Scholars Journal of Medical Case Reports
Abbreviated Key Title: Sch J Med Case Rep
ISSN 2347-9507 (Print) | ISSN 2347-6559 (Online)
Journal homepage: https://saspublishers.com

OPEN ACCESS

Emergency Visceral Surgery

Small Bowel Obstruction Due to an Obturator Hernia with Lateral Strangulation (Richter's Hernia): A Case Report and Literature Review

Ettaoussi Abdelhak[1], Benzidane Kamal[1], Ismael Ibrahim[1*], Ichrak Bouali[1], Majd Abdessamad[1], Kamal Khadija[1], Bouali Mounir[1], El Bakouri Abdelilah[1], El Hattabi Khalid[1]

[1]Hassan II University of Casablanca, Morocco, Department of Emergency Visceral Surgery, Ibn Rochd University Hospital, Casablanca, Morocco

DOI: https://doi.org/10.36347/sjmcr.2026.v14i02.018 | **Received:** 09.11.2025 | **Accepted:** 14.01.2026 | **Published:** 16.02.2026

***Corresponding author:** Ismael Ibrahim
Hassan II University of Casablanca, Morocco, Department of Emergency Visceral Surgery, Ibn Rochd University Hospital, Casablanca, Morocco

Abstract **Case Report**

Obturator hernia is a rare cause of intestinal obstruction, primarily affecting elderly, thin women. The Richter's variant, which involves only a portion of the intestinal wall, poses a diagnostic challenge due to its subtle clinical presentation. An 88-year-old woman, with no surgical history, presented with acute intestinal obstruction evolving over five days. Clinical examination revealed no remarkable findings. Abdominal CT scan initially suggested obstruction due to a primary adhesive band. Emergency laparotomy revealed lateral strangulation of a small bowel loop at the obturator right foramen, which was necrotic. Segmental small bowel resection of 5 cm with hand-sewn end-to-end anastomosis was performed, along with hernia repair by peritoneal suturing. Postoperative recovery was uneventful.

Keywords: obturator hernia, Richter's hernia, bowel obstruction, emergency surgery.

INTRODUCTION

Obturator hernia (OH) is an uncommon abdominal wall hernia caused by the protrusion of intra- or extraperitoneal contents through the obturator canal. It accounts for only 0.05–1.4% of all hernias and for 0.2–1.6% of cases of small bowel obstruction [1,2]. It is most frequently observed in elderly, thin, multiparous women due to pelvic floor laxity, reduced peritoneal fat, and a wider obturator canal [2,3].

Clinically, OH is difficult to diagnose because it is rarely palpable externally. Patients usually present with nonspecific signs of bowel obstruction nausea, vomiting and abdominal pain. Pathognomonic but inconsistently present is the Howship–Romberg sign (medial thigh pain due to obturator nerve compression) [4]. However, in our case, only a portion of the intestinal wall is incarcerated without complete luminal obstruction, making diagnosis even more challenging.

Delay in diagnosis often results in complications such as incarceration, strangulation, ischemia, or perforation, which contribute to the high morbidity and mortality associated with this condition [5,6]. Computed tomography (CT) has become the gold standard for early detection, allowing timely surgical management [1,3,7].

We report here the case of an 88-year-old woman admitted for acute intestinal obstruction, with CT scan findings suggestive of adhesive small bowel obstruction. Intraoperative diagnosis revealed a small bowel obstruction due to obturator hernia with lateral wall strangulation, consistent with Richter's hernia.

CASE REPORT

An 88-year-old woman, with no medical or surgical history, presented with a five-day history of bowel obstruction, characterized by absence of stool and gas passage, associated with bilious vomiting, without gastrointestinal bleeding, evolving in an afebrile context with impaired general condition.

On admission, the patient was conscious (GCS 15/15), hemodynamically and respiratorily stable. Abdominal examination showed a distended, tympanic, non-tender abdomen, no laparotomy scars, no palpable masses, and free hernia orifices. Vaginal and rectal examinations were unremarkable. Other systemic examinations were normal.

The patient presented with an abdominopelvic CT scan showing small bowel dilation with hydro-aerial levels measuring up to 42 mm. A transitional level was located upstream of the iliac bifurcation on the left, with a spiral appearance of vessels and beak-like transition. Left colon and rectum were collapsed. No signs of digestive ischemia were noted.

