



A WANDERING IUCD- A RARE CASE

Medicine

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ABSTRACT

Extrauterine migration of IUCD is a rare entity and is often one of the reasons for refusal of IUCD insertion. Uterine perforation by IUCD is although rare but one of the serious complications. Much rarer is the migration of IUCD inside the bladder. Women with intrauterine IUCD should be educated about the follow-up. Here we have reported a similar case of 46 years old female, P4L4A1 who presented with complaints of recurrent UTI since past 1 year. She had history of post-partum IUCD insertion 10 years back and after 1 year of insertion she did not feel thread vaginally. She got herself evaluated at a local facility where X-ray abdomen was done and was referred to LHMC for misplaced IUCD. After evaluation, IUCD was localized inside the bladder cavity which was managed successfully by cystoscopy.

KEYWORDS

Migrated IUCD, intravesical IUCD, cystoscopy, bladder stones, Uterine perforation

INTRODUCTION

According to reference manual for IUCD services 2018, IUCD is the most commonly used long acting reversible contraceptive (LARC) with a prevalence rate of 13.7%. Risks associated with IUCD insertion include infection, displacement, embedment, uterine perforation and ultimately leading to extrauterine migration. Here we have reported a rare case of asymptomatic misplaced intravesical IUCD which was previously thought to have spontaneously expelled.

CASE REPORT

A 46 years post-menopausal female, presented to the gynaecology OPD with complaints of recurrent urinary tract infections and pain lower abdomen for the last 1 year which was evaluated and prescribed multiple courses of antibiotics. She had 4 full term normal vaginal deliveries at primary health center and CuT 380A was inserted 10 years back just after the delivery of last baby. She felt thread for the first 1 year after which no thread was felt. She consulted a local practitioner where she was counselled that the IUCD had expelled spontaneously. Patient conceived spontaneously 3 years later but had bleeding per vaginum in the first trimester itself. She was evaluated at a private facility where dilatation and evacuation was performed as a result of incomplete abortion with no comment on IUCD.

During the evaluation of UTI, IUCD was detected inside the bladder for which she was referred to a tertiary care center. A 2D-transvaginal ultrasound showed a focal lesion along the posterior aspect of the urinary bladder with empty endometrial cavity. A 3D-Ultrasound was also performed at our center as shown in figure I which reported IUCD inside urinary bladder with 4.2 cm vertical limb and 3.3 cm horizontal limb. Mild granulation around IUCD was seen without any adhesion to the posterior bladder wall. No bladder wall thickening was observed. A urology consult was sought and a CECT-pelvis was advised. Sagittal section of CT-scan showed a linear hyperdense content within the urinary bladder? IUCD in view of relevant history. A management plan of cystoscopic removal of intravesical IUCD was made. During cystoscopy, a freely mobile IUCD was visualised inside the urinary bladder with encrustations over its horizontal limbs as shown in figure II. Bladder mucosa was mildly inflamed. Rest of the cystoscopic findings were normal. With the help of grasper, IUCD was easily removed through urethra without any hindrance. Hysteroscopy was done to look out for any perforation site or fistulous tract. A small perforation of 0.5cm x 0.5cm was identified 2cm below fundus on right side where omentum was seen stuck. Laproscopically, omentum was pulled out. Bleeding was present through the perforation site from the uterus. It was sealed with surgical snare and hemostasis was achieved.

Bladder was seen to be intact without any obvious fistulous tract. Recovery of the patient went well and was discharged on third day of operation.

DISCUSSION

Richter in 1909 was the first one to introduce IUCDs for contraception which was further developed into flexible plastic IUCDs. Due to its easy availability, cost-effectiveness, safety, simplicity, reversibility, IUCDs are widely used. Dysmenorrhoea, hypermenorrhoea, abnormal bleeding, chronic pelvic pain are common complications associated with IUCDs.

Almost 0.1-0.9% of the IUCDs migrate from its normal site whereas every 0.5-3 out of 1000 insertions leads to uterine perforations (1). Immediate post insertion traumatic perforation and secondary perforation due to gradual erosion through myometrium are the two common mechanisms of uterine perforation due to IUCD. Inappropriate timing of IUCD insertion, faulty technique, inexperienced provider, deformed anatomy of cervix or uterus are some common causes of primary uterine perforation during IUCD insertion. Due to the thin and soft uterine wall, risk of migration is the greatest during puerperium and lactation. Secondary perforation usually occurs due to chronic inflammation causing erosion of the uterine wall, more common in case of previous CS scar and subsequent curettage. Previously insertion instruments were rigid which increased the risk of uterine perforation. When the device penetrates partly through the uterine layers, it is described as partial perforation.

