Migrated Copper-T Arm as A Nidus in Infra Umbilical Sinus Tract

Dr. Jatin K. Punia¹, Dr. Abhinav Puri², Dr. Anil Kumar³, Dr. Yatindra Kashid⁴, Dr. R. K. Jindal⁵

Assistant professor¹, Senior Resident², Associate Professor^{3,4} and Professor⁵ Departments of General Surgery, ESIC Medical College & Hospital, NH3, Faridabad, Haryana.

Submitted: 01-03-2021 Revised: 07-03-2021 Accepted: 10-03-2021

ABSTRACT: To report a case of migrated copper-T arm with an unusual sinus tract presentation and successful retrieval of the lost intra uterine contraceptive device (IUCD) with complete tract excision.

BACKGROUND

Now a day's, IUCD is being used as a contraceptive method of choice and is being very popular among the users because of its effectiveness. Many cases have been reported of its migration into other adjacent organs since the use of IUCD.

We report a case of migrated Copper-T arm into anterior abdominal wall and present as a discharging infra umbilical sinus. As per the history given by the patient, the faulty technique of insertion of IUCD and its associated complications cannot be over looked.

CASE REPORT

A 32 years old female presented with long standing infra umbilical sinus with the history of infected Copper-T removal 2 years back. MR Fistulogram shows the tract, its extension & foreign body. Patient underwent surgery with complete removal of fistula tract with retrieval of Copper-T remnant as an incidental intra operative finding.

CONCLUSION: A very few cases have been reported regarding uterine perforation via IUCD and present as a sinus. Proper history and relevant investigation help in deciding the plan of action in proper direction. Proper technique of insertion and removal of IUCD including checking all its part also help in decreasing the rate of complications. Early removal of such migrated device, when found decreases the further complication and morbidity.

KEYWORDS: Copper-T, intra uterine contraceptive device, IUCD migration, Infra umbilical sinus

I. INTRODUCTION

Now a day's, IUCD is being used as a contraceptive method of choice and is being very popular among the users because of its effectiveness. Many cases have been reported of its migration into other adjacent organs since the use of IUCD.

We report a case of migrated Copper-T arm into anterior abdominal wall and present as a discharging infra umbilical sinus. As per the history given by the patient, the faulty technique of insertion of IUCD and its associated complications cannot be over looked.

II. CASE REPORT

A 32 years female, G2P2A0L2 presented with the infra umbilical sinus for last 2 years. As per the history of the patient, she had a normal vaginal delivery 2 years back with an immediate Copper-T insertion as a contraceptive device. After 28 days she went to the same clinic with pain abdomen and there Copper-T was removed because it was infected, as told to the patient. 2 weeks after removal of Copper-T she develop an infra umbilical swelling with continues discharge. After 3 months she went to a surgeon where incision and drainage was done for that discharging cavity. Since then, she was on oral antibiotics with a continuous discharging sinus.

Patients underwent MR Fistulogram which shows a linear tract extending via infra umbilical region, through rectus sheath with a blind end inferiorly in pre vesical space with evidence of foreign body.

Patient was then operated with complete removal of sinus tract. While opening the tract proximal to pre vesical space 2 foreign bodies of size 8 mm & 6 mm were found. An on table gynecology opinion was taken for the conformation of foreign bodies as the arm of Copper-T. Patient had an uneventful recovery with complete healed wound.





Figure 1 Figure 2 Fig 1: Retrieved arm (foreign body) of Copper-T remnant. Fig 2: MR Fistulogram showing sinus tract with foreign body.

III. DISCUSSION

Varieties of contraceptive methods were introduced in 1965¹. These devices are very effective and reversible method of contraception. Although there are some related complications like abdominal pain, infection, ectopic pregnancy, perforation of uterine and menorrhagia². Migration rate of copper-T is 0.5-1%/1000 IUCD insertions³. Migrated copper-t was reported from various nearby organs like intestinal tract⁴ or urinary bladder, as copper-t embedded vesicle calculus⁵ and in broad ligament⁶.

Some cases of appendicular perforation have been reported which later mimic like appendicitis⁷. Many surgeons have also reported the Copper-T entangled in omentum⁸ sometimes wrongly inserted in rectum because of lack of experience⁹. Uterine perforation and migration like complication of Copper-T have also been seen in few cases 10,11. Such complications are very rare but are a clear and a loud indicator of immediate removal of IUCD and beside all this IUCD is being used as a first choice of contraceptive around the globe⁵. Migration or complication related to displace IUCD also depends on the hand and experience of the doctor performing the procedure.

