

## Case Report

# Migrated intrauterine contraceptive device: erosion in to sigmoid colon

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**Received:** 21 February 2018

**Accepted:** 29 March 2018

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### ABSTRACT

Intrauterine contraceptive devices (IUCDs) are one of the most widely chosen contraceptive methods with high efficacy, less side effects, and low cost especially in a developing country like India. Although they have low side effect profile but they are also associated with serious complications like device migration into adjacent organs, uterine perforation and sepsis. Any patient presenting with loss of thread should be assessed for localization of the IUCD. Authors are thereby reporting a case of a 30-year-old lady who presented with 2 month amenorrhea with loss of IUCD thread. She was diagnosed with intrauterine pregnancy with migrated IUCD into distal sigmoid colon. The patient was explored, IUCD was removed, dilatation and evacuation were done. Authors concluded that IUCDs are safe only in experienced hands and an institutional training is must for family planning workers. Patient education regarding regular checkup for threads is also emphasized.

**Keywords:** Intrauterine pregnancy, Migrated IUCD, Sigmoid perforation

### INTRODUCTION

Intrauterine contraceptive devices are one of the popular methods of reversible birth control in the world with millions of users worldwide<sup>1</sup> accounting for 16.5% use in undeveloped countries and 9.4% use in developed countries.<sup>1</sup>

Intrauterine devices are safe, effective and widely used. However, IUCDs may cause some serious complications like bleeding, uterine perforation, and bowel perforation. Migration into gastrointestinal tract is a rare but serious complication.<sup>2</sup> The incidence of uterine perforation by IUCD is reported to be between 1.3 and 1.6 per 1000 insertions.<sup>3</sup> Migration of IUCD commonly present as missing threads but can also present with pregnancy. Migration can occur into adjoining organs like colon, rectum, appendix, bladder or peritoneal cavity here authors report a case of migration of IUCD to the sigmoid colon along with singleton intrauterine pregnancy.<sup>4,5</sup>

Treatment options available for such cases include retrieval by minimally invasive methods like laparoscopy or endoscopic methods or by laparotomy depending on expertise, facilities, and nature of migration.

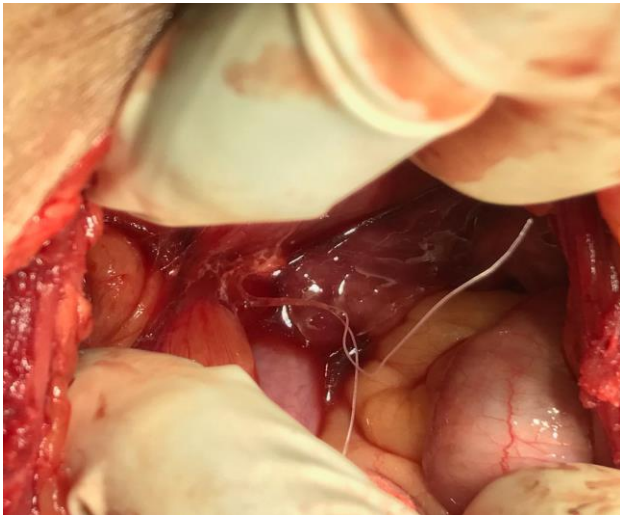
### CASE REPORT

A 30-year-old lady presented to obstetric Out Patient Department with complains of amenorrhea for last 2 months. She was G4P3A0L3 with regular cycles of 29 days. She was inserted with copper-T 2 years ago. She had no bowel, bladder or complaints pertaining to copper T.

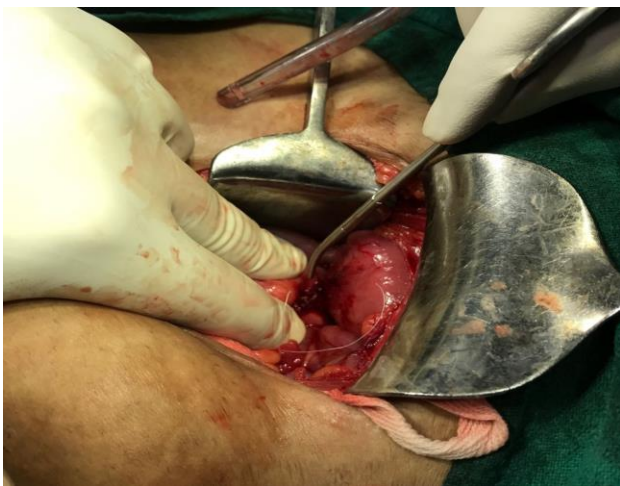
On per-speculum examination no threads were visible. Per rectal examination was normal. Urine pregnancy test came out to be positive. She was subjected to Ultrasonography which showed copper T either embedded in posterior myometrium or on the surface of uterus. As patient doesn't want to continue with the

