



A Rare Case of Retained Copper-T Intrauterine Contraceptive Device Migration with Caecal Perforation in Pregnancy Managed by Ileocecal Resection and Ileocolic Anastomosis

Tahir Mahmood¹, Aneeqah Din Muhammad², Shahroze Wajid², Ahmad Uzair Qureshi²

¹Department of Urology, Mayo Hospital, Lahore, ²Department of General Surgery, Mayo Hospital, Lahore, Pakistan.

ABSTRACT

Intrauterine contraceptive devices (IUCDs) are effective long-acting reversible contraceptives but may rarely perforate the uterus and migrate to adjacent viscera, sometimes remaining asymptomatic for years.

A 33-year-old woman at 26 weeks' gestation presented with right iliac fossa pain, fever, and tachycardia for 1 day. Intraoperative findings revealed a transmigrated Copper-T device within the caecum, causing dual perforations

of the caecum, requiring ileocecal resection and end-to-end ileocolic anastomosis.

Maternal recovery was uneventful, and fetal viability was preserved throughout the entire hospital stay. The patient was discharged on the 5th postoperative day. Long-standing retained IUCDs can cause serious gastrointestinal complications and contraceptive failure; prompt surgical management yields favorable outcomes.

Keywords: Intrauterine Devices (IUD / IUCD), Intrauterine Device Migration, Foreign-Body Migration, Uterine Perforation, Intestinal / Bowel Perforation, Pregnancy, caecum

*Corresponding Author: Aneeqah Din Muhammad

Email: dr.aneeqah92@gmail.com

How to cite: Mahmood T, Din Muhammad A, Wajid S, Qureshi AU. A Rare Case of Retained Copper-T Intrauterine Contraceptive Device Migration with Caecal Perforation in Pregnancy Managed by Ileocecal Resection and Ileocolic Anastomosis. Pak J Med Dent. 2026 April ;15(2): 401-405. Doi: <https://doi.org/10.36283/ziun-pjmd15-2/032>.

Received: Thu, January 01, 2025 **Accepted:** Wed, March 25, 2026 **Published:** Mon, April 13, 2026

INTRODUCTION

IUCDs are among the most effective reversible contraceptives and are widely used globally; their mechanisms, safety profile, and efficacy have been summarized by WHO guidance and technical reviews¹. Although uterine perforation is uncommon, modern series show that symptoms may be mild or absent and that perforation is often detected incidentally or during investigation for other complaints^{2,3}. Perforation may occur at insertion or present rarely as delayed transmigration with embedding or migration into adjacent organs, including the bowel, bladder, omentum, or peritoneal

cavity^{4,5}. Bowel involvement can lead to adhesions, obstruction, fistula, or perforation and may mimic acute surgical conditions such as peritonitis, appendicitis, presenting with diagnostic difficulties, especially in pregnancy when imaging options are limited⁶.

CASE PRESENTATION

A 33-year-old female with an unplanned pregnancy at 26 weeks with parity of two and the last delivery 10 years back via spontaneous vaginal delivery, at which time a copper T IUCD was placed intrauterine.

Acute right iliac fossa pain, with high-grade fever for one day, presented at 26 weeks' gestation; vital signs were as follows: Pulse of 115bpm, blood pressure of 100/80mmHg, Temperature of 101°F, and Respiratory rate of 18/min. Abdominal examination revealed tenderness in the right iliac fossa with positive rebound and a positive cough impulse, consistent with localized peritonism. The rest of the abdomen was soft and non-tender.

Routine labs showed total leukocyte count of $19.2 \times 10^9/L$, haemoglobin 13.2 g/dL, platelets $196 \times 10^9/L$, renal function tests and liver function tests were within the normal range. Abdomino-pelvic and obstetric ultrasound confirmed a single viable intrauterine pregnancy and a streak of fluid in the right iliac fossa; advanced radiology was deferred due to gestation.

A preliminary working diagnosis of acute appendicitis with suspicion of a perforated appendix was made. After resuscitation, open appendicectomy via a gridiron incision under general anaesthesia was performed.

Intraoperative findings revealed 10ml pus on opening the peritoneum and two caecal perforations; one perforation at the base of an autolyzed appendix, through which a Copper-T device was entering into the caecum, and another perforation at the anterior wall of the caecum, approximately 2.5 cm from the first perforation, caused by one of the limbs of an IUCD; no uterine perforation was found. The IUCD had migrated from the uterus into the retroperitoneum, and from there, it had entered the caecum at the base of the appendix. Ileocecal resection and primary end-to-end ileocolic anastomosis were performed, and the device was removed.

Postoperative recovery was uneventful; fetal viability was ensured; the patient was discharged on postoperative day 5 after she was oral free, mobilized and passing stool and flatus.