For the conformation of migrated Copper-T, x-rays, ultra sonography¹² and at the end CT scan/ MR Fistulogram as used in our case. The pathologies and complication occur after a short interval of any foreign body insertion procedure should raise a suspicion of co-relation between the complication and the procedure. Immediate retrieval of the IUCD after conforming the diagnosis is recommended as the first line of treatment. This retrieval can be performed either by open or laparoscopic technique but that depends on the area as well as time of migration of the misplaced IUCD.

Our patient has an uneventful insertion of Copper-T at the time of FTVD but removal of that IUCD just within few weeks of insertion because of infection should cause a suspicion surgeons/doctors mind to see for other related pathologies and to confirm the parts of that IUCD removed to rule out any residual which later act as a nidus for stone formation⁵ or any sinus or fistula tract. Proper inspecting the IUCD removed can force surgeon to investigate for the missing part which might allow him to remove that missing part as soon as possible and avoid further complications and morbidity of carrying that remnant of Copper-T as a foreign body with a continuous discharging sinus.

IV. CONCLUSION

A very few cases have been reported regarding uterine perforation via IUCD and present as a sinus. Proper history and relevant investigation help in deciding the plan of action in proper direction. Proper technique of insertion and removal of IUCD including checking all its part also help in decreasing the rate of complications. Patient with the history of IUCD removal with its missing part should raise a suspicion in surgeon's mind to investigate for that missing part. Early removal of such migrated/lost device decrease further complication and morbidity.

REFRENCES

- [1]. Zakin D, Stern WZ, Rosenblatt R. Complete and partial uterine perforation and embedding following insertion of intrauterine devices. Obstet Gynaecol Surg. 1981;36:335–53. [PubMed]
- [2]. Sharifiaghdas F, Mohammad Ali Beigi F, Abdi H. Laproscopic removal of a migrated intrauterine device. Urol J2007;4(3):177-179.
- [3]. Kriplani Alka, Garg Pradeep, Sharma Meenakshi, Agarwal Nutan. Laparoscopic removal of extrauterine IUCD using fluoroscopy guidance: a case report. Journal of Gynaecologic Surgery. 2005;21(1):29–30.
- [4]. Key TC, Kreutner AK. Gastrointestinal complications of modern intrauterine contraceptive device. Obstet Gynecol. 1980;55:239–44. [PubMed]
- [5]. Punia K. Jatin, Saxena Gourav, Bayes 25 Years Old Copper-T Embedded Vesical Calculus: A Rare Case Report. International journal of surgery and surgical sciences. 2016; Vol 4:No3.
- [6]. Goyal Sunder, Goyal Snigdha. Displaced intrauterine device: a retrospective study.JMR 2016; 2(2): 41-43.
- [7]. Carson SA, Gatlin A, Mazur M. Appendiceal perforation by copper-7 intrauterine contraceptive device. Am J Obstet Gynecol. Nov 1, 1981;141(5):586–87. [PubMed]
- [8]. Kriplani Alka, Garg Pradeep, Sharma Meenakshi, Agarwal Nutan. Laparoscopic removal of extrauterine IUCD using fluoroscopy guidance: a case report. Journal of Gynaecologic Surgery. 2005;21(1):29–30.
- [9]. Maru Laxmi, Jharvade Hemlata, Lall Pooja Rani. An unusual case of copper-T in rectum. J Obstet Gynecol India. 2005;55(1):79–80.
- [10]. Güvel S, Tekin MI, Kilinç F, Peskircioglu L, Ozkardeş H. Bladder stones around a migrated and missed intrauterine contraceptive device. Int J Urol. 2001;8:78–9. [PubMed]
- [11]. Katara AN, Chandiramani VA, Pandya SM, Nair NS. Migration of intrauterine contraceptive device into the appendix. Indian J Surg. 2004;66:179–80.
- [12]. Demirci D, Ekmekçioğlu O, Demirtaş A, Gülmez I. Big bladder stones around an intravesical migrated intrauterine device. Int Urol Nephrol. 2003;35:495–6. [PubMed]