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Chronic pelvic pain and recurrent urinary tract infection in a forgotten intrauterine contraceptive device (IUCD) for 20 years: a case report on misplacement and migrated IUCD

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Abstract

Background: Intrauterine contraceptive device (IUCD) migration into the urinary bladder is a rare complication that may cause recurrent urinary tract infections, hematuria, abdominal pain, and bladder stone formation.

Case presentation: A 47-year-old woman presented to the urology clinic at Life Hospital in Kalar, Iraq, in September 2025 with chronic intermittent lower abdominal pain, hematuria, and recurrent UTIs. Her medical history was unremarkable, and she had a copper-T IUCD inserted in 2005. She reported mild post-insertion bleeding and later experienced an early miscarriage and a term home delivery. Examination revealed left iliac fossa tenderness and a positive urine culture for E. coli. Imaging showed a 22 mm intravesical stone attached to a migrated IUCD. CT confirmed one T-limb in the bladder forming a stone, with the other limb penetrating the abdominal wall. Failed cystoscopic and laparoscopic attempts led to open surgery. The IUCD and stone were successfully removed, and the bladder was repaired. Recovery was uneventful, with catheter removal following a clear cystogram.

Conclusion: Early recognition and prompt surgical removal of migrated IUCDs are crucial to prevent chronic infection, adhesion, and bladder wall damage.

Keywords: IUCD Migration, Urinary Bladder, Vesical Stone, Cystoscopy, Surgical Removal, Iraq

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Background

Migration of an intrauterine contraceptive device (IUCD) into the urinary bladder is a rare but important cause of vesicolithiasis (bladder-stone formation) [1]. In female patients, bladder stones often develop in the setting of foreign-body presence or urinary stasis, though intravesical migration of IUCDs is seldom encountered [2]. Although IUCDs are recognized for their safety and effectiveness, uterine perforation followed by extra-uterine migration remains a recognized albeit uncommon risk [3]. Factors contributing to perforation and migration include device type, insertion timing, insertion technique, and uterine/cervical anatomy; however, the precise mechanism through which IUCDs migrate into the bladder remains incompletely understood [4]. Post-insertion symptoms such as pelvic pain, abnormal vaginal bleeding, or missing device threads may signal early uterine wall injury or device malposition [3]. Once the device enters the bladder, clinical presentation ranges widely—from asymptomatic findings to recurrent urinary tract infections, hematuria, irritative voiding symptoms, or dyspareunia [5]. Given the potential for bladder stone formation and chronic infection in such cases, high clinical suspicion is warranted for patients with IUCDs and persistent urinary symptoms. Additionally, cases of unusual pathogens such as Serratia fonticola have been reported in community-acquired urinary tract infections, highlighting the importance of considering atypical causes in recurrent infections associated with foreign bodies [6].

Case presentation

A 47-year-old woman presented to the urology clinic at Life Hospital, Kalar City, Sulaymaniyah Province, northern Iraq, in September 2025 with a history of chronic intermittent lower abdominal pain, hematuria, and recurrent urinary tract infections (UTIs). Her past medical history was unremarkable for chronic illnesses. Surgical history revealed a repair of a cleft hard palate during early childhood. Obstetric history included four

pregnancies: three live births and one first-trimester abortion, all delivered vaginally without complications. She reported undergoing intrauterine contraceptive device (IUCD) placement (copper-T) in 2005. Mild vaginal bleeding occurred immediately after insertion, which her gynecologist reassured was normal post-procedural bleeding. Three years later, she conceived but experienced a spontaneous abortion in the first trimester. Her second successful pregnancy occurred seven years after IUCD insertion, culminating in a term vaginal delivery assisted by a midwife due to regional conflict during the ISIS war.On physical examination, the patient demonstrated tenderness in the lower abdomen, particularly in the left iliac fossa, without rebound tenderness or fever. Vaginal examination was normal. Laboratory investigations revealed active bacterial growth in the urine, with culture confirming Escherichia coli. Renal function tests and white blood cell count were within normal limits, while C-reactive protein levels were elevated, indicating an inflammatory response. Abdominal ultrasonography demonstrated normal abdominal organs but identified a 22 mm echogenic, non-mobile stone located at the left superior wall of the bladder, with associated bladder wall thickening. A native abdominal CT scan was performed for further evaluation, revealing a T-shaped structure consistent with a migrated IUCD. One limb of the device was embedded within the bladder, forming a calculus, while the other limb penetrated the bladder wall into the abdominal wall. Surrounding tissues exhibited dense fibrosis and adhesions, and the uterus appeared anteverted and empty (fig,1).

