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Case Report

A rare case of perforating intrauterine contraceptive device

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ABSTRACT

The trends in the acceptability of contraceptives is globally shifting from permanent sterilisation to long acting reversible contraceptive (LARC). With the increasing use of IUCD, the knowledge of its common and rare complications has become pertinent. One of them is cervical perforation in which strings are mostly visible and hence it can be easily missed. Here we present a rare case of cervical perforation which was timely detected before it could have caused more damage. A patient complaining of IUCD associated pain should undergo thorough examination and a probability of perforation should be kept in differential diagnosis despite string visibility. A clinician has to be more vigilant about this rare complication to prevent damage to cervix and avoid unwanted pregnancy.

Keywords: Cervical perforation, Cervical perforation with intrauterine contraceptive device, Copper T, Intrauterine contraceptive device complications, Long acting reversible contraceptives, Nabothian follicle

INTRODUCTION

Worldwide, long acting reversible contraceptives (LARC) has become more popular than sterilization owing to their reversible nature. The LARC methods have high patient acceptability, have limited contraindications for use, and are often recommended, in some cases, due to their dramatically improved bleeding control.¹ The American college of obstetricians and gynaecologists even endorse the use of LARC, including IUDs, for adolescents also.² After the device is removed, the return of fertility is almost rapid.^{3,4} Copper T is one of the highly used LARC having failure rate of 0.8% with typical use.⁵

IUCD can be inserted just after delivery (post placental), just after termination of pregnancy (post abortion) or any time in post menstrual phase (interval IUCD). Menstrual irregularities and dysmenorrhea are one of the common problems associated with IUCD, also the incidence of spontaneous IUCD expulsion is 2-10% in the first year of

insertion.⁶ Missing thread is also commonly encountered problem during IUCD follow up. Since the popularity of postpartum IUCD (post-placental) insertion after introduction of PPIUCD programme by government of India, the problem of missing thread has compounded. In Safdarjung Hospital Family planning OPD, 26.7% of Cu-T follow up patients were found with missing strings over a period of 6 months. Missing thread without any symptom of pain can be due to curling up of thread in the cervical canal or in the endometrial cavity in case of post placental insertion or could be due to spontaneous expulsion of strings from IUCD. Missing thread associated with the pain abdomen can be due to uterine perforation which is seen in 0.1% of IUCD users.⁷ Uterine perforation can cause injury to abdominal viscera or can lead to intrauterine or extrauterine pregnancy.

Cervical perforation is one of the rarely encountered complication of IUCD. It can be easily missed during follow up, as strings are generally visible and patient may or may not be symptomatic.

CASE REPORT

A 22-year-old female PIL1 presented in family planning OPD of Safdarjung hospital, with complaints of prolonged cycles and lower abdominal pain since last two months. She had history of IUCD insertion.



Figure 1: Nabothian like protrusion of vertical limb of IUCD from anterior lip of cervix.



Figure 2: Vertical limb of IUCD getting embedded into the anterior lip of cervix (hysteroscopic view).



Figure 3: Horizontal arms at the level of internal os.

One year back she underwent an emergency caesarean section in view of non-progress of labour which was followed by post-placental insertion of IUCD (380A). IUCD was spontaneously expelled after two months, which was noticed by the patient. She did not use any alternative method of contraception till IUCD 380A was reinserted from a local dispensary in Delhi by a paramedical staff. There were no immediate complications. Patient was comfortable and was having normal menstrual cycles at 28 days interval lasting for 6 days till six months post insertion.

Since last 2 months patient was having prolonged cycles occurring at an interval of 45 days lasting for 6-8 days with normal flow. There was no history of dysmenorrhoea or inter menstrual bleeding. There was no coital difficulty or dyspareunia. Patient also had pain lower abdomen since two months which was intermittent, pricking in nature, non-radiating. It was not associated with discharge per vaginum or any bladder, bowel dysfunction.

She visited the same dispensary with above complains, where Cu-T was inserted, as she desired another pregnancy, she requested removal of Cu-T. The removal was attempted twice after giving sublingual misoprostol, but could not be removed. Her USG was done which reported IUCD as displaced downwardly in lower part of uterus and cervix. In view of mispositioned IUCD with pain lower abdomen patient was referred to Safdarjung Hospital.

Her systemic examination was normal. On per speculum examination Cu-T thread was visible outside the external os. Cervix and vagina were healthy. On careful examination a small whitish protrusion over anterior lip of cervix at 10 o'clock position was seen, which looked like a nabothian cyst (Figure 1). On per vaginal examination the same whitish protrusion was knobby and hard to touch, mild cervical motion tenderness was present. This was never noticed previously by the examining doctors missing out on the vital clue.

She was taken for hysteroscopic examination in which vertical limb of Cu-T was found perforating anterior lip of cervix and peeping outside with only thin epithelium left over the knob which was seen on per speculum examination as a protrusion (Figure 2). The horizontal limbs were embedded at the level of internal os (Figure 3). Hysteroscopic guided removal of Cu-T was done. Patient was sent home after two hours in satisfactory condition and opted for DMPA as her future contraception.

DISCUSSION

This case does not have the exact incidence about cervical perforation in literature as it is a rare complication. Case series have been reported by various authors four decades back with similar clinical

presentation and mostly were successfully removed through the fistulous tract in the cervix.⁸ In the recent published case reports, the clinical presentation varied as in the case reported by Oruc S et al, patient was asymptomatic and perforation was detected during follow up after 3 years of insertion where as in the case reported by Chauhan et al, patient had complaint of dyspareunia, hence perforation was detected within 3 months of insertion.^{9,10} In the present case, interval Cu-T was inserted and patient remained asymptomatic for 6 months after which she developed pain lower abdomen and perforation was identified after eight months. In this case USG only reported downward displacement but could not identify perforation, another observation which differed in our case was the difficulty of removal which was attempted twice with misoprostol at dispensary but failed to be removed and later removed with hysteroscopy. The difficulty in removal shows that partially perforating IUCD removal may be more challenging than complete perforation as in the latter it can be removed through the fistulous tract. The cause of pain might be due to irritation of cervical afferent fibres by IUCD limb which was relieved after Cu-T removal. Dyspareunia was although not present in our case may be because there was only partial perforation but it was seen in the case reported by Chauhan et al, where there was complete perforation of cervix.¹⁰ In all the cases of cervical perforation Cu-T thread was visible, hence it emphasizes the importance of careful gynecological examination and not just looking for strings. Hysteroscopic examination can be done in any case to confirm the diagnosis. This modality could provide an insight into the etiology of cervical perforation as the horizontal arms are also fixed at the level of the internal os partially perforating it. As observed in our case the embedding of horizontal limbs at internal os may have caused persistent pressure in the cervical canal eventually leading to cervical perforation. This would suggest either a low placement of IUCD at the time of insertion or IUCD getting trapped at the internal os during the process of spontaneous expulsion.

Hysteroscopy in all cases can only confirm this hypothesis.

CONCLUSION

The cases of cervical perforation with IUCD may be declining over the years as the number of cases published are few since the last case series published almost four decades back. The decreased incidence in this country could be the govt. of India initiative for providing training in IUCD insertion for skill enhancement or may be there could be under reporting. Though a rare complication, hysteroscopy can provide new insights into it and in future may help finding a preventive measure.

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