
PERSISTENT HAEMATURIA AND CHRONIC PELVIC PAIN DUE TO A WAY-WARD INTRA-UTERINE CONTRACEPTIVE DEVICE

Case Report

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ABSTRACT

Background: The bladder is one of the organs that an intra-uterine contraceptive device can migrate into because of its close proximity to the uterus. Its complication of bladder perforation is seldom diagnosed prior to intervention probably as a result of its rarity.

Method: A case report of a Nigerian female who presented with persistent filling-phase lower urinary tract symptoms, haematuria and chronic pelvic pain as a result of a migrated IUCD into the bladder. The device was inserted after uterine evacuation of retained products of conception following an incomplete spontaneous miscarriage with the consent of the husband. It was discovered at cystoscopy, retrieved and she was followed up.

Result: The patient was a 29-year old woman who presented with a 2-year history of persistent haematuria, dysuria, and chronic pelvic pain despite several episodes of antibiotic treatment for suspected urinary tract infection. Intra-uterine contraceptive device was discovered in the urinary bladder at a diagnostic cystoscopy and was retrieved. Further history revealed that an IUCD was inserted without her knowledge by health personnel immediately after evacuation of the uterus of retained products of conception following an incomplete miscarriage. She recovered without complication within 2 weeks of its removal.

Conclusion: This report highlights the need to discourage the insertion of IUCD by untrained health workers and to consider intra-vesical migration of IUCD in women of reproductive age with recurrent or persistent urinary tract symptoms recalcitrant to antibiotic treatment.

Key words: Intra-uterine contraceptive device, haematuria, uterine perforation, Urinary bladder, cystoscopy

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Introduction

Foreign bodies in the bladder can result in recurrent urinary tract infection, haematuria, urolithiasis and pelvic pain¹. They may exist in the bladder as a result of migration of materials used for masturbation, ureteric stents, or through migration from structures close to the bladder. Intra-uterine contraceptive device (IUCD) is a safe, common and cost effective long-term means of contraception but associated with complications including menorrhagia, dysmenorrhoea, pelvic and or abdominal pain, and pelvic infections. Migration of the IUCD into neighbouring structures such as the bladder, though rare has been reported^{2,3,4}.

We report a case of persistent haematuria, increased urinary frequency, dysuria and chronic pelvic pain as a result of migration of IUCD into the bladder.

Case report

Mrs A.C, a 29 year old para 2+2, 2 alive, who

presented at the gynaecological clinic with a 2- year history of haematuria, dysuria and pelvic pain. The haematuria was initially terminal but later became total. The complaints started about three months after evacuation of the uterus of retained products of conception under general anaesthesia in a private clinic following a spontaneous incomplete miscarriage at about eight weeks of gestation. She had been to different hospitals for the same complaints and had several investigations including urinalysis, urine microscopy, culture and sensitivity (mcs), pelvic ultrasound and cervical biopsy which on histology showed adenocarcinoma of the cervix. She had taken several antibiotics without any remarkable improvement.

Physical examination revealed a woman in painful distress but the vital signs and the systemic examination were essentially normal except a markedly tender suprapubic region. Pelvic

examination showed grossly normal vaginal walls but the ectocervix had some nabothian follicles. The uterus was normal in size with no adnexal tenderness or mass. Rectal examination was also normal.

An assessment of urinary tract infection to rule out vesical schistosomiasis was entertained and was requested to do urine microscopy, culture and sensitivity, urinalysis and pelvic ultrasound. She was then commenced on oral amoxicillin/clavulanic acid (Augmentin), praziquantel and Tramadol. She presented a week later with same complaints and urine microscopy result that yielded klebsiella species but the urinalysis and pelvic ultrasound were normal. The antibiotic was changed to Ofloxacin and was scheduled a week later for examination under anaesthesia (EUA) and a repeat cervical biopsy if there was no improvement.

During the EUA at cystoscopic evaluation, the Urologist observed a ureteric stent-like structure in the bladder. A decision was taken to remove it which was effected using a grasper forceps. It was found to be an intact copper T 380A intra-uterine contraceptive device with intact strings (Figs 1-2). A cervical biopsy was taken and she was placed on Ibuprofen and to continue Ofloxacin.

Further history after the above findings revealed insertion of the contraceptive device during the evacuation of the uterus of retained products of conception she had in her last pregnancy which ended as incomplete miscarriage by a health worker without her knowledge but with consent of the husband who had earlier complained of her short inter-pregnancy intervals.

The patient did very well subsequently with marked improvement of the symptoms after about three days of the removal of the device. At follow up at two weeks, she had no complaint. She was then asked to bring the histology result when it was ready but defaulted.

Fig 1: IUCD being withdrawn from the urethral meatus



Fig 2: IUCD displayed on a piece of gauze



Discussion

With the use of IUCD as a contraceptive device, various complications of its use have been reported including pelvic infection, pregnancy and uterine perforation^{2,4}. A rare complication of IUCD is its migration to structures close to the uterus or into the abdominal cavity^{2,3,4}. Although the process of IUCD migration into the bladder is gradual and accompanies with complications such as cystitis, haematuria, and pelvic pain^{2,4} as noted in this case report, most of the perforations occur at the time of insertion. The rare complication of perforation has been attributed to various causes such as insertion by a non-specialist, though migration of IUCD inserted by gynaecologist has been reported^{4,5}. Infection and tissue damage caused by the vaginal speculum during insertion can lead to adhesions and thus facilitate perforation of the uterus⁶. Actinomyces infection which frequently develops in the presence of IUCD also facilitates the perforation of the uterus^{6,7}.

In addition, IUCD migration is more frequent in women that labour with the device in situ as well as post-abortion and postpartum insertions. This is attributable to the reduction in size of the uterus and thinning of the walls as a result of relative hypoestrogenaemia^{5,8}. We believe that the cause of migration of IUCD in this case was as a result of insertion by a non-specialist and the immediate insertion post uterine evacuation.

Symptoms such as haematuria, dysuria and chronic pelvic pain as noted in this case are seen when IUCD migrated into the bladder^{4,9,10}. However, the discovery of IUCD in this patient was incidental as patient was unaware of its insertion. When suspected, it can be imaged using ultrasound, radiography and computed tomography^{10,11}. Most authors stated that migrated IUCD should be removed even if asymptomatic as it can cause pain, infection, intra-abdominal adhesions, injury to neighbouring organs as noted in this patient^{5,8,10}. Moreso, foreign body in the urothelium acts as a

nidus for stone formation with increased risk when infection supervenes^{4,10}, though this was not seen in this case report.

IUCD in the bladder is usually removed endoscopically as was done in this patient but open surgery may be needed if it is broken while it is being withdrawn out by foreign body forceps.

In conclusion, perforation of the uterus is an uncommon complication of IUCD. Its insertion by untrained health professionals should be discouraged to reduce complications associated with it. Patients with recurrent lower urinary tract symptoms recalcitrant to antibiotic treatment should be questioned for missed IUCD and if suspected, should be confirmed and removed cystoscopically.

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