Figure 1: Abdominal ultrasound showing 22 mm echogenic bladder stone at the left upper wall with bladder wall thickening.

Given the diagnosis, the patient was counseled regarding management options, including cystoscopic, laparoscopic, and open surgical approaches. She was admitted for surgical intervention under general anesthesia. Initially, a 22 Fr rigid cystoscope was introduced in the lithotomy position, revealing an inflamed bladder mucosa with debris and a stone adherent to the anterior wall via the IUCD limb. Multiple attempts to grasp and remove the device cystoscopically failed. Subsequent laparoscopic attempts using a three-port technique to release the extravesical portion were also unsuccessful due to extensive adhesions and tissue oozing, which limited visibility and safe dissection.

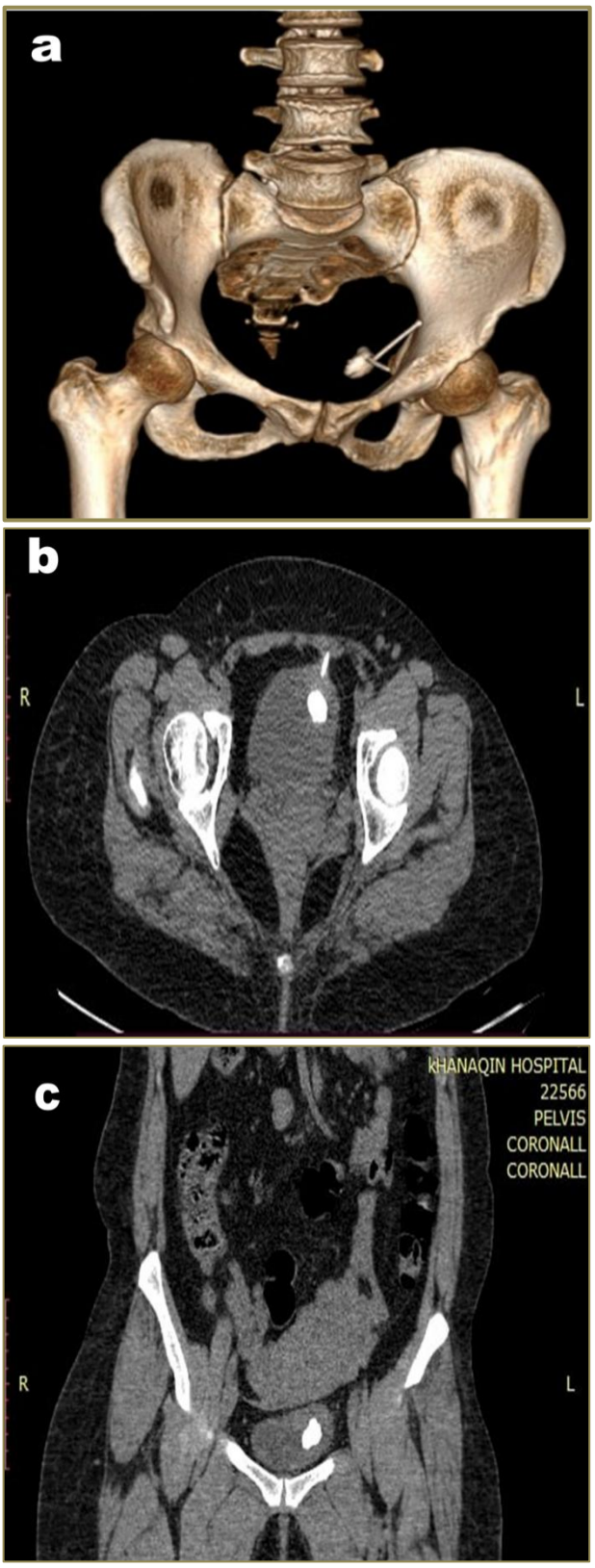

Figure 2 (a, b, c): Native abdominal CT scan showing migrated IUCD with intravesical stone and extravesical limb penetrating abdominal wall

