

Obturator Hernia Unveiled: A Silent Threat with Surgical Urgency

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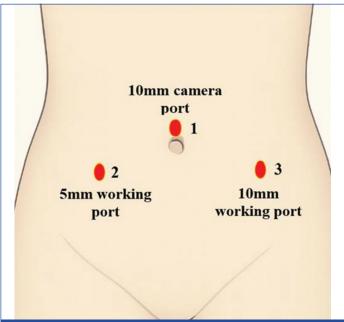
Dear Editor,

We read with keen interest the article titled "Unilateral Obturator Hernia (OH) in an Elderly Male: A Case Report" by Sharma PK et al., which adeptly addresses the diagnostic complexity and clinical implications of OH. The authors have aptly highlighted the subtlety of its presentation, the indispensable role of imaging in its identification and the elevated risk of morbidity associated with delayed surgical

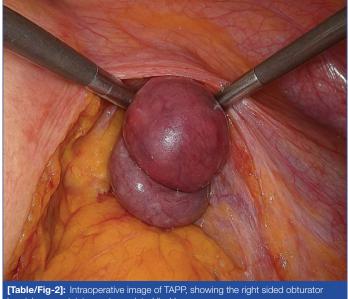
In continuation of this pertinent discussion, authors wish to share their experience in managing a comparable case at our tertiary care institution. A 42-year-old, moderately built female (BMI: 28 kg/m²) presented with a long-standing, painless swelling along the medial aspect of her right thigh, associated with intermittent constipation and absence of a cough impulse. The deep pelvic location of the OH contributed to subtle functional limitations, including mild discomfort during ambulation and prolonged standing. She had no known co-morbidities. Despite the long-standing nature of her symptoms, she had previously deferred medical evaluation due to financial constraints. However, the sudden onset of acute pain in the preceding 48 hours prompted urgent presentation to our centre. A Contrast-Enhanced Computed Tomography (CECT) scan confirmed a strangulated right obturator hernia with a defect measuring 2.5 × 2 cm and incarcerated small bowel as content.

The patient underwent a laparoscopic Transabdominal Preperitoneal (TAPP) repair under American Society of Anaesthesiologists (ASA) II status. A standard three-port TAPP configuration [2] was employed to ensure optimal access and visualisation of the obturator canal and associated pelvic structures [Table/Fig-1]. Upon entering the preperitoneal space, a right-sided obturator hernial defect measuring approximately 2.5×2 cm was identified, containing a segment of incarcerated small bowel [Table/Fig-2]. The herniated contents were carefully reduced, revealing a 5-cm segment of ischaemic ileum that necessitated resection after intraoperative assessment of viability. A primary end-to-end anastomosis was performed laparoscopically. Given the risk of contamination, mesh placement was deferred and the hernia defect was closed anatomically using interrupted intracorporeal sutures. Adequate peritoneal lavage was performed and a drain was placed in the pelvis. The procedure lasted 138 minutes and was technically demanding due to the deep pelvic location of the obturator canal and the friability of the incarcerated bowel segment.

Postoperative recovery was guided by the Enhanced Recovery After Surgery (ERAS) Protocol, emphasising early ambulation, adequate analgesia and deep vein thrombosis prophylaxis using pneumatic compression devices and subcutaneous low-molecular-weight heparin [3]. Nil Per Os (NPO) status was maintained for the initial 24-48 hours postresection, after which oral liquids were cautiously reintroduced once bowel sounds returned. The patient was then started on a soft diet by postoperative day 4. The postoperative course was uneventful and the patient was discharged after eight days of hospital stay. During follow-up at six months postoperatively, the patient demonstrated no clinical or radiological evidence



[Table/Fig-1]: Standard three-port placement for Transabdominal Preperitoneal TAPP) repair of right-sided obturator hernia; 1: 10-mm camera port placed supraumbilically for optimal visualisation of the pelvic cavity; 2: 5-mm working port in the left lower quadrant for instrument manipulation and retraction; 3: 12-mm working port in the right lower quadrant for dominant hand dissection, bowel resection, and suturing if required.



hernial sac containing a strangulated ileal loop.

of recurrence and had fully regained functional capacity, with no residual pain or limitation in activity.

Owing to its concealed pelvic location and insidious onset, obturator hernia is often misdiagnosed or mistaken for more common groin pathologies. Among these, femoral hernia presents the most frequent diagnostic dilemma due to its anatomical proximity and

shared demographic profile, particularly in elderly, emaciated females. However, unlike femoral hernias, OH often remains clinically silent until complications such as bowel obstruction or strangulation emerge. In such cases, especially when no overt groin bulge is noted, cross-sectional imaging plays a decisive role in establishing the diagnosis [4]. Clinical recognition of subtle signs such as the Howship-Romberg sign and the Hannington-Kiff sign may offer additional diagnostic insight in select cases [5].

Present case further emphasises the evolving role of laparoscopy in the management of both elective and emergency presentations of OH. While open surgery has historically been the standard surgical approach, several studies, including those by Burla MM et al., Sun Z et al., and Schizas D et al., have demonstrated that minimally invasive repair yields equivalent outcomes with comparable morbidity and significantly lower recurrence rates [Table/Fig-3] [6-8]. The laparoscopic approach offers significant advantages, including superior visualisation, reduced postoperative morbidity and the opportunity to assess the contralateral obturator canal. It enables both bowel resection and hernia defect closure through a single access route, thereby streamlining intraoperative workflow [9,10].

