

Original Research Article

## Misplaced IUCD: Etiology and Management-A Retrospective Study

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**Abstract:** Intrauterine copper devices are considered as a highly effective, non-hormonal method of contraception that can be safely used by all women regardless of breastfeeding status during this interval. They can be inserted post menstrually, post abortal, post-delivery or in post puerperal period. This in turn has come with an increase in the number of related problems like misplaced Cu-T. This retrospective study was conducted in the department of Obstetrics and Gynecology at Govt. Medical College Haldwani, from July 2015 to June 2016. All patients referred or presented with lost string or misplaced IUCD were enrolled. Total 25 patients were included in the study. Of these 25 women, in 12 patients IUCD was inserted following vaginal delivery, in 6 patients it was inserted following 1<sup>st</sup> LSCS, in 5 patients it was inserted in 2<sup>nd</sup> LSCS and only 2 patients had interval CuT insertion. It was found in pelvic cavity in 2 cases, subsequently removed by laparoscopy. Hysteroscopy is the preferred method in management of misplaced IUCD.

**Keywords:** hysteroscopy, laparoscopy, misplaced cu-T, PPIUCD programme

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### INTRODUCTION

- Intrauterine contraceptive devices(IUCD'S) are the most widely used, reversible method of contraception.
- It is the second most common method of contraception, after sterilization. 1 Most widely used IUCD are copper releasing devices [1]. Since Cu-T 380 A is in government supply in India and provided at free of cost; hence it is the most common IUCD to be used here. The IUCDS are considered safe, cheap and effective method of contraception with failure rates of <1/1000 women per year [2].
- They are suitable for lactating mothers as there is no effect on quality and components of breast milk [3].
- The reported incidence of perforation varies from 1 in 350 to 1 in 2500 [4].
- PPIUCD programme was launched in March 2011 and was functional from 2012 in Kumaon region in Uttarakhand. The string is used to monitor the presence or absence of the device and for the removal of device. In India, IUCD is mostly inserted by lady health worker or paramedical staff. Inadequate pelvic examination before insertion and

inexperience of the inserting person predisposes for misplaced IUCD or uterine perforation.

Causes of lost string may be

1. Thread coiled inside
2. Thread torn through
3. Device expelled outside unnoticed by the patient
4. Device perforated the uterine wall and lying in the peritoneal cavity.
5. Device pulled up by the growing uterus in pregnancy

### MATERIAL AND METHODS

- This study was conducted in the department of Obstetrics and Gynecology at Govt. Medical College Haldwani, from July 2015 to June 2016.
- Here we report the case series of 25 cases with lost strings of IUCD in whom the routine procedure of IUCD retrieval failed and were referred to our hospital for further management.
- All women who had voluntarily gone for IUCD removal or have seen IUD expelled out spontaneously were excluded from the study.

**RESULTS**

Total numbers of patients for Cu-T insertion seen during the study period of 1 year were 25. All IUCD were CuT 380A.

**Table-1: Age and parity of patients**

Age	No of patients	Percentage
20 – 30 yr	6	24
30 – 40 yr	16	64
>40 yr	3	12
Parity	No of patients	Percentage
1-2	7	28
3 -4	16	64
>4	2	8

**Table-2: Time and mode of insertion of IUCD**

Mode and Time of insertion	No .patients	Percentage
After Vaginal delivery	12	48
After 1 <sup>st</sup> LSCS	6	24
After 2 <sup>nd</sup> LSCS	5	20
Interval IUCD insertion	2	8

- In all the patients with misplaced IUCD gynecological examination, ultrasound evaluation, X-ray AP view abdomen and pelvis was done to locate the IUCD.
- A 10mm operative hysteroscope with grasping forceps was used for extraction of IUCD under TIVA( total intravenous anesthesia)

**Table-3: Interval between insertion and removal of IUCD**

Time interval between insertion and removal	Number	Percentage
<6 months	1	4
6 – 12 months	3	12
12 -18 months	6	24
18 -24 months	10	40
>24 months	5	20

- All the patients got their IUCD inserted at primary health centre or civil hospital and none were inserted at tertiary care centre.
- Of these 25 women, in 12 patients IUCD was inserted following vaginal delivery, in 6 patients it was inserted following 1<sup>st</sup> LSCS, in 5 patients it was inserted in 2<sup>nd</sup> LSCS and only 2 patients had interval CuT insertion.

**Table-4: Location of the IUCD**

Location of device	Number	Percentage
Intra-uterine	18	72
Partially embedded	15	60
In the cervical canal	3	12
Extra-uterine	2	8

**Table-5: Method of removal of IUCD**

Removal	No. Of Patients
Easy removal	
With artery forceps	3
Hysteroscopic removal	15
Laparoscopic removal	2

In 3 patients IUCD was present in the cervical canal which was removed with artery forcep. A patient in whom IUCD was partially embedded was removed with the help of hysteroscope. In 2 patients whom it was found to be in the peritoneal cavity it was removed with the help of laparoscopy. In one patient it was found to

be translocated outside the uterine cavity embedded in the omentum, and in 2<sup>nd</sup> patient it was found on the surface of the bladder. In both the cases no IUCD was seen in uterine cavity on an ultrasound but the X-ray abdomen erect view showed IUCD in peritoneal cavity. None of the patients required laparotomy.



**Fig-1:Hysteroscopic view of partially embedded IUCD**

## DISCUSSION

- IUCD is the safe, cheap and reversible long term method of contraception. Despite numerous advantages still IUCD is not widely accepted due to certain complication associated with it like increased pain, bleeding ,infection, perforation of uterine wall and migration to other organs
- The mechanism of migration is thought to be the insertion procedure itself or the chronic inflammatory reaction with gradual erosion through the uterine wall. The incidence is influenced by several factors, which includes the timing of insertion, parity and history of previous abortion, skills and technique of insertion.
- Ultrasound of lower abdomen and pelvis is usually the 1<sup>st</sup> investigation of choice followed by X-ray abdomen erect view if required.
- Withdrawal of the migrated IUCD is advisable even if it has not given rise to any symptoms, so that the further complication is avoided, as there is risk of formation of adhesions and injury to bowel and urinary bladder. WHO also

recommends removal of misplaced IUCD because of potential damage to adjacent organs and associated medicolegal problems [5].

- Adoni and Benchetrit found no adhesion in 3 and 11 cases respectively. They suggested that surgery should be done only in symptomatic cases and asymptomatic cases should be managed conservatively [6].
- K Jillani 6 and N Elahi in their studies reported presentation with lost strings in 40.90% and 32.4% of patients respectively. Next frequent complaint was pain lower abdomen in 25 .67% cases. K Jillani 6 and N Elahi 7 cited that 31.33% and 42.86% patient presented with complained of pain abdomen. There were two cases of pregnancy with IUCD in situ, which were both intrauterine. Menstrual abnormality occurred in 24.32% patients.[7,8].

## CONCLUSION

Hysteroscopy is the preferred method in management of misplaced IUCD as it is performed under vision and is not a blind procedure. In addition minimum hospital stay, minimal invasive method,

comforts and early recovery also makes hysteroscopy the preferred method of IUCD removal.

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