The decision was made to convert to an open approach via a 5 cm Pfannenstiel incision. Dissection through the rectus sheath and rectus muscle, followed by entry into the retropubic space, allowed identification and mobilization of the bladder, which was inflated with saline for better visualization. The bladder was opened, revealing friable mucosa secondary to chronic infection.

The stone and IUCD were carefully removed, as they were densely adherent to the bladder and anterior pelvic wall.

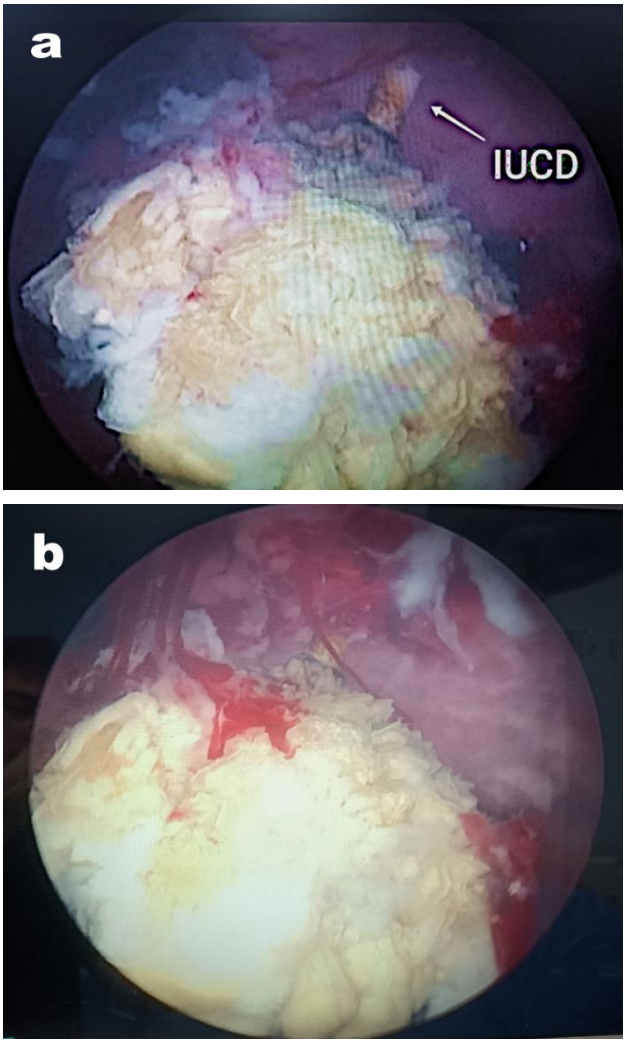

Figure 3 (a, b): Cystoscopic view of IUCD with vesical stone

The bladder was repaired in two layers, and a Foley catheter was left in place for two weeks. Postoperative cystography confirmed the absence of leakage, and the catheter was subsequently removed. The patient recovered without complications.

