

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

ABSTRACT

Context: Uterine perforation is a rare yet important complication of postpartum intrauterine device. Most experts recommend removal of perforated IUD whether symptomatic or not. Asymptomatic perforations pose a management dilemma.

Case report: We report an unusual case of asymptomatic perforated copper T detected intraoperatively. A 32 year old Gravida 5 Para 4 with 4 living children presented to us for Medical Termination of Pregnancy and laproscopic ligation. She was asymptomatic. Her general physical and abdominal examination was unremarkable. 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.

On laparoscopy, IUD thread was seen perforating through the left cornu of uterus. Decision for minilaprotomy taken in view of perforating IUD . It was removed slowly by holding the thread with artery forceps through the perforation site. No active bleeding was observed and postoperative period was uneventful.

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

Key words: perforation, contraception, CopperT

29 INTRODUCTION

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

35 A perforated IUD which is symptomatic , need to be removed by laparoscopy or laparotomy.
36 However when IUD perforation is asymptomatic and it is accidentally detected at the time
37 of surgery, it poses a dilemma as whether to remove or leave it. This case report highlights
38 management of one such a case.

39 CASE REPORT

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

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

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

50 Patient was taken for Medical Termination of Pregnancy with laproscopic ligation under
51 short general anaesthesia. On laparoscopy, CuT thread was seen perforating through the
52 left cornu of uterus. Decision for minilaprotomy taken in view of perforating IUD after
53 appropriate consent from husband.

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

61 DISCUSSION

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

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

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

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

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

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

76 1 IUD embedded in uterine wall (partial perforation), it should be removed. (hysteroscopic
77 removal may be attempted).

78 2 IUD outside the uterine cavity (complete perforation) and woman does not have any
79 symptoms, it is safer to leave the IUD than remove it. After 6 weeks, IUCDs that have
80 completely perforated the uterus, may become partially or completely covered with scar
81 tissue and this rarely causes any problems. These should be left at their place as removal of
82 such IUCD may lead to pelvic abscess and other complications.

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

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

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

95 **Aknowledgement:** None

96 **Funding:** None

97 Conflicts of interest: None

98 Consent: Obtained from patient and husband for publication

99

100 REFERENCES

- 101 1. Harrison-Woolrych M, Ashton J, Coulter D. Uterine perforation on intrauterine device
102 insertion: is the incidence higher than previously reported? *Contraception*. 2003;67:53–56
- 103 2. Heinberg EM, McCoy TW, Pasic R. The perforated intrauterine device: endoscopic
104 retrieval. *JSLs*.2008;12:97
- 105 3. Inal HA, Ozturk Inal Z, Alkan E. Successful Conservative Management of a Dislocated
106 IUD. *Case Rep Obstet Gynecol*. 2015;130528.
- 107 4. Reference Manual for IUCD services, 2018, Family Planning Division, Ministry of
108 Health and Family Welfare, Govt. of India
- 109 5. Loveless A, Dhari A, Kilpatrick CC. Perforated levonorgestrel-releasing intrauterine
110 system resulting in small bowel obstruction: a case report. *J Reprod Med*. 2014;59:611–
111 613.



114
115 Fig 1: Embedded Cu T 375(Multiload)