



**LAPAROSCOPIC REMOVAL OF MIGRATED INTRAUTERINE
CONTRACEPTION DEVICE EMBEDDED IN MYOMETRIUM – A
CASE REPORT**

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<p>Article Info <i>Received 15/12/2015</i> <i>Revised 27/01/2016</i> <i>Accepted 22/02/2016</i></p> <p>Key words: Contraception, Laparoscopy, Migrated IUCD.</p>	<p>ABSTRACT Adverse effects following use of intrauterine contraceptive device is not uncommon. Many cases of migrated IUCD have been reported and published in the literature which caused a challenge in detecting and managing the migrated IUCD. We report a case of young women who were referred to us after she cannot felt the IUCD string in the vagina. An ultrasound scan of pelvis revealed that the intrauterine contraception device was no longer in the uterine cavity, but the exact location of the IUCD was unclear. A hysteroscopy procedure was performed to locate the missing IUCD in which later confirmed to be migrated and embedded in the myometrium. The IUCD was successfully retrieved through a laparoscopic surgery.</p>
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INTRODUCTION

Intrauterine contraception device (IUCD) is one of the contraception method preferred by women. According to United Nations publication on World Contraceptive used 2011, IUCD is the second most modern contraception methods used after sterilization, with more than 160 thousand women were using it [1].

Among South East Asia countries, 9.9% of the female populations choose to use IUCD for contraception. However, using IUCD is not without a risk. Spontaneous expulsion, perforation, and infection are the common adverse effects after the insertion of IUCD [2,3]. Recently, many cases of migrated IUCD have been reported and published in the literature [4-8].

Such cases posed a significant challenge in detecting and managing the migrated IUCD. We described a case of young women with missing IUCD in which later confirmed to be migrated and embedded in the myometrium. A laparoscopic surgery was performed to retrieve the IUCD.

CASE PRESENTATION

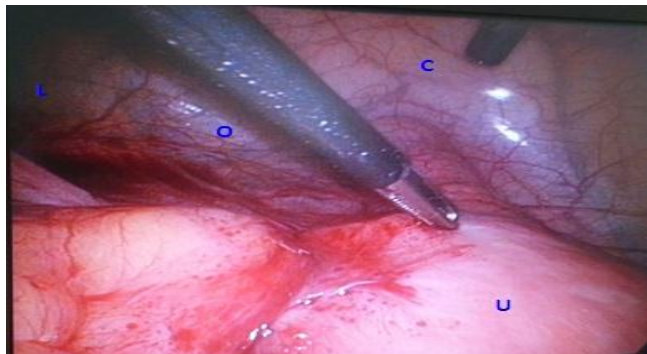
A 29 years old lady, para 3, had intrauterine contraception device inserted two months after giving birth to her last child. Three months after the insertion, as she could no longer felt the intrauterine contraception device strings at the external os of the cervix, she was referred to our center and underwent a pelvic ultrasound. Ultrasound scan of pelvis revealed that the intrauterine contraception device was no longer in the uterine cavity, but the exact location of the IUCD was unclear. She underwent hysteroscopy procedure in operating theater to localize the site and possible removal of the IUCD. On hysteroscopy examination, only the strings can be seen projected out from the anterior uterine wall while the body of intrauterine contraception device was out of view. The procedure was proceeded to laparoscopic surgery to locate the missing intrauterine contraception device. Once laparoscopic camera introduced, the surgeon noted a sigmoid colon and omentum adhered to the left anterior wall of the uterus (Fig. 1). Carefully, the adhesion was



released, and once it was done, the intrauterine contraception device was visualized (Fig. 2). It was entirely embedded in the serosa of the uterus. A small incision was made on the uterine wall surrounding the device to release it (Fig. 3) and managed to remove in toto (Fig. 4). The patient made a good recovery and discharged home on the same day of operation. Four weeks after the