pregnancy, she was planned for X-ray abdomen and pelvis. On X-rays the position of copper T was high enough to be sure that it is inside peritoneal cavity. The patient was planned for exploratory laparotomy and Dilatation and evacuation in the same sitting after obtaining written and informed consent.

Intraoperatively there were dense adhesions between posterior surface of the uterus and distal part of sigmoid colon. On dissection threads were found inside the peritoneal cavity (Figure 1) with the main body of IUCD embedded in the sigmoid colon probably in its musculature. The copper T was removed from the colon by making an enterostomy. As there was no contamination, primary closure of the sigmoid was done. Dilatation and evacuation was done and adjoining uterine perforation (Figure 2) was also repaired. Drain was placed in pelvic cavity. Patient was orally allowed on 3<sup>rd</sup> post-op day, drain removed on 4<sup>th</sup> day and she was discharged on 7th day in satisfactory condition.



**Figure 1: Threads of IUCD found inside the peritoneal cavity with the main body of IUCD still embedded in the sigmoid colon.**



**Figure 2: Uterine perforation at the dissection site.**

## DISCUSSION

IUCDs are widely used and one of the safest method of contraception since 1965.<sup>4</sup> The incidence of uterine perforation by IUCD is reported to be between 1.3 and 1.6 per 1000 insertions.<sup>5</sup> There are various factors responsible for uterine perforation by IUCD, out of which the important ones are: consistency and flexion of uterus, type of IUCD and rigidity of the material, timing of insertion, the experience of inserting healthcare personnel and amount of force applied while insertion.<sup>4</sup> Studies shows if the IUCD does not penetrate the uterine endometrium while insertion, the chances of complete perforation are drastically reduced.<sup>4</sup>

The cause of migration is considered to be faulty procedure or a chronic inflammatory reaction to the foreign body leading to gradual erosion and perforation through the uterine wall. A delayed onset of symptoms usually indicates secondary migration of the IUCD.<sup>4</sup>

Misplaced IUCDs have been reported from gastrointestinal tract, urinary bladder as vesical calculi, may lead to perforation of appendix, omentum.<sup>5-8</sup>

A per speculum examination followed by a plain radiograph is usually the first investigation done, but in this case as the patient presented with pregnancy, Ultrasonography was done first and x-ray was done after her decision for abortion was made. The treatment of the misplaced IUCD is surgical retrieval, either by laparotomy or laparoscopically. Surgical retrieval of migrated IUCD is indicated even when no symptoms appears to avoid future complications like perforation and fistula formation.<sup>9,10</sup>

Although it is advisable to remove a migrated IUD by minimally invasive techniques.<sup>11</sup> Endoscopic techniques like colonoscopy, hysteroscopy, and cystoscopy can be used for removal of misplaced IUCD depending on its location. There are many case reports of removal of IUCD colonoscopically and laparoscopically but a review of surgical techniques to remove IUCD revealed that 93% of the reported cases were firstly attempted laparoscopically, later converted to open surgery in 57.1% cases.<sup>11</sup> In this case dense adhesions were anticipated with obliterated pouch of douglas hence exploratory laparotomy was planned.

## CONCLUSION

In developing country like India, family planning is the need of the hour. IUCD is one of the safest and cost effective methods of contraception so family planning workers should be properly trained and educated regarding its complications. Beneficiaries should also be educated for regular examination of threads and to report the missing threads to the family planning workers as early as possible to avoid complications.

*Funding: No funding sources*

*Conflict of interest: None declared*

*Ethical approval: Not required*

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**Cite this article as:** Kumar H, Sharma P, Aggarwal B. Migrated intrauterine contraceptive device: erosion in to sigmoid colon. *Int J Res Med Sci* 2018;6:1828-30.