Whereas when the IUCDs passes through all the layers of uterine layers- endometrium, myometrium and serosa, it is termed as complete perforation. Sometimes, a partial perforation may convert into complete perforation due to the uterine contractions which pushes the IUCDs through the myometrium. Zatzkin et al classified uterine perforation due IUCD into 4 types (2). Type A- when IUCD located in both uterine cavity and myometrium; Type B- IUCD present entirely in myometrium; Type C- IUCD present in myometrium and peritoneal cavity; Type D- IUCD present in all three compartments.

In anteverted uterus, pouch of Douglas and in retroverted uterus, vesicouterine pouch are the typical sites for perforation. After lying freely in the peritoneal cavity for a time, IUCDs ultimately attaches to rarer sites like omentum, right iliac fossa, adnexa, uterosacral ligament, broad ligament, fallopian tube, ovary, colon, bladder, appendix, stomach, liver. Rarely, IUCD may migrate to rectum which can be removed by proctoscopy.

The risk associated with ectopic placement of an IUCD in the bladder and stone formation is approximately 1% to 3% (3). If urinary tract is perforated, patients may present with symptoms like dysuria, recurrent urinary tract infections, hematuria, frequency, suprapubic pain, bladder stones. Cases have been reported in the literature with menouria due to vesicouterine fistula, colovesical fistula, hydronephrosis due to retroperitoneal location of IUCDs. In our case, the IUCD was placed freely inside the bladder.

Missing IUCD threads is usually the sentinel sign for initiating investigation. Transvaginal ultrasound is more precise than transabdominal ultrasound for localization of a perforated IUCDs. Although one needs to be careful when looking for LNG-IUS as later is visualized only as an acoustic shadow on ultrasound. However, ultrasound can easily miss IUCDs migrated to the upper abdomen for which CT-scans can be more helpful.

Removal of IUCD in the bladder depends on its position, shape, patient conditions, and hospital equipment. Different techniques for the removal if intravesical IUCDs have been documented in the literature. Kilholma et. al. reported a case back in the times when minimal invasive surgeries were not available where they removed a partially perforating IUCD in the bladder by pulling the string of the IUCD through the vagina (4). Most of the cases in the literature have documented cystoscopy as the most common method for removal of IUCD completely or almost completely perforating the bladder. Laparoscopy or Laparoscopy with cystoscopy can be performed if IUCD is intraperitoneal. We managed the case by cystoscopic IUCD removal followed by laparoscopy. Although, if these methods are difficult to perform, open surgery should be performed.

CONCLUSION

To conclude, patients with IUCD should be counselled to check the device regularly. Expertise in IUCD insertion and skilled provider plays a pivot role in minimising the complications. Healthcare workers should be educated and trained about technique of IUCD insertion, its complications, its diagnosis and management. Missing IUCD string should always be evaluated with the help of X-ray, USG and CT-scan. If a woman with IUCD complains of lower urinary tract symptoms, bladder perforation by IUCD should always be suspected and managed by a multidisciplinary approach.

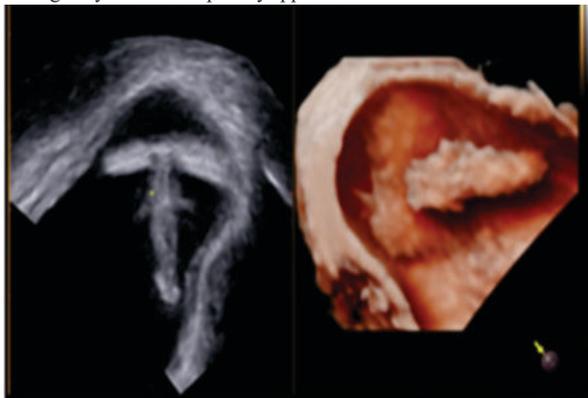


Figure I -3D- USG of IUCD inside bladder



Figure II- Cystoscopic picture of intravesical IUCD

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