

INTRODUCTION

- **Intrauterine devices, (IUDs)** are the widely used reversible and reliable birth control method used world wide.
- Currently, there are two types of IUDs available: Copper and hormonal (Mirena). Both devices are T-shaped plastic embedded with barium sulphate to help in imaging. Strings are attached to the tips of the devices to facilitate identification of location and help removal.
- Mirena, the hormone device releases a form of progestin called Levonorgestrel (LNG) that in addition to effective contraception, also reduces menstrual bleed and cramping, adding to its popularity. Mirena remains active for 5 years once inserted.

Intrauterine device (IUD) migration outside uterine cavity is uncommon and its migration in bladder is a very rare complication and unusual presentation.

CASE REPORT

A 51 years lady was seen in our urogynaecology clinic with an over two years history of recurrent urinary tract infections, dysuria and occasional haematuria with missing IUCD threads. She had more than eight recurrent urinary infections in a year. She was para two, using Mirena Coil as contraceptive for past 20 years being changed every five years. She had undergone a flexible cystoscopy in the past, in one stop haematuria clinic under urologist due to blood in urine, which revealed no abnormality and was discharged on Nitrofurantoin 50 mg. She had high BMI of 56 but no features of incontinence or urogenital prolapse. Her pelvic examination showed evidence of oestrogen deficiency and was given Estriol vaginal cream 0.1% to use every night. She was booked under urogynaecology clinic for diagnostic cystoscopy to exclude interstitial cystitis. This procedure was cancelled and rebooked twice due to active urine infection and was given antibiotics treatment. On third occasion, she still had urinary infection however, procedure went ahead after discussing risks and benefits. Procedure was done under local anaesthesia according to wishes of woman because she was keen to see findings during cystoscopy. On cystoscopic examination, Mirena was noted at the cranial border of bladder with tail still attached to the bladder wall. As it was an unexpected finding, she revealed her last coil replacement around 2 1/2 years back and since that time she is having recurrent urinary symptoms. The coil removal was attempted but was not possible to remove under local analgesia. Later on coil was removed under GA by urologist.

Discussion

- **The risks** related to IUD use include ectopic pregnancy, infection, irregular bleeding, embedment, expulsion and perforation. The perforated IUD may migrate to any neighbouring structure, including the urinary bladder. Most of perforations occur at or soon after insertion. Factors influencing are skill of physician, timing of insertion (recent abortion, or pregnancy, delivery by caesarean section, lactation, sepsis make soft consistency of uterus), acutely retroverted uterus. However sometimes, slow migration of IUD can occur through the muscular wall of the uterus with time.
- Perforations are possible; migration of an IUD into bladder should be considered in women presenting with newly onset, unexplained, recurrent or persistent urinary tract infections, dysuria, haematuria. Migration of IUD into the bladder is an extremely rare event with less than 70 reported cases. Although rare, however index of suspicion should be kept high if symptoms suggest so and displaced device should be removed to prevent potential complications.
- Once an IUD is in bladder, it usually becomes encrusted with calculi. Calculus formation develops over time in these cases. The interval between insertion and symptoms varies from 6 months to 16 years.
- **The treatment options** for an intravesical IUD are varied. Open surgery is performed generally in cases with partial penetration of the bladder wall, to remove the device and repair the defect. However, this type of open surgery increases the morbidity because of extensive surgical exploration. Other options are cystoscopic or suprapubic cystoscopic extraction of the device.
- The overall reported incidences of intrauterine device perforation is about 0.87 per 1000 insertions. In the case presented, the Mirena was found in the bladder with no active signs of perforation but recurrent urinary symptoms.

CONCLUSION

Migration of IUCD is a known complication and intravesical migration should be considered where recurrent UTI is associated with missing coil threads.