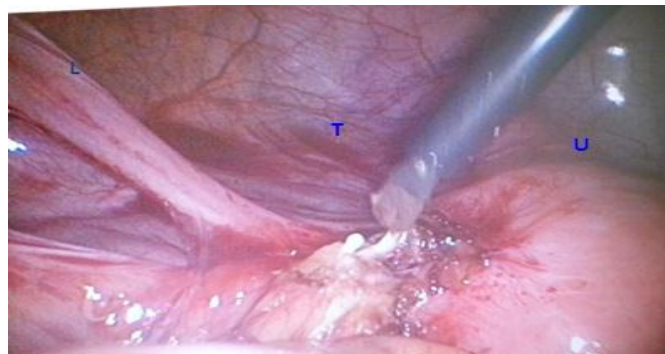
surgery, the patient was seen again during follow-up in the outpatient clinic. The patient was well and satisfied with the outcome of the surgery. However, she expressed her concern when asked about subsequent contraceptive method post-surgery. Afraid that she might experience similar complication if opted for IUCD insertion again, she wish to try other methods of contraception.

Figure 1. Adhesion between omentum and left anterior wall of uterus.



**L=left round ligament of uterus, O=omentum, U=uterus, C=cervix

Figure 2. The tip of intrauterine contraception device was visualized after adhesion been released.



**T=tip of the intra uterine contraception device, L=left round ligament of uterus, U=uterus

Figure 3. Small incision was made on the uterine wall surrounding the intra uterine contraception device to remove it.



**T=tip of the intra uterine contraception device, U=uterus

Figure 4. Migrated intra uterine contraception device removed.



DISCUSSION

Any complication arising from IUCD insertion will significantly demotivate patient to continue using IUCD as the contraceptive method in the future. As displayed in this case report, the patient expressed her worried about having a similar experience if choosing to continue using IUCD. Thus, it is imperative for the medical practitioner to take all the necessary steps to minimize any potential complication arising from IUCD insertion.

Although the risk of uterine perforation depends on the skill of the operator during the insertion [2], in this case report, the interval between post delivery period and IUCD insertion may contribute to the risk of migrated device. Postpartum uterus is soft and requires a particular period to shrink back to its pre-pregnancy size. Inserting IUCD too early after birth might puncture the uterus.

Although several studies [9,10] found that immediate post-partum insertion of IUCDs was safe, effective and lower incidence of expulsion, the risk of perforation was unclear. Thus, the authors recommend that postpartum mother to postpone the IUCD insertion with the use of other contraceptive methods for temporary protection until the uterus back to its pre-pregnancy size.

Women were also advised to seek medical attention if they could not felt the IUCD string. For medical practitioner, removing IUCD with missing thread need to be done under direct vision. As in this case report, the location of suspected migrated IUCD was initially identified through hysteroscopy procedure. Since only part of the string seen protruding out from the uterine wall, the patient was subjected to surgical removal. If any medical practitioner is blindly pulling out the string without

knowing the body of IUCD has embedded in the myometrium, it may tear off the uterine wall and will cause massive bleeding.

In the expert hand, laparoscopic surgery is a fast, safe and noninvasive method to retrieve the migrated IUCD. The success of the laparoscopic surgery in this case report proved the findings from other studies [11,12]. In addition, the use of diagnostic imaging to localize the site of migrated IUCD can help to reduce the use of intraoperative adjuncts (i.e., hysteroscopy) and lower the rate of laparoscopic conversion to open surgery [12,13].

CONCLUSION

A shorter time interval between post childbirth and IUCD insertion was the possible reason for the migrated and embedded IUCD in the above case report. Location of the missing IUCD must be confirmed first before it can be removed. Laparoscopic surgery offers a

fast, safe and noninvasive method to retrieve the migrated IUCD.

ACKNOWLEDGEMENT

The authors would like to thank the Director General of Health, Malaysia, for his permission to publish this paper.

CONFLICT OF INTEREST:

The authors declare that they have no conflict of interest.

STATEMENT OF HUMAN AND ANIMAL RIGHTS

All procedures performed in human participants were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. This article does not contain any studies with animals performed by any of the authors.

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