and pelvic computed tomography (CT) revealed a high-grade small bowel obstruction (SBO) with multiple dilated loops of small intestine. Importantly, an obturator hernia was identified on the CT (**Figure 1**). On physical examination, the patient appeared cachectic, with a body mass index (BMI) of 16 kg/m². Vitals were stable and labs were within normal limits except for mild elevation of WBC. The abdomen was soft, non-distended, and non-tender to palpation, with no guarding, rebound tenderness, or peritoneal signs. Bowel sounds were present, and no palpable hernia was appreciated. Overnight nasogastric tube output measured 200 mL of bilious fluid.

Intervention

The patient underwent diagnostic laparoscopy, which revealed a Richter-type obturator hernia with perforated small bowel incarcerated within the hernia sac. The decision was made to proceed with a robotic-assisted laparoscopic obturator hernia repair (**Figure 2**), with resection of a 10 cm segment of mid-ileum with primary side-to-side anastomosis. On postoperative day one, the patient's right leg pain had completely resolved. Vital signs remained stable, and her white blood cell count returned to normal limits. On postoperative day three, she denied nausea or vomiting but had not yet experienced return of bowel function. Abdominal distension was noted, and an abdominal radiograph was consistent with postoperative ileus. By postoperative day seven, the ileus had resolved, the patient tolerated a soft diet and was having bowel function. She was subsequently discharged home in stable condition, with outpatient follow-up arranged.

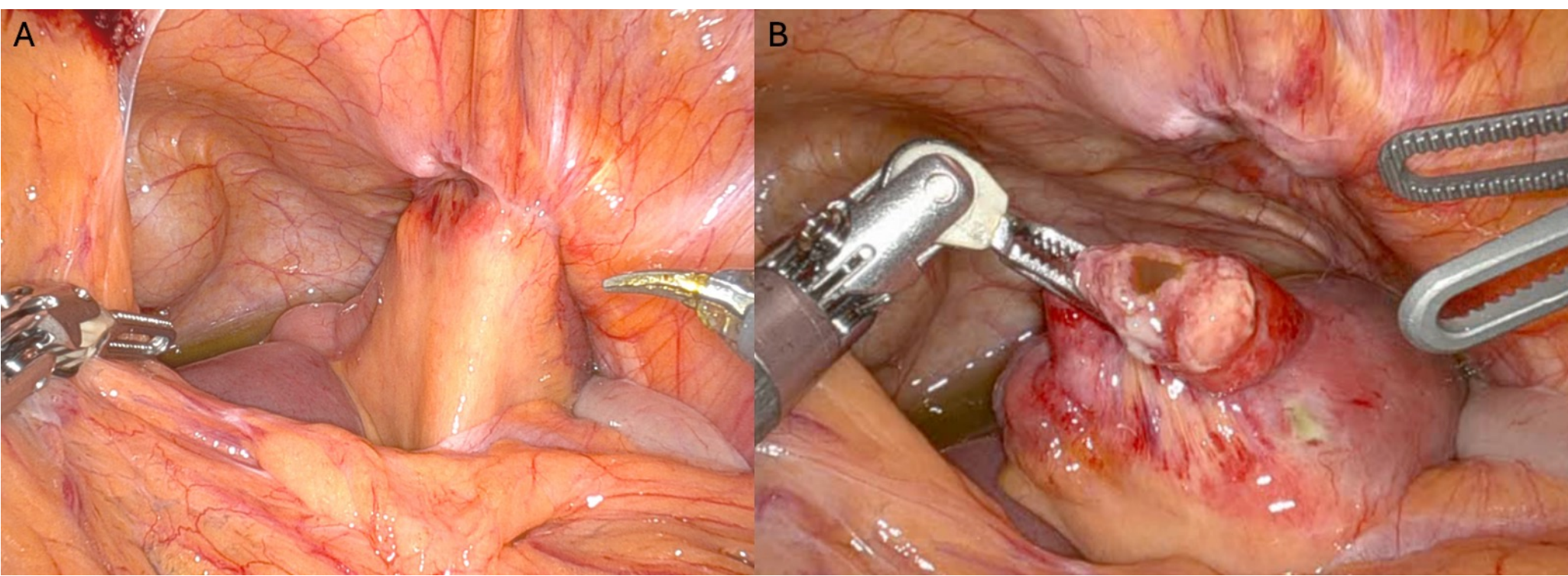


Figure 2. (A) Robotic-assisted intraoperative picture showing an obturator hernia. (B) Robotic-assisted intraoperative picture showing a perforated ileum within the hernia sac.

Conclusion

Obturator hernias are a rare and often overlooked cause of bowel obstruction. The nonspecific symptoms can delay diagnosis and increase the risk of potential complications. This case highlights the importance of maintaining a high index of suspicion in elderly patients with unexplained thigh pain and gastrointestinal symptoms. Early recognition and timely surgical intervention are essential to ensure favorable outcomes.

Discussion

This case underscores the diagnostic challenge of obturator hernia. The absence of abdominal symptoms and an atypical pain distribution contributed to a 5-day delay in diagnosis. CT imaging remains the modality of choice and is crucial in identifying the hernia. Prompt imaging and surgical intervention are essential to ensure favorable outcomes.

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