A curious case of missing couplet IUCDs

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ABSTRACT

Intrauterine contraceptive device (IUCD) is one of the most widely used family planning methods. Although considered to be generally safe, it can be associated with problems such as missing IUCD. There have been many reports of isolated missing IUCD but reports of two missing IUCDs in the same patient are very rare. We report the case of a 35-year-old lady with such an occurrence that was diagnosed incidentally on a routine kidney, ureter and bladder (KUB) radiography.

Keywords: Complications, contraception methods, intra-uterine contraceptive device, migrations

INTRODUCTION

Intrauterine contraceptive device (IUCD) is one of the world’s most widely used family planning methods. 1 The first IUCD was developed at the beginning of this century but widespread acceptance has only occurred in recent decades. Modern IUCDs have been used widely since the 1960s and have been modified and redesigned to improve their safety and efficacy. It is the second most commonly used form of contraception after tubal ligation in women. It is the most commonly used form of reversible contraception. An estimated 100 million women worldwide use the IUCD for fertility control with China accounting for 65% of IUCD users. 1 Although generally very safe it can be associated with a myriad of problems and complications, one of which is the missing IUCD thread on per speculum examination. This happens when the IUCD is not visible on examination. The IUCD can be intra-uterine or may have completely migrated out without the patient’s knowledge. IUCDs can also perforate the uterus resulting in its subsequent relocation in other organs within the pelvis and the abdomen, in organs like urinary bladder or bowel. 2, 3 In approximately 50% of clinically diagnosed missing IUCD, the devices are actually still located within the endometrial cavity. 4 There have been many reports of isolated missing IUCD but reports of two missing IUCDs in the same patient are very rare. 5, 6 We report the rare
Case of a 35-year-old Malay lady with such an occurrence that was diagnosed incidentally on abdominal radiography.

**CASE REPORT**

A 35-year-old lady had gone to see her general practitioner with intermittent painless macroscopic haematuria. Urine microscopy examination confirmed the presence of red blood cells (RBCs) and radiography was requested. This interestingly showed two IUCDs (Figure 1a) and she was referred to gynaecology clinic for further evaluation.

Her background obstetrics history revealed that she was para-5 with all normal vaginal deliveries and three miscarriages. Her last child birth was in 2000 following which she had three miscarriages and evacuation of retained products in 2006 and 2007. She then had an IUCD inserted in Jan 2008 for contraception and follow-up showed the IUCD in situ. At the time of the IUCD insertion in 2008, she did not give history of any previous IUCD insertion. Her menstrual cycles were normal and regular.

On detailed questioning at the latest consultation, she revealed that she had an IUCD inserted in 1995, which she had forgotten to mention previously during the subsequent IUCD insertion. This later was confirmed when her old notes became available. She had previously been diagnosed with missing IUCD threads in 1995. She was then advised to be followed up with a pelvis radiograph which she defaulted as she was feeling well. She had also forgotten to mention about the missing IUCD threads when she delivered in 1997 and 2000.

Fig. 1: a) Radiography showing two IUCDs, b) ultrasound scan image showing possibility of two IUCDs in the uterus, c) ultrasound scan showing no IUCD after the removal of one IUCD and, d) a computed tomography image showing an IUCD located in the Pouch of Douglas, partly embedded in the bowel (arrow).
In the latest presentation, there were no significant findings on examination. An ultrasound scan in the department showed two superimposed IUCDs (Figure 1b). The IUCD threads were not seen on speculum examination but one of the IUCDs could be removed blindly with long artery forceps. Following the removal, a repeat ultrasound scan did not show any intrauterine IUCD (Figure 1c). A computed tomography scan of pelvis showed that the second IUCD had migrated outside of the uterus and was lying in the pouch of Douglas (Figure 1d). She was then scheduled for a diagnostic laparoscopy and removal of IUCD. At laparoscopy, the IUCD was seen in the pouch of Douglas and embedded in the sigmoid colon. On retrieval after careful dissection, the IUCD was found to be discoloured with faecal matter. The general surgeons were involved and small defect was found in rectum and was repaired with 3.0 Monosuture laparoscopically. The postoperative recovery was uneventful and the patient was discharged on the fifth day after operation. She was followed up two weeks later in gynaecological clinic and was doing fine. She was then started on oral contraceptive pills for contraception.

**DISCUSSION**

General practitioners, family planning doctors, and gynaecologists are frequently faced with the problem of patients whose IUCD threads are missing. The problem may be diagnosed by the patient, although only about two-third of women who practice self-examination are able to feel their IUCD threads. Absent threads may otherwise be found at routine contraceptive follow-up or incidentally during gynaecological examination for other reasons. The incidence of missing threads is uncertain and may vary with different devices. Missing IUCD threads may be a sign that the IUCD has been expelled, thread that is coiled or broken, or the IUCD has perforated the uterus. Approximately 80% of missing IUCDs are found within the uterine cavity whereas 15% are found in the cervical canal. Approximately five percent are found to have perforated the uterus.

In instances when a patient mentions that her IUCD threads are missing, enquiry should be made as to the last time the string was felt and the risk of pregnancy should be determined. A pelvic examination should be performed to determine if the threads are high in the cervix or hidden by a fold in the vagina. Often the threads can be located by probing the cervical canal with cotton swabs or narrow forceps. Although not absolutely necessary, an ultrasound or a radiograph can be used to locate the IUCD. If there is a risk that the woman is pregnant however, a radiograph is usually not advised or contraindicated.

Perforation of the uterus by IUCD usually occur during insertion. Interestingly, this is rare after uncomplicated insertions. The average perforation rate is estimated to be three per 1,000 insertions. Perforation is often very small and located away from major vessels to cause any significant bleeding. Hysteroscopy is the best modality to assess the position of a suspected missing IUCD and it will allow extraction or repositioning. If the IUCD is not found in the uterus, it can be located on a radiograph of the abdomen. Both antero-posterior and lateral views and other specific studies can define its relationship with the other organs.
If the missing IUCD is located in the abdominal cavity, the safest and most acceptable way to remove it is by laparoscopy. Most litigations concerning perforated IUCDs have been prompted by the use of laparotomy or colpotomy. IUCDs in the abdomen, especially the copper type can induce development of adhesions and may cause infections. Therefore, perforated copper IUCDs should be removed as soon as possible. The management of missing IUCD is summarised in Figure 2.

In conclusion, our case highlighted the importance of a detailed history before IUCD insertion. Although missing IUCD is not common, clinicians should always consider this possibility in patients who previously had IUCD inserted and found to have missing threads. The possibility of migration with perforations of the bowel and bladder should always be considered. A diagnosis of 'missing threads' should only be made after adequate radiological investigations and a migrated IUCD should to be removed at the earliest opportunity.

REFERENCES