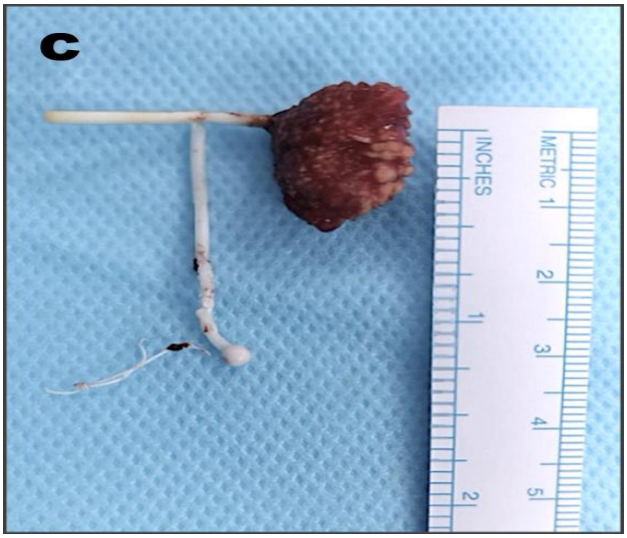

Figure 3 (c): A crossing vessel within a bundle of cremasteric tissue

Discussion

Intrauterine contraceptive devices (IUCDs) remain a widely used, safe, and reversible contraceptive method. However, complications such as menorrhagia, irregular bleeding, pelvic inflammatory disease, ectopic pregnancy, and silent uterine perforation can occur [7,8]. Migration of IUCDs into the urinary bladder is a rare but clinically significant complication. Patients with intravesical migration often present with urinary tract infections (UTIs), hematuria, lower abdominal pain, or irritative voiding symptoms [9,10]. In our patient, chronic intermittent lower abdominal pain, hematuria, and recurrent UTIs were the main presenting features. All IUCDs that migrate into the bladder should be removed regardless of symptom presence to prevent chronic infection, calculus formation, and bladder wall injury [11]. Cystoscopic removal is preferred due to low morbidity and efficacy via the natural urethral route [12]. In this case, cystoscopic extraction failed due to severe adhesions and tissue oozing. Laparoscopic removal is an alternative minimally invasive approach; however, it was also unsuccessful due to extensive pelvic adhesions [13]. Open surgery via a Pfannenstiel incision was ultimately required for safe removal. Complex cases of IUCD migration require a multidisciplinary approach, involving urologists, gynecologists, and general surgeons, and preoperative planning based on radiological and endoscopic findings is essential for optimal outcomes [9,14]. Similar principles are recommended for other complex urological procedures, such as flexible ureterorenoscopy in ectopic or malrotated kidneys [15], and managing penetrating or complicated genitourinary injuries [16].

Conclusion

This case highlights the need for vigilance regarding IUCD migration in women presenting with recurrent or persistent urinary symptoms. Early imaging with ultrasonography and CT scan is recommended for timely diagnosis. Cystoscopic removal remains the preferred method; however, open surgery may be necessary in complex scenarios. Documentation of IUCD type, insertion date, and removal schedule is essential. Multidisciplinary collaboration improves patient outcomes and reduces procedural complications. Regular imaging should be performed to confirm correct IUCD positioning. Urologists and gynecologists should consider IUCD migration in women with recurrent UTIs or irritative urinary symptoms. Patient history should always include previous IUCD use when assessing pelvic or abdominal pain. Multidisciplinary management involving urologists, gynecologists, and surgeons is essential for complex IUCD migrations. Patients should be educated on potential IUCD complications and importance of follow-up. Lessons from other urological procedures, such as flexible ureterorenoscopy or management of penetrating urological injuries can inform safe operative planning. Health records should include IUCD type, insertion, and removal dates for future reference.

Abbreviation

IUCD: Intrauterine Contraceptive Device; UTI: Urinary Tract Infection; CT: Computerized Tomography

Declaration

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Availability of data and materials
Data will be available by emailing aousjaleel@yahoo.com

Authors' contributions
Aous Abed Al-Jaleel Khaleel (AAAK) is the lead author who reported the case, compiled the first draft and approved the final version of it. Waleed Khalid Mohammed (WKM) contributed in writing the case report draft. All authors read and approved the final manuscript.

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Ethics approval and consent to participate
We conducted the research following the declaration of Helsinki. The ethical approval was obtained from the "Life Hospital" in Kalar, Diyala, Iraq. Patient verbal and signed consent form was obtained.

Consent for publication
Not applicable

Competing interest
The authors declare that they have no competing interests.