Study	Design/Scope	Key findings	Strengths
Burla MM et al., [6] (2023)	Systematic review and meta-analysis of 13 observational studies Included 351 repairs (Laparoscopic and Open).	Mesh repair was associated with a significantly lower recurrence rate (RR 0.31; 95% CI 0.11–0.94). No increase in mortality or complications.	Large pooled dataset; robust statistical analysis Directly informs practice for recurrence prevention.
Sun Z et al., [7] (2025)	Retrospective cohort of 13 patients with CT-confirmed obturator hernia between 2017–2023; compared laparoscopic TAPP vs open surgery.	Laparoscopic repair led to shorter hospital stay (median 7 vs 13 days), less blood loss, lower postoperative CRP, and no recurrences at 12 months.	Direct comparison of techniques Perioperative metrics objectively measured Follow-up confirms durability of outcomes.
Schizas D et al., [8] (2021)	Systematic review of 74 studies encompassing 146 patients across elective and emergency settings.	Laparoscopic approach showed shorter hospital stay and reduced morbidity compared to open repair; highlighted diagnostic challenges and presentation variability.	Broad multicentric synthesis Captures both elective and emergency contexts; reinforces minimally invasive feasibility.

[Table/Fig-3]: Comparative summary of recent studies evaluating laparoscopic versus open approaches in obturator hernia repair [6-8].

On the other hand, laparoscopic repair of obturator hernia is limited by a steep learning curve, primarily due to the rarity of the condition, its deep pelvic location and the advanced technical expertise required for navigating complex pelvic anatomy, performing bowel resection, identifying the obturator canal with precision and executing intracorporeal suturing. Moreover, the increased cost associated with laparoscopic instrumentation and prolonged operative time may further restrict its applicability in resource-limited healthcare settings [11].

Authors commend the Sharma PK et al., [1] for shedding light on this rare yet clinically significant condition and endorse their emphasis on early recognition and timely surgical management. In our view, continued awareness, combined with heightened clinical suspicion and advanced imaging, remains central to improving outcomes in patients with obturator hernia.

REFERENCES

- [1] Sharma PK, Christina PE, Sharmeela S, Diwakar A. Unilateral obturator hernia in an elderly male: A case report. J Clin Diagn Res. 2025;19(2):01-04.
- [2] Nishina M, Fujii C, Ogino R, Kobayashi R, Kumada K, Yamane K, et al. Preoperative diagnosis of obturator hernia by computed tomography. Semin Ultrasound CT MRI. 2002;23(2):193-96.
- [3] Ceresoli M, Braga M, Zanini N, Abu-Zidan FM, Parini D, Langer T, et al. Enhanced perioperative care in emergency general surgery: WSES position paper. World J Emerg Surg. 2023;18(1):47. Doi:10.1186/s13017-023-00519-2. URL: https://wjes.biomedcentral.com/articles/10.1186/s13017-023-00519-2.
- [4] Jia Y, Shang J, Zhang H, He N, Ma J. Clinical outcomes of enhanced recovery after surgery program in elderly patients undergoing TAPP hernia repair: A retrospective cohort study. J Laparoendosc Adv Surg Tech A. 2023;33(12):1220-27.
- [5] Haraguchi M, Matsuo S, Kanetaka K, Tokai H, Azuma T, Yamaguchi S, et al. Obturator hernia in an ageing society. Ann Acad Med Singap. 2007;36(6):413-15
- [6] Burla MM, Gomes CP, Calvi I, Oliveira ESC, Hora DAB, Mao RD, et al. Management and outcomes of obturator hernias: A systematic review and meta-analysis. Hernia. 2023;27(4):795-806. Doi:10.1007/s10029-023-02808-w. URL: https://pubmed.ncbi.nlm.nih.gov/37270718.
- [7] Sun Z, Tang L, Wu Z, Hu G, Xu M. Retrospective comparison of laparoscopic and open surgery for obturator hernia: A single-center experience. Eur J Med Res. 2025;30:396. Doi:10.1186/s40001-025-02646-9. URL: https://eurjmedres. biomedcentral.com/articles/10.1186/s40001-025-02646-9.
- [8] Schizas D, Apostolou K, Hasemaki N, Kanavidis P, Tsapralis D, Garmpis N, et al. Obturator hernias: A systematic review of the literature. Hernia. 2021;25(1):193-204. Doi: 10.1007/s10029-020-02282-8. Epub 2020 Aug 9. PMID: 32772276.
- [9] Liu J, Zhu Y, Shen Y, Liu S, Wang M, Zhao X, et al.. The feasibility of laparoscopic management of incarcerated obturator hernia. Surg Endosc. 2017;31(2):656-60. Doi:10.1007/s00464-016-5000-5. URL: https://pubmed.ncbi.nlm.nih. gov/27168103.
- [10] Ng DC, Tung KL, Tang CN, Li MK. Fifteen-year experience in managing obturator hernia: From open to laparoscopic approach. Hernia. 2014;18(3):381-86. Doi:10.1007/s10029-013-1116-2. URL: https://pubmed.ncbi.nlm.nih.gov/23572396.
- [11] Kohga A, Kawabe A, Okumura T, Yamashita K, Isogaki J, Suzuki K. Laparoscopic repair is a treatment of choice for selected patients with incarcerated obturator hernia. Hernia. 2018;22(5):887-95. Doi: 10.1007/s10029-018-1747-7. URL: https://pubmed.ncbi.nlm.nih.gov/29497889.

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