# Intrauterine Contraceptive Device (Iucd) Migration to The Urinary Bladder A Case Report

## Abstract

NO Chukwujama\* F Anolue\*\*

T Oguike\*

J Azike\*

Departments of Surgery\*
Obstetrics /Gynaecology\*\*
Imo State University Teaching
Hospital
Orlu, Imo State.

All Correspondence: Dr NO Chukwujama Department of Surgery Imo State University Teaching Hospital Orlu, Imo State, Nigeria

E-mail:nzubechuks@yahoo.com

We highlight a unique case of an intravesical intrauterine contraceptive device (IUCD) that was discovered incidentally in the course of evaluation for secondary infertility in a woman who denied knowledge of insertion of the device. The IUCD was easily retrieved at cystoscopy as a day case procedure.

**Key Words:** Intrauterine Contraceptive Device, Migration, Urinary bladder.

# **Case Report**

Mrs. NGA is a 34yr old Para 3+0 1 alive. She presented with secondary infertility and oligomenorrhoea of three years duration. Her first pregnancy was thirteen years before presentation and ended up in a Caesarian section following intrapartum eclampsia. She had a male baby who is alive and well. Her second pregnancy was twelve years before presentation. She had a Caesarian section for antepartum haemorrhage and breech presentation. The baby died shortly after delivery. Her third pregnancy was three years before presentation. She labored in a maternity home with a breech presentation and was finally referred to a tertiary centre following the arrest of an after coming head of the breech. She had an abdominal delivery of a dead fetus. The detail of the operative findings and subsequent events could not be ascertained. She had a long stay at the hospital. She continued to have periods of oligo-amenorrhoea for which she visited various health facilities for care. She however denied knowledge of use of any form of contraceptive including an intrauterine device. Her general examination was satisfactory.

Abdominal examination revealed a midline subumbilical scar. Vaginal examination revealed a diminutive and stenotic cervix. No IUCD thread was seen

Pelvic ultrasonography showed a normal sized anteverted uterus of normal echotexture but with a right ovarian cyst measuring 7.5cm x 4.8cm.

Hysterosalpingography was abandoned when a Lippes loop IUCD was incidentally demonstrated in the pelvic region on the preliminary film.



An attempt to retrieve the IUCD at hysteroscopy failed as the loop could not be visualized. A repeat ultrasonography localized the IUCD in the urinary bladder necessitating a urological consult. Urological review established a long standing history of frequency, urgency and occasional haematuria.

She was worked up for and had urethrocystoscopy under caudal block. The findings included a normal urethra and bladder mucosa. The two ureteric orifices were visualized and emitting clear urine. A lippes loop IUCD covered in extensive encrustation was found embedded in the anterior bladder wall. The lippes loop was grasped with a size 5mm endoscopic grasper introduced through the working channel of a size 16F Cystoscope. The Cystoscope with the grasped IUCD were withdrawn in one piece through the urethra

Post operative period was uneventful and patient was subsequently discharged to the gynaecological clinic for continued care.

#### **Discussion**

Intrauterine contraceptive device (IUCD) is an age long contraceptive method that has found common usage in the developing world. This is mostly due to its high efficacy, low risk, low cost, and very high acceptability among women<sup>1</sup>. However it is not without its own complications. These include uterine perforation and migration to neighboring sites, hemorrhage, pelvic pain, septic abortions and ectopic pregnancy<sup>2,3</sup>

Migration constitutes the most dangerous complication of IUCD. It occurs in 1-3 per 1000 insertions<sup>1</sup>. Various sites of migration have been reported and include the peritoneum, omentum, appendix, colon, ovary and urinary bladder<sup>4-6</sup>

Migration of IUCD to the urinary bladder appears to be a low frequency complication<sup>1</sup>. It tends to present with inability to feel the thread, urinary frequency, urgency, dysuria, hematuria, urinary tract infection, calculi, and uterovesical fistula 7-11. Curiously, the index patient denied any knowledge of an IUCD having been inserted into her at any time. She nonetheless admitted to irritative lower urinary tract symptoms and haematuria. Possibilities abound. She might have lost memory of events that happened during a turbulent post operative period. Secondly, an overzealous but negligent care giver may have acted in the patient's 'best interest' without the requisite informed consent either following the repair of a ruptured uterus or in the course of treatment of Ashermann's syndrome. Olaore et al had reported a case of intravesical IUCD following

insertion for the treatment of Asherman's syndrome<sup>12</sup>. The risk of uterine perforation from IUCD insertion is known to increase during the pueperium or out of the menstruation and predisposes to IUCD migration<sup>1</sup>. In addition, the previous uterine scar must have been a major predisposing factor.