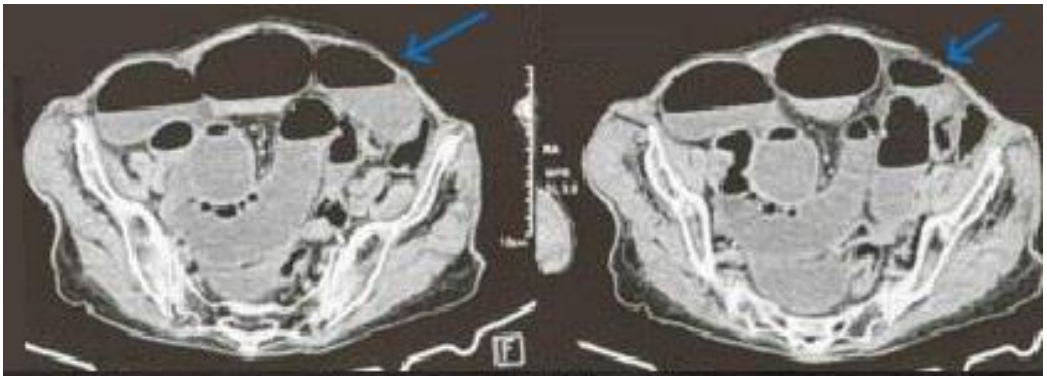

Figure 1: CT image showing the transitional level. Blue arrow

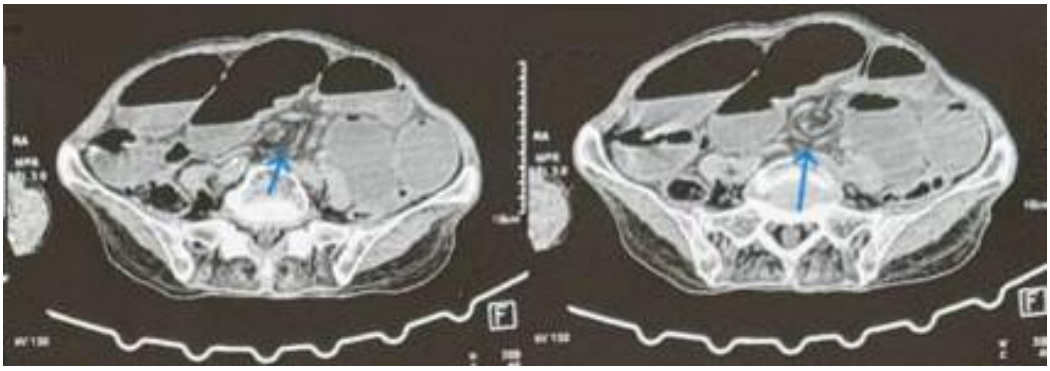

Figure 2: CT image showing the spiral appearance of vessels and beak-like transition. Blue arrow

The patient was prepared with intravenous access, monitoring, and blood tests (CBC, coagulation profile, electrolytes), all of which were normal.

A midline supra- and infra-umbilical laparotomy was performed. Exploration revealed minimal peritoneal effusion with serous fluid, dilated small bowel loops, and an anti-mesenteric portion of a necrotic ileal loop incarcerated in the right obturator foramen and performing a spin on itself.

A segmental small bowel resection of 5 cm was performed with end-to-end anastomosis. The defect was closed with peritoneal suturing to repair the hernia.

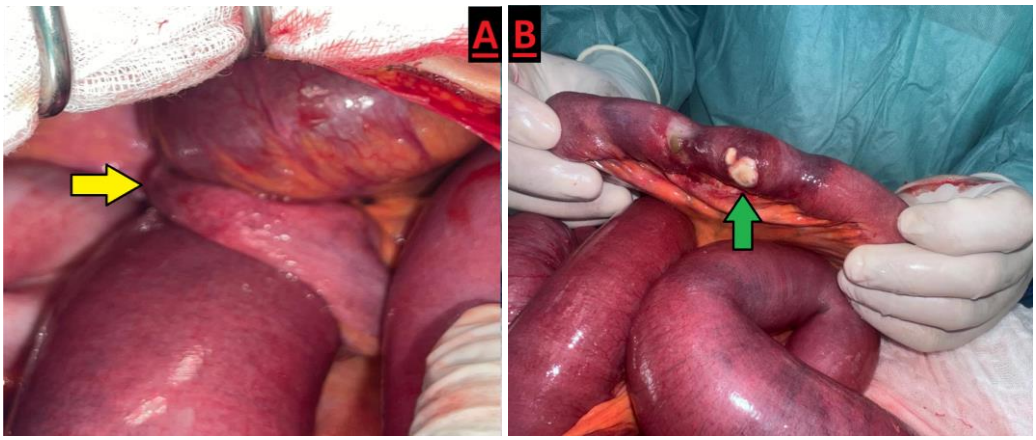

Figure 3: Intraoperative image: A – incarcerated ileal loop at the obturator foramen before reduction (yellow arrow); B – lateral strangulation of the loop after reduction (green arrow)

Postoperative recovery was uneventful, with bowel function resuming on day 2, oral feeding on day 4, and discharge on day 5.

