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## Case Report

# Misplaced IUCD: a case report

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### ABSTRACT

Contraception is a national emergency, essential in a developing country like India. Intrauterine contraceptive devices (IUCDs) are amongst the most frequently used methods of contraception. The patients with misplaced IUCDs may present with pregnancies or 'lost strings' or they may remain asymptomatic and/ or may have recurrent pregnancy losses and may become pregnant as in our case.

**Keywords:** Diagnostic hysterolaparoscopy, Laparoscopy, Misplaced IUCDs, Perforation, Recurrent abortions, Rt iliac fossa pain

### INTRODUCTION

Intrauterine contraceptive devices (IUCDs) are the main pillars of contraceptive measures in the developed as well as developing countries. They are one of the most reliable and cheapest contraception methods.<sup>1</sup> Misplaced IUCD is termed as the condition when IUCD thread is not visualized through the cervical OS.<sup>2</sup> Malpositioned IUCD is a condition where, although the IUCD is present within the uterine cavity but its placement is eccentric and part or the whole of it may be embedded in the myometrium.<sup>3</sup> Transmigration of IUCDs is a very rare but a dangerous complication.

The incidence of uterine perforation varies and is around 13/1000 insertions.<sup>4</sup> Cases of misplaced IUCD being reported because of their unusual presentations and because of their impact on the acceptance of the family planning services. This case is an atypical presentation since the patient was suffering from recurrent pregnancy losses after delivering her first child and copper T insertion and then delivered a full-term baby vaginally

after 3 successive losses and had persistent pain in the Rt iliac fossa.

### CASE REPORT

A 29 yr P3L3A3 came to gynae OPD with pain Rt iliac fossa which have been persistent and has taken multiple treatments for PID in the past and has undergone multiple ultrasounds with no abnormality detected. She had given birth to two female children in 2009 and 2011 and underwent Cu-T insertion at local nursing home in 2013. Following IUCD insertion she had moderate pain and bleeding for 2-3 weeks for which she went to another gynaecologist who could not trace the threads of the Cu-T and assured the patient that the device might have expelled out since the USG pelvis and abdomen did not show any evidence of IUCD and the patient also had her symptoms abated by that time however there was no history suggestive of expulsion of IUCD.

Following that the patient started trying to conceive but every pregnancy resulted in abortion successively in 2013, 2014 and 2015. Following which she underwent PID treatment multiple times since she complained of

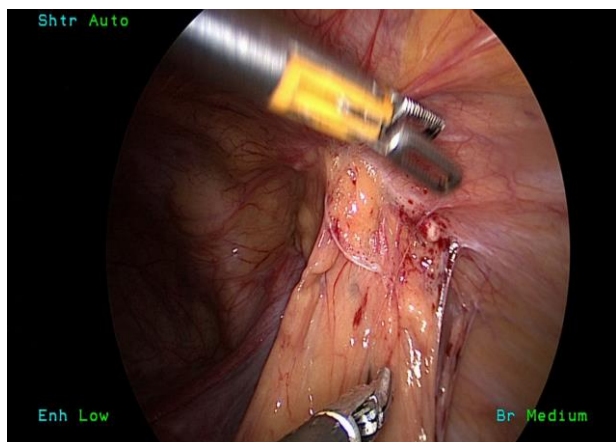
persistent pain in the Rt iliac fossa which was mistakenly taken as PID pain and given repeated PID treatments in OPD empirically. After this she conceived again in 2016 and delivered a healthy male baby but still had pain in the Rt iliac fossa region.



**Figure 1: X-ray KUB showing Cu-T in the abdominal cavity.**



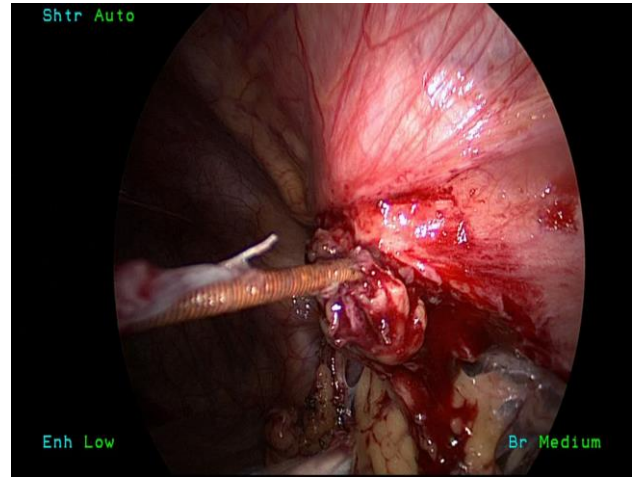
**Figure 2: Hysteroscopy showing empty uterus.**



**Figure 3: IUCD adherent to anterior abdominal wall.**

She was referred to surgical specialist who asked for x ray KUB for suspected renal calculi and this clinched the diagnosis and location of lost IUCD which was embedded in the anterior abdominal wall with the omentum adhered to it near the iliac region of the abdomen.