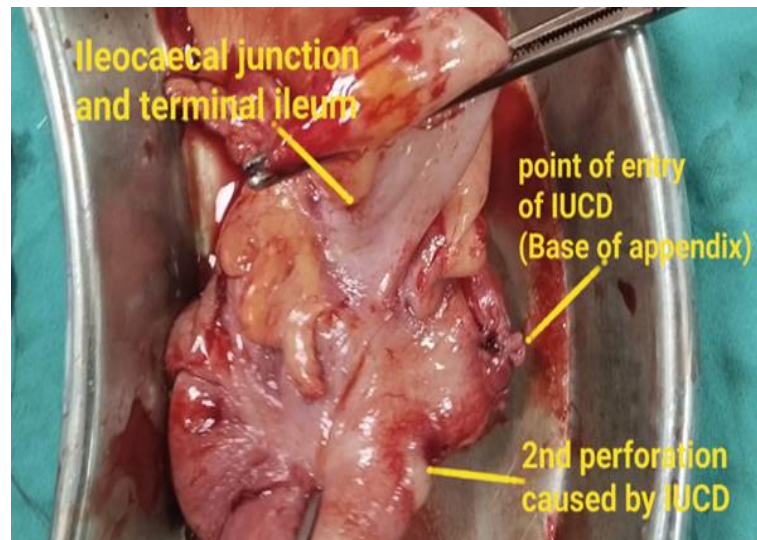


Figure 1. Resected Specimen Showing 2 Caeca Perforations.



Figure 2. The Transmigrated IUCD.

DISCUSSION

Uterine perforation incidence with IUCDs is low but documented across decades; risk factors include inadequate insertion technique, uterine position, and crude operator experience, and perforation may be complete or partial with or without embedding or transmigration.^{2,3} Many patients are asymptomatic or have mild symptoms; up to ~30% may be asymptomatic at diagnosis in modern cohorts, underscoring the potential for delayed presentations.^{1,5} Extrauterine IUCDs are generally recommended for removal because of risks of organ injury, adhesions, and contraceptive failure; laparoscopic retrieval is often feasible but laparotomy may be required for visceral perforation or dense adhesions or in cases of diagnostic dilemmas.⁸ There have been some case series and reports

documenting small- and large-bowel perforations from migrated IUCDs presenting as acute abdomen or appendicitis, necessitating bowel resection in some instances, but these are rare^{6,7}.

Retained extrauterine IUCDs can result in contraceptive failure and unintended pregnancy; management decisions must balance maternal and fetal risks, with prompt surgical intervention when visceral injury is suspected.^{10,11} In our case report, the patient had forgotten that she had a Copper T IUCD placed 10 years back and had not gone for removal of the device⁴.

CONCLUSION

Long-standing retained Copper-T IUCDs can cause delayed and concealed uterine perforation, migration, and serious gastrointestinal complications including caecal perforation; early recognition and surgical management are essential for favorable maternal and fetal outcomes.

FUNDING

None.

PATIENT'S CONSENT

Informed consent of the patient was taken before the writing of the manuscript.

CONFLICT OF INTEREST

None.

AUTHORS' CONTRIBUTION

TM wrote the basic manuscript. **ADM** analyzed the data, finalized the manuscript and was the primary surgeon. **SW** was the assistant in the case, and **AUQ** supervised the whole process.

REFERENCES

1. Faculty of Sexual & Reproductive Healthcare. FSRH Guideline: Intrauterine contraception. *BMJ Sex Reprod Health*. 2023;49(1):1-142.
2. Li Q, Qi D, Bi T, Guo X, Chen H. Case report: Uterine perforation caused by migration of intrauterine devices. *Front Med (Lausanne)*. 2024 Sep 5;11:1455207. doi: 10.3389/fmed.2024.1455207. PMID: 39301484; PMCID: PMC11410695.

3. Verstraeten V, Vossaert K, Van den Bosch T. Migration of intra-uterine devices. *Open Access J Contracept*. 2024;15:41-7. doi:10.2147/OAJC.S458156.
4. Al-Darwish AS, Saffaf MK, Bawareth R, AlHawassi S. Intraperitoneal migration of an intrauterine device: a case report. *J Surg Case Rep*. 2025;2025(7):rjaf579. doi:10.1093/jscr/rjaf579.
5. Myo MG, Nguyen BT. Intrauterine device complications and their management. *Curr Obstet Gynecol Rep*. 2023;12:88-95. doi:10.1007/s13669-023-00357-8.
6. Khan MEA, Kelly E, Haidaran AID. Perforation of sigmoid colon by a migrated intrauterine contraceptive device (IUCD), diagnosis and surgical management: a case report. *J Surg Case Rep*. 2025;2025(1):rjae803. doi:10.1093/jscr/rjae803.
7. Lu S, Yao X, Shi J, Huang J, Zhuang S, Ma J, Liu Y, Zhang W, Yu L, Zhu P, Zhu Q. Is it a “colon perforation”? A case report and review of the literature. *Front Med*. 2022;9:817029.
8. Badhe P, Varrrior A, Sultan M, Jain S. A barrier beyond all barriers – migrated intrauterine contraceptive device. *Eurorad*. 2024. [Case report; accessed 2025 Dec 28]. Available from: <https://www.eurorad.org/case/18092>
9. Gelaw KA, Atalay YA, Gebeyehu NA. Unintended pregnancy and contraceptive use among women in low- and middle-income countries: systematic review and meta-analysis. *Contracept Reprod Med*. 2023;8:55. doi:10.1186/s40834-023-00255-7.
10. United Nations Population Fund (UNFPA). Nearly half of all pregnancies are unintended — global crisis says new UNFPA report [Internet]. New York: UNFPA; 2022 Apr 4 [cited 2025 Dec 28]. Available from: <https://www.unfpa.org/press/nearly-half-all-pregnancies-are-unintended%E2%80%9494-global-crisis-says-new-unfpa-report>