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References
1. Liu G, Li F, Ao M, et al. Intrauterine devices migrated into the bladder: two case reports and literature review. BMC Women's Health. 2021; 21:301. doi:10.1186/s12905-021-01443-w.
2. Nigusie T, Solomon F, Degefe M, Almaw S, Tadele A. Intrauterine contraceptive device (IUCD) migration into the bladder with bladder stone formation: case report. Urol Case Rep. 2024 Sep 1;56:102770. doi:10.1016/j.eucr.2024.102770.
3. Li Q, Qi D, Bi T, Guo X, Chen H. Case report: uterine perforation caused by migration of intrauterine devices. Frontiers in Medicine. 2024;11:1455207. doi:10.3389/fmed.2024.1455207.
4. Zorilă GL, Căpitănescu RG, Drăgușin RC, et al. Uterine perforation as a complication of the intrauterine procedures causing omentum incarceration: a review. Diagnostics. 2023;13(2):331. doi:10.3390/diagnostics13020331.
5. Nigusie T, Solomon F, Degefe M, Almaw S, Tadele A. Intrauterine contraceptive device (IUCD) migration into the bladder with bladder stone formation: Case report. Urol Case Rep. 2024 Jun 19;56:102770. doi: 10.1016/j.eucr.2024.102770.
6. Katib AA, Shaikhomar O, Dajam M, Alqurashi L. Serratia fonticola microbe presented as a community-acquired urinary tract infection (UTI): a case report. J Ideas Health. 2020 Oct 27;3(3):226–7. doi:10.47108/jidhealth.Vol3.Iss3.68.
7. Liu W, Zhang Y, Qian L, Zhang Z. Partial intrauterine device migration into the abdominal cavity with bladder penetration and stone formation: A case report and multidisciplinary management. Medicine 2025; 104:41(e45184). http://dx.doi.org/10.1097/MD.0000000000045184
8. Malki EG, Sbeih D, Bael P, Alsarabta H, Alzawahra A. The rolling stone: migration of an intrauterine device leading to bladder stone formation nine years after insertion: a case report. BMC Urol. 2025 Apr 17;25(1):93. doi: 10.1186/s12894-025-01780-0.
9. Askarova K, Mamadjanova S, Ayubov B. When contraception goes rogue: Bladder migration of an intrauterine device presenting as refractory cystitis. Urol Case Rep. 2025 Aug 25;63:103177. doi: 10.1016/j.eucr.2025.103177.
10. Christodoulides AP, Karaolides T. Intravesical Migration of an Intrauterine Device (IUD)-Case Report. Urology. 2020 May;139:14-17. doi: 10.1016/j.urology.2020.02.009.
11. Bakri S, Azis A, Nusraya A, Putra MZDA, Natsir AS, Pattimura MIF. Intrauterine device (IUD) migration into the bladder with stone formation: A case report. Urol Case Rep. 2023 May 15;49:102439. doi: 10.1016/j.eucr.2023.102439.
12. Torres Zapata LE, Maldonado Calderón JL, Aguilar Urrea LF, Garcia Bailón AM, Molgado Garza VM. Minimally Invasive Approach to Intrauterine Device Migration Into the Bladder Using Holmium Laser. Cureus. 2025 Jul 6;17(7):e87377. doi: 10.7759/cureus.87377.
13. Fadli MY, Ferdian V. Corpus alienum in urinary bladder due to Intrauterine Device (IUD) translocation: a case report. Bali Medical Journal.2024;13(2): 738-740. DOI: 10.15562/bmj.v13i2.5136.
14. Liu G, Li F, Ao M, Huang G. Intrauterine devices migrated into the bladder: two case reports and literature review. BMC Womens Health. 2021 Aug 16;21(1):301. doi: 10.1186/s12905-021-01443-w.
15. Khaleel A. Flexible ureterorenoscopy for renal stones in ectopic malrotated pelvic kidneys: a case report on safety and effectiveness. J Ideas Health. 2025;8(1):1232–1235. doi:10.47108/jidhealth.Vol8.Iss1.396.
16. Katib A, Filfilan A, Dakkak B, Bugis B. A Worker falls with impalement by a steel bar that results in a penetrating scrotal injury: a case report. J Ideas Health. 2025;8(1):1262–1264. doi:10.47108/jidhealth.Vol8.Iss1.404.