Her past and family history was not significant. General physical and abdominal examination was unremarkable. Speculum examination revealed normal cervix and vagina. On vaginal examination, uterus was anteverted and normal in size.



**Figure 4: IUCD being removed laparoscopically.**

A diagnostic hysterolaparoscopy was done and the lost IUCD was retrieved laparoscopically after adhesiolysis and patient never had pain since then.

## DISCUSSION

IUCDs are the most acceptable, safe, efficacious, reversible and widely used contraceptive method but it may be associated with menorrhagia, irregular bleeding, pelvic inflammatory diseases, ectopic pregnancy and silent uterine perforation.<sup>5,6</sup> The reported incidence of the transmigration of the IUCD from the uterus to the neighbouring organs is 1-3/1000 IUCD insertions.<sup>2</sup>

The incidence of transmigration is affected by the several factors which includes parity, timing of IUCD insertion, uterine position, past history of abortions, type of IUCD and the operator experience.<sup>5</sup> Out of these risk factors, chance of uterine perforation is maximum at the time of IUCD insertion.<sup>7</sup> Moreover the incorrect positioning of the IUCD is the result of faulty technique and insertion by insufficiently trained staff. Review of the literature suggested various mechanisms for the migration of IUCDs which includes the faulty insertion technique or the chronic inflammatory process due to the erosion of the uterine wall.<sup>8</sup> Copper-containing devices are known to cause massive tissue response and thus leading to

complications once lying in the peritoneal cavity.<sup>1</sup> In our case Cu-T had caused tissue response leading to recurrent pregnancy losses following uterine perforation and peritoneal reaction. The complete extrusion of the IUCD through myometrium is facilitated by the uterine contractions and the pressure difference between the uterine (high) and the peritoneal cavity (low).<sup>6</sup> The movement and the migration in the peritoneal cavity is facilitated by the contractions of the abdominal organs i.e. urinary bladder, intestine as well as movement of the peritoneal fluid.<sup>1,6</sup>

Patient with the misplaced IUCD remain asymptomatic in 85% of cases and there is no effect on the adjacent organs.<sup>7</sup> But in 15% of the cases it may present with unwanted pregnancy, irregular vaginal bleeding and abdominal pain. Dangerous complications associated with the misplaced IUCD include bowel perforation, rectovaginal fistula, rectal strictures, bladder perforation, bowel obstruction, appendiceal perforation and mesenteric perforation.<sup>9</sup>

Removal of misplaced IUCD is desirable even if the patient is asymptomatic so that the future complications like perforation of adjacent organs or any fistula development can be avoided.<sup>4</sup> WHO also advocates the removal of the misplaced or malpositioned IUCD because of the risk of injury to the adjoining organs and medicolegal issues.

Nowadays ultrasound is the initial modality in case of non-visualization of the IUCD thread. This can precisely tell the location and the correct dexterity of the IUCD if present in the uterine cavity or pelvis. In places where there is non-availability of the ultrasound or cost problem, plain radiograph of the abdomen can be done to see its presence in the pelvis or abdomen (especially when there is non-localization of the IUCD on pelvic USG). To see the exact distance of the IUCD from the uterine cavity, uterine sound can also be used during radiographic examination.

Endoscopic procedures have emerged as a preferred modality for the removal of all types of misplaced or malpositioned IUCDs.<sup>10</sup> Devices in the uterine cavity or partially embedded in the myometrium can be easily dealt with the hysteroscopy. Misplaced IUCDs anywhere in the abdomen can be managed with the laparoscopy and in very few cases of misplaced IUCD's laparotomy is required.

## CONCLUSION

The contraceptive measures are the need of today's era, as the population census is going beyond limits in India. It is therefore very important to reduce the complications and

the failure rate of these measures so that more couples can be counselled about these services. To reduce the failure rates and perforation of the uterus, the health staff should be adequately trained. This case report explains the need for surveillance in cases of misplaced IUCD and another cause to look for when the patient presents with a recurrent abortions and inflammation due to foreign body. Ultrasound as well as plain radiograph of the pelvis and abdomen are the important modalities to diagnose the condition.

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