



A CASE SERIES OF POST PLACENTAL INTRAUTERINE CONTRACEPTIVE DEVICE INSERTION WITH MULTILOAD COPPER 375 IUCD- HYSTEROSCOPIC REMOVAL OF RETAINED FRAGMENT OF FRACTURED INTRAUTERINE CONTRACEPTIVE DEVICE

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ABSTRACT **Background** Post placental insertion of Intrauterine contraceptive devices (PPIUCD) have been advocated as a measure for population stabilization by the Government of India. But literature has been so far scarce on the fractured retained bit of IUCD an atypical adverse effect. **Case presentation** Here we present a case series of three cases of Postplacental Intrauterine contraceptive device (PPIUCD) insertion with multiload copper 375 IUCD. One along with cesarean delivery and other two patients along with normal vaginal delivery. All three had multi load Copper IUCD and a fragment of IUCD was retained while attempting the removal. We did Hysteroscopic removal of the fragment of Copper IUCD. Since it's not a radio-opaque fragment and Sonographic examination will less likely interpret it, we present here as a clinically challenging scenario which was managed less invasively and uneventfully. **Conclusion** Multiload Copper IUCD has no specific advantage over copper 380A for Postplacental insertion as per the clinical experience, but problem of breaking of multiload Copper IUCD has been under reported and hence their role in Postplacental insertion has to be given a second thought.

KEYWORDS : Multiload Copper IUCD, PPIUCD, hysteroscopy, retained IUCD

BACKGROUND:

Post placental insertion of Intrauterine contraceptive devices (PPIUCD) have been advocated by the Government of India (GOI) since 2000 and adapted universally in all states since 2010 with the aid of John Hopkins Program for International Education in Gynecology and Obstetrics (JHPIEGO), funded by United States Agency for International Development (USAID). After written informed consent ruling out the contraindications like Postpartum hemorrhage/ sepsis, PPIUCD insertion with Copper T 380 A or multiload copper 375 IUCD (Figure. 1) is done after delivery of the placenta along with Cesarean or normal vaginal delivery up to 48 hours postpartum. PPIUCD has advantage of high acceptability by the patient, no influence on lactation, lacks need of cervical dilatation and the lactational amenorrhea that follows averts menorrhagia related to IUCD's. In this paper we present three such cases of Postplacental IUCD insertion who attended family welfare clinic in a tertiary hospital of south India during January 2022 to December 2023 (two years).

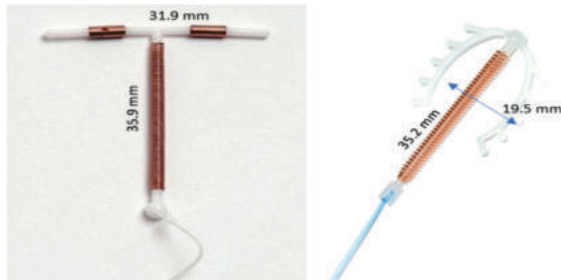


Figure.1 Cu T 380 A and Multiload Copper 375 IUCD 19.5 mm

Case 1:

23 years old Mrs. X P1L1 had a previous cesarean delivery and PPIUCD insertion with multiload copper 375 before 3 years. She has regular menstrual periods and plans for her next conception. Approached a healthcare facility nearby for PPIUCD removal where she underwent IUCD removal. But to the surprise left wing of the multiload IUCD was not retrieved hence referred to us. X Ray Abdomen and pelvis and Ultrasound Pelvis didn't reveal any abnormality. Patient was planned for Hysteroscopic examination and retrieval of the retained fragment after her next periods. We succeeded in the mission without much difficulty.

Case 2:

Mrs. Y aged 27 years P1L1 had multiload Copper 375 PPIUCD insertion at her Last child birth delivered per vaginam 2 and half years ago. Referred from a primary health Centre after fractured right wing of Multiload Copper 375 IUCD while attempting removal.

Transvaginal ultrasound showed an altered echogenic shadow in the posterior wall of endometrial cavity measuring 8mm x 2mm without increased vascularity around it as shown by arrowhead in Figure.2. Patient underwent hysteroscopic removal of the retained part.

