

Intra-operative detection of asymptomatic perforated Copper T- A case report

ABSTRACT

Context: Uterine perforation is a rare yet important complication of the intrauterine device (IUD). Whereas many experts recommend removal of perforated IUD irrespective of symptomatic or not, no-touch is recommended when IUD is outside the uterus and IUD is surrounded and embedded in the fibrotic tissues: attempting its removal may cause bleeding. Thus, asymptomatic perforation poses a management dilemma.

Case report: We report a patient with asymptomatic perforated IUD (copper T) incidentally detected intraoperatively, which we removed under mini-laparotomy. A 32-year-old pregnant woman (Gravida 5 Para 4) presented to us for Medical Termination of Pregnancy and laparoscopic tubal ligation. Vaginal examination revealed uterus of 10 week-size and bilateral fornices were free and non-tender. Transvaginal ultrasound revealed a single live intrauterine embryo of 10 week-size. Laparoscopy revealed that the left cornu of the uterus was perforated, from which IUD thread was observed: no thick fibrosis was observed around the site. Thus, we decided to remove IUD through mini-laparotomy: we held the thread and removed the IUD slowly, with no bleeding. Postoperative period was uneventful.

Conclusion: In this case, considering no fibrosis around the perforated site, leaving this IUD potentially may cause future complications, and thus, we decided to remove it. No conclusion can be made from this single case, we believe that this case may provide information to decide whether perforated IUD, which was incidentally found, should be removed or not.

Keywords: perforation, contraception, CopperT

INTRODUCTION

Uterine perforation is an important complication of postpartum intrauterine device insertion, with an incidence of one in 1,000 insertions. [1] Most cases are "silent" and not recognized at the time of insertion. Symptoms may vary according to the location of extrauterine IUD i.e. pain abdomen, bowel symptoms, frequency of micturition, recurrent urinary tract infection.

A perforated IUD which is symptomatic, need to be removed by laparoscopy or laparotomy. However, when IUD perforation is asymptomatic and it is accidentally detected at the time

of surgery, it poses a dilemma as to whether to remove or leave it. This case report highlights the management of one such a case.

CASE REPORT

A 32-year-old Gravida 5 Para 4 with 4 living children presented to us for Medical Termination of Pregnancy with laparoscopic ligation. All her deliveries were full term normal vaginal deliveries and postpartum CuT375 was inserted 2 years back after last childbirth in a government hospital. According to the patient, she spontaneously expelled the IUD 6 months back. She did not have any complaints.

On examination, the abdomen was soft. Per speculum examination revealed a healthy cervix and vagina. On per vaginal examination, uterus was 10 weeks size and bilateral fornices were free and non-tender.

Transvaginal ultrasound was done which confirmed a single live intrauterine fetus of 10 weeks 6 days. No abnormality was detected.

The patient was taken for Medical Termination of Pregnancy with laparoscopic ligation under short general anaesthesia. On laparoscopy, CuT thread was seen perforating through the left cornu of uterus. The decision for mini-laparotomy taken in view of perforating IUD after appropriate consent from the husband.

Supra-pubic 3-5 cm vertical incision was given and abdomen opened in layers. IUD thread was seen perforating at fundus near the left cornu. It was removed slowly by holding the thread with artery forceps through the perforation site. No active bleeding was observed at the perforation site. Bilateral tubal ligation was done by modifying Pomeroy's method. Postoperatively, the patient was observed and injectable antibiotics(ampicillin, gentamycin and metronidazole) given for 48 hours. The patient was discharged on day 3 and followed on day 7. She had an uneventful postoperative period

DISCUSSION

Most experts recommend removal of perforated IUD whether symptomatic or not.

In the case report by Heinberg et al, three cases of asymptomatic uterine perforation presenting one year after insertion were managed by endoscopic removal. It was emphasised that If the IUD is deeply embedded into the myometrium or presenting within the peritoneal cavity, operative laparoscopy should be done.[2]

Another case reported by Hasan Ali Inal et al of successful conservative management of a dislocated IUD concluded asymptomatic patients, whose vaginal examinations and ultrasonography or X-ray results reveal a dislocated IUD, may benefit from conservative management.[3]

Ministry of health and family welfare of India (2018) recommends:[4]

• Uterine perforation discovered within 6 weeks after insertion: IUD embedded in the wall of the uterus (partial perforation) or outside the uterine cavity (complete perforation) should be removed immediately by laparoscopy or laparotomy.

• Uterine perforation discovered after 6 weeks or more after insertion:

1 IUD embedded in the uterine wall (partial perforation), it should be removed. (hysteroscopic removal may be attempted).

2 IUD outside the uterine cavity (complete perforation) and woman does not have any symptoms, it is safer to leave the IUD than remove it. After 6 weeks, IUCDs that have completely perforated the uterus may become partially or completely covered with scar tissue and this rarely causes any problems. These should be left at their place as removal of such IUCD may lead to a pelvic abscess and other complications.

If the IUD is outside the uterine cavity (complete perforation) and the woman has symptoms such as abdominal pain associated with diarrhoea, or excessive bleeding, it should be removed immediately by laparoscopy or laparotomy.

In our case, though the IUD was inserted more than 6 weeks ago and asymptomatic, since there was no fibrosis, leaving this cu T potentially had the risk of future complications like a perforation in bowel or urinary tract. Rarely, adhesion formation stimulated by a perforated device can result in intestinal obstruction.[5] Therefore removing cu T at this time was the best option with minimum complications. Our patient did well with no post-operative complications.

CONCLUSION: Though asymptomatic, but since there was no fibrosis, leaving this IUD potentially had the risk of future complications. Therefore removing IUD at this time was the best option with minimum complications.

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Consent: Obtained from patient and husband for publication

REFERENCES

1. Harrison-Woolrych M, Ashton J, Coulter D. Uterine perforation on intrauterine device insertion: is the incidence higher than previously reported? Contraception. 2003;67:53–56
2. Heinberg EM, McCoy TW, Pasic R. The perforated intrauterine device: endoscopic retrieval. JSLS.2008;12:97

3. Inal HA, Ozturk Inal Z, Alkan E. Successful Conservative Management of a Dislocated IUD. Case Rep Obstet Gynecol. 2015;130528.
4. Reference Manual for IUCD services, 2018, Family Planning Division, Ministry of Health and Family Welfare, Govt. of India
5. Loveless A, Dhari A, Kilpatrick CC. Perforated levonorgestrel-releasing intrauterine system resulting in small bowel obstruction: a case report. J Reprod Med. 2014;59:611–613.



Fig 1: Embedded Cu T 375(Multiload)