Diagnostic methods include plain abdominal radiograph, abdomino-pelivic ultrasound, abdominal CT scan and cystoscopy<sup>1, 13</sup>. The IUCD in our patient was discovered incidentally at hysteroslpingography done in the course of investigation for secondary infertility. The exact location of the IUCD was confirmed at abdomino-pelvic ultrasound and cystoscopy.

Retrieval of an intravesical IUCD can usually be accomplished cystoscopically<sup>13,14</sup>. This is because of relatively easy access into the bladder via the short female urethra<sup>13,14</sup>. On rare occasions, an open surgical technique may be required for the removal of a large bladder stone that may have formed around the device<sup>14,15</sup>. We were able to safely extract this patient's IUCD endoscopically as a day case procedure.

#### Conclusion

The urinary bladder is a potential site for migration of intrauterine contraceptive device. The peculiar nature of the index case lay in the fact that the patient denied any knowledge of its insertion while presenting with secondary infertility. Endoscopic retrieval is both a simple and safe technique that can be accomplished as a day case procedure.

## References

- 1. Ebel L, Foneron A, Troncoso L, Canoles R, Hornig A, Corti D. Intrauterine device migration to the bladder: Report of four cases. Actas Urol Esp. 2008; 32(5): 530-532
- Caliskan E, Ozturk N, Dilbaz BO, Dilbaz S. Analysis of risk factors associated with uterine perforation by intrauterine devices. Europ J Contracept Reprod Health Care 2003;8(3):150-155.
- 3. Zakin D, Stern WZ, Rosenblatt R. Complete and partial uterine perforation and embedding following insertion of intrauterine devices. I: Classification, complications, mechanism, incidence and missing string. Obstet Gynecol Surv. 1981; 36(7):335-353.
- 4. Huseyin Ozdemir, Kamran Mahmutyazýcýoglu, H. Alper Tanrýverdi, Sadi Gundogdu, Ahmet Savranlar, Tulay Ozer. Migration of an Intrauterine ContraceptiveDevice to the Ovary.

- Journal of Clinical Ultrasound 2004; 13(2): 91-94
- Nceboz US, Ozcakir HT, Uyar Y, Caglar H. Migration of an intrauterine contraceptive device to the sigmoid colon: a case report. Eur J Contracept Reprod Health Care. 2003; 8(4):229-232.
- 6. Disu S, Boret A. Asymptomatic ileal perforation of an intrauterine device. Arch Gynecol Obstet. 2004; 269(3):230-231.
- 7. Pascual Regueiro D, García de Jalón Martínez A, Mallén Mateo E, Sancho Serrano C, Gonzalvo Ibarra A, Rioja Sanz LA. Intravesical foreign bodies. Review of the literature. Actas Urol Esp. 2003; 27(4):265-273.
- 8. Yalcin V, Demirkesen O, Alici B, Onol B, Solok V. An unusual presentation of a foreign body in the urinary bladder: a migrant intrauterine device. Urol Int. 1998; 61(4):240-242.
- 9. Ikechebelu J, Mbamara S. Laparoscopic Retrieval of Perforated Intrauterine Device. Nig J Clin. Pract. 2008; 11(4):394-395.

- 10. Essiet A, Etuk SJ, Bassey DE. Migrant IUD with stone formation in the urinary bladder: Report of a case and review of literature. Nig. J. Surg. 2004; 10(1): 21-23.
- 11. Nwofor AM, Ikechebelu JI. Uterovesical fistula and bladder stones following bladder penetration by a perforating intrauterine contraceptive device. J Obstet Gynaecol. 2003; 23(6): 683-684.
- 12.Olaore JA, Shittu OB, Adewole IF. Intravesical Lippes loop following insertion for the treatment of Asherman's syndrome: a case report. Afr J Med Sci 1999; 28: 207-207.
- 13. Wachira K, Wipaporn P. Foreign bodies in the female urinary bladder: 20 year experience in Ramathibodi hospital. Asian Journal of Surgery 2008; 31(3): 130-133
- 14. Nabi G, Hemal Ak, Khaitan A. Endoscopic management of an unusuall foreign body in the urinary bladder leading to intractable symptoms. Int Urol Nephrol 2001: 33: 351-2.
- 15. Tarek AE, Ahmed AS, Mohamed SE, Lotfy SS, Mostafa AS. Bladder stone: a complication of intravesical migration of lippes loop. Scand J Urol Nephrol 1993; 27: 279-280.