Case report: Intravesical Migration Of Intrauterine Contraceptive Device In A Nigerian Woman, A Case Report.

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ABSTRACT
Intravesical migration is a rare complication of intrauterine contraceptive device (IUCD) and may present with chronic pelvic pain, vaginal discharge, dysuria, haematuria and recurrent urinary tract infections. This is a rare case of intravesical migration of IUCD that presented with chronic pelvic pain. This was diagnosed and localised by ultrasonography.

Key words: Intravesical, Intrauterine, Contraceptive, Ultrasonography.

Case presentation
A 52-year-old Nigerian woman, para 4+2 referred to the Radiology Department for pelvic ultrasound on account of recurrent pelvic pain for 15 years which recently became aggravated 3 weeks prior to presentation. There was no history of dysuria, strangury, frequency of micturition, urgency or nocturia. She had IUCD inserted after the third confinement but got pregnant 4 years post insertion. No history of IUCD removal, an attempt at removal after she noticed she was pregnant proved abortive because the IUCD tag was not intact. She however had an uneventful pregnancy and was delivered per vaginum. Transabdominal/ transvaginal ultrasound revealed a normal empty uterus with intact endometrial plate. A linear echogenic structure casting a posterior acoustic shadow was seen within the urine filled bladder just adjacent to the bladder wall.(figure 1) The urine was otherwise echolucent and the urinary bladder wall was within normal limits. A plain abdominal X-ray done revealed the IUCD in the pelvis. (figure 2). An assessment of intravesical migration of IUCD was made. The device was removed by an open surgical technique. It was however found to be partly embedded in the cervical wall and partly within the urinary bladder.

Discussion
IUCDs are very popular among the women in sub-Saharan Africa, especially in Nigeria, as it
is coitus independent, cost-effective, and long acting[1] Reports from different family planning units in Nigeria had shown the prevalence rates of 34.5–66% [2].

**Figure 1:** Transabdominal USS image showing the IUD (white arrow) within the urinary bladder.

**Figure 2:** Plain radiograph showing the IUD (white arrow) in the pelvis.

This method is however not without complications. These complications include device failure to prevent contraception, painful abdominal cramps, expulsion, complete or partial uterine perforation, device migration, menstrual disturbances, increased risk of ectopic pregnancy, and pelvic inflammatory disease. Uterine perforation is an uncommon but serious complication. The mechanism of the perforation is unknown, but some underlying risk factors have been identified. These include congenital anomalies, infections, history of abortion and hypoestrogenism, which can cause thinning of the uterine wall in the first 6 months of postpartum lactation period. Perforation occurs in one of every 1,000 cases [3]. Migration of IUCDs into the adjacent organs is not common although some cases have been reported in the literature. In a case report and literature review, Kassab and Audra et al reported migration of the IUD to the omentum, rectosigmoid, peritoneum, bladder, appendix, small intestine, adnexal and iliac vein. [4] Migration into the urinary bladder is rare. IUDs can float freely within the bladder lumen or can be embedded in the bladder wall. Patients may be asymptomatic for a long time, or may present with chronic pelvic pain as in the case of this patient. Other presentations are vaginal discharge, dysuria, haematuria, recurrent urinary tract infections and irritation during voiding. Urinary bladder calculi has also been reported in some cases of intravesical migration of IUDs[5].

The commonest type if IUD in Nigeria is TCu 380A. The copper wire is radiopaque on plain radiography and hyperechoic on US. The coexistence of pregnancy and missing IUDs, which is sometimes the case, should be evaluated first by transabdominal or transvaginal US, especially in patients with amenorrhoea. In the absence of cystosis, the best and least expensive method for detecting a misplaced IUD is plain abdominopelvic
radiography,[6] however, this can only indicate the presence of IUCD in the pelvis but cannot localise it. Ultrasonography however plays an important role in localizing a missing IUCD located within the pelvis as in this case. Although, CT can be required for precise localisation and to detect accompanying complications.

Removal of an intravesical IUCD is usually done cystoscopically because of relatively easy access into the bladder via the short female urethra, although 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 [7], and also in cases where the IUCD is partly within the bladder lumen and partly within the bladder wall and adjacent structures as in this patient.

Conclusion
Although, Intravesical migration is a rare complication of IUCD. Its possibility must be entertained in cases of missing IUCD. In cases of missing IUCD with the absence of cyesis a plain abdominopelvic radiograph should be used to exclude the extrusion of the IUCD followed by ultrasound scan for localization.

Competing interests
The authors declare no conflict of interest.

Authors' contributions
Olayemi Atinuke Alagbe and oluwatoyin Ige Oyekale drafted this article
Olayemi Atinuke Alagbe, oluwatoyin Ige Oyekale and Akeem Babatunde performed the ultrasound scan and made the diagnosis.
Oluwatoyin Nike Akinoyoade got the patient's history and followed up the patient.

References
1 Nwali Matthew Igwe. Intrauterine contraceptive device use in Abakaliki, southeast Nigeria: A 5-year review. Tropical journal of medical research 2016;19(2)138-143