DISCUSSION

Strangulated obturator hernia represents the most severe complication of this rare condition. In many series, more than 50% of obturator hernias progress to strangulation if untreated [6]. The herniated bowel loop, often a segment of ileum or jejunum, can become ischemic, necessitating emergency surgery and sometimes bowel resection [1,7].

Obturator hernia is favored by advanced age, emaciation, multiparity, and chronic conditions increasing intra-abdominal pressure (e.g., COPD, chronic constipation, ascites) [2,8]. Anatomically, hernia formation progresses through three stages: preperitoneal fat plug, peritoneal sac development, and visceral herniation [2]. The obturator canal's close relation to the obturator nerve explains the characteristic neuralgic thigh pain [4].

Patients typically present with intestinal obstruction, but the absence of external swelling leads to frequent misdiagnosis [6]. The Howship–Romberg sign is present in only 15–50% of cases [2]. Modern imaging, especially contrast-enhanced CT, enables precise localization of the herniated bowel and assessment of viability [1,3]. In our case, the Richter's form made preoperative diagnosis difficult.

Surgery is the only effective treatment. Both open and laparoscopic approaches are described. Open midline laparotomy allows rapid exposure, resection if needed, and is preferred in unstable patients or when strangulation is suspected [3,7]. Laparoscopic repair (TEP or TAPP) is increasingly adopted in stable patients, associated with lower morbidity and mortality compared with laparotomy [3].

Repair can be done by primary closure, herniorrhaphy, or mesh placement, depending on contamination and bowel viability [4,9]. In cases of ischemic or necrotic bowel, resection with primary anastomosis is required [7].

Despite surgical advances, mortality remains high (up to 12–40%) due to delayed presentation and comorbidities [3,8]. Early recognition with CT and prompt surgery remains the key to improving survival. Multidisciplinary perioperative care is essential for frail elderly patients [1].

CONCLUSION

Strangulated obturator hernia, although rare, is a life-threatening surgical emergency. It should always be considered in elderly, emaciated, multiparous women presenting with bowel obstruction of unclear cause. CT imaging is critical for early detection, and emergency surgery either open or laparoscopic is mandatory once strangulation is suspected. Increased awareness among clinicians and timely intervention are crucial to reduce the still-considerable morbidity and mortality associated with this elusive condition [1–9].

REFERENCES

1. Aryal M, Keshari S, Pandey A, Pandey A, Paudel I. A rare case of left-sided obturator hernia diagnosed by computed tomography. Clin Case Rep. 2023;11: e7297.
2. Jidou AV, Belga I, Derkaoui A, *et al.,* Strangulated obturator hernia : A rare case report and review of the literature. Int J Surg Case Rep. 2025; 134:111739.
3. Anderson T, Bessoff KE, Spain D, Choi J. Contemporary management of obturator hernia. Trauma Surg Acute Care Open. 2022;7: e001011.
4. Delgado A, Bhuller SB, Phan P, Weaver J. Rare case of obturator hernia: Surgical anatomy, planning, and considerations. SAGE Open Med Case Rep. 2022; 10:2050313X221081371.
5. Nakagawa H, Asakura T, Hamaguchi S. Obturator hernia. CMAJ. 2022;194: E50.
6. Chitrambalam TG, Christopher PJ, Sundaraj J, Selvamuthukumaran S. Diagnostic difficulties in obturator hernia: A rare case presentation and review of literature. BMJ Case Rep. 2020;13: e235644.
7. Li H, Cao X, Kong L. Obturator hernia: Diagnosis and surgical treatment. Front Surg. 2023; 10:1159246.
8. Dhakre VW, Agrawal P. 'Little old lady's hernia' (obturator hernia): A deceptive encounter. J Minim Access Surg. 2019; 15:180–181.
9. Conti L, Grassi C, Banchini F, *et al.,* Management of Obturator Hernia. In: Hernia Surgery. IntechOpen; 2022.