

Question 2

How common is IUCD expulsion?

Question 3

How did the patient's IUCD get into her bladder?

Question 4

What are the issues with an intravesical IUCD?

Answer 1

Expulsion, perforation or pregnancy are possible reasons for IUCD threads not being visible in the vagina, although, a common cause may just be the retraction of the threads into the uterus or cervical canal. Pregnancy should first be excluded – conducting a urine pregnancy test is the quickest way to do so. If the woman is not pregnant, advise an alternative method of contraception and arrange for a pelvic ultrasound scan. If the ultrasound confirms that the IUCD is in the uterus, the woman will be receiving the full contraceptive effect and the IUCD may be left in situ until the time for removal (ie using a thread retriever, long forceps, hysteroscopy). If the ultrasound confirms that the IUCD is not in the uterus, request abdominal and pelvic X-rays to locate the IUCD. If the entire abdominal cavity and pelvis are visualised with no IUCD located, this confirms expulsion and need for IUCD re-insertion or an alternative method of contraception. If an IUCD is seen on the abdominal or pelvic X-ray, this may indicate perforation and the patient would need elective laparoscopic removal. A helpful flowchart is available at the Faculty of Sexual and Reproductive Healthcare website.¹

Answer 2

The IUCD is a safe and cost-effective, long-acting reversible contraceptive (LARC),² and can reduce rates of unintended pregnancy.³ However, spontaneous expulsion of IUCDs can occur in 3–5% of women, usually within the first three months of insertion.² Factors that may increase this risk of expulsion include being an adolescent, previous

expulsion, obesity, heavy menstrual bleeding or post-abortion placement.²

Answer 3

Mirena has a soft and flexible plastic frame that is very difficult, if not impossible, to push through the vaginal or uterine cervix muscle wall, and then through the bladder wall. Uterine perforation usually occurs at insertion, following the tract made by the metal sound and subsequent intravesical migration.⁴ We present this rare case of an IUCD in the bladder due to self-insertion through the urethra, not because of uterine perforation with intravesical migration. To our knowledge, this is the first reported case of an IUCD that was self-inserted into the bladder. When reviewed, the patient expressed surprise that the IUCD could have been pushed into her urethra. She thought that the opening to aim for would have been obvious to her friend, and that her friend could not have missed 'the big lump' (ie cervix). This case highlights a potential knowledge gap for some women in their understanding of perineal anatomy.

Answer 4

An intravesical IUCD may not necessarily be symptomatic. In our case report, the patient was asymptomatic for six months. It is important that an intravesical IUCD be removed because of the reported complication of secondary calculus formation.⁵ This can present with cystitis, haematuria and pelvic pain.⁶ The patient had two non-viable pregnancies while waiting for the removal of her intravesical IUCD, demonstrating the lack of contraceptive effect when the IUCD was in the bladder. This emphasises the lack of local effects of an IUCD if it is not in direct contact with the endometrium, and the importance of arranging an alternative method of contraception until the IUCD is replaced.

Key points

- If IUCD strings are not present, it is imperative to confirm the location of the IUCD.
- Arrange for an alternative method of

contraception to be used until the IUCD is confirmed to be in the correct place.

- An intravesical IUCD in the bladder provides no contraceptive effect.
- While there are reports of intravesical IUCDs due to uterine perforation during insertion, a self-inserted intravesical IUCD is also possible.

Authors

Jason J Ong PhD, MMed, MBBS, FRACGP, Postdoctoral Research Fellow, Faculty of Medicine, Nursing and Health Sciences, Central Clinical School, Monash University, Vic; Melbourne Sexual Health Centre, The Alfred, Carlton, Vic. jong@mshc.org.au

Helen Henzell MBBS, Sexual Health Physician, Melbourne Sexual Health Centre, The Alfred, Carlton, Vic

Lisa Doyle MBBS, General Practice Registrar, Melbourne Sexual Health Centre, The Alfred, Carlton, Vic

Christopher K Fairley PhD, MBBS, Director, Melbourne Sexual Health Centre, Faculty of Medicine, Nursing and Health Sciences, Central Clinical School, Monash University, Vic; Melbourne Sexual Health Centre, The Alfred, Carlton, Vic

Competing interests: None.

Provenance and peer review: Not commissioned, externally peer reviewed.

Acknowledgement

We thank the patient who has provided written consent to publish her clinical history.

Funding

Jason J Ong (number 1104781) is supported by an Australian National Health and Medical Research Council (NHMRC) Early Career Fellowship.

References

1. Faculty of Sexual and Reproductive Healthcare. Intrauterine contraception. London: Faculty of Sexual and Reproductive Healthcare, 2015. Available at www.fsrh.org/standards-and-guidance/documents/ceuguidanceintrauterinecontraception [Accessed 23 May 2017].
2. Deans EI, Grimes DA. Intrauterine devices for adolescents: A systematic review. *Contraception* 2009;79(6):418–23.
3. McNicholas C, Madden T, Secura G, Peipert JF. The contraceptive CHOICE project round up: What we did and what we learned. *Clin Obstet Gynecol* 2014;57(4):635–43.
4. Demirci D, Ekmekçioğlu O, Demirtaş A, Gülmez I. Big bladder stones around an intravesical migrated intrauterine device. *Int Urol Nephrol* 2003;35(4):495–96.
5. Rajaie Esfahani M, Abdar A. Unusual migration of intrauterine device into bladder and calculus formation. *Urol J* 2007;4(1):49–51.
6. Gillis E, Chhiv N, Kang S, Sayegh R, Lotfipour S. Case of urethral foreign body: IUD Perforation of the bladder with calculus formation. *Cal J Emerg Med* 2006;7(3):47–53.