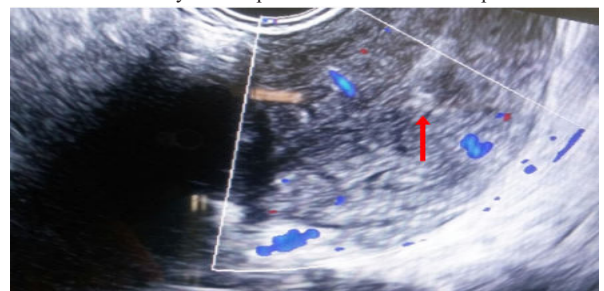
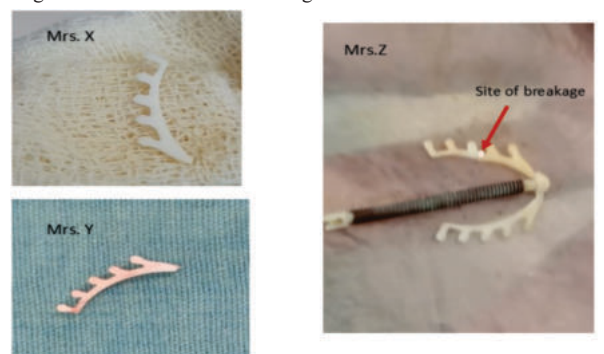


Figure 2. Ultrasound pelvis – retained fragment of Multiload IUCD

Case 3:

31 years P2L2 Mrs. Z had previous 2 normal vaginal deliveries and Postplacental IUCD insertion with Multiload Copper 375 IUCD after Last child birth 2 years ago. She underwent laparoscopic interval sterilization with removal of PPIUCD at a private hospital under anesthesia. But a part of the right wing was not found in the IUCD after removal. Patient was explained that it may not be harmful and was advised follow-up after 2 months. Patient was reviewed after 2 months; she remained asymptomatic but had anxiety of getting the fragmented IUCD removed. She presented to us for the same and hence was planned for Hysteroscopic removal. Intraoperatively the broken fragment was found to be embedded partly in the uterine wall near the cornua and was removed after focal adhesiolysis. All the three fragments removed are shown in Figure.3.



DISCUSSION

Intrauterine contraceptive devices (IUCD) inserted Postplacental or within 48hrs postpartum has higher acceptability and provides an immediate contraception, only demerit being higher expulsion rate than interval or postabortal IUCD insertion (2.3%)¹. Postpartum IUCD reference Manual published by GOI advices follow up after 6 weeks and thereafter if necessary².

All the three patients presented here had a retained fractured fragment of multiloal Copper 375 IUCD 2 to 3 years after insertion. Literature search reveals this condition is less reported.

A case report based in Turkey has shown spontaneous expulsion of broke horizontal arm of Copper T 380A³. Largest published data so far had been the RUDIUS study a retrospective Cohort study by E. Canovas et al in 135 Patients with Intrauterine contraceptive device rupture. They have concluded that waiting for at least one normal menstrual periods after fractured IUCD may pave way for spontaneous expulsion of the fragment⁴. In our patients we have waited for 1- 3 months.

Government of India has also issued Specifications for Cu IUCD 375 and they are procured after these are met especially the Insertion flexibility test and Implant flexibility test⁵. The size of the Copper T 380 A and multiloal Copper 375 are approximately the same in length but the width is higher in the former 31.9 mm vs 19.5 mm. Hence the multiloal Copper 375 IUCD is an attractable option. In a postpartum uterus the size of either of the IUCD is least influential. We hypothesize that the multiloal devices with serrated wings may pave way for the implantation of a part of the IUCD and hence resulting in breaking of the wings at attempted removal. These wings are not radio opaque and also difficult to be interpreted in ultrasound examination.

CONCLUSION

We conclude that Multiloal Copper 375 IUCD has no specific advantage over copper 380A for Postplacental insertion as per the clinical experience, but problem of breaking of multiloal Copper IUCD has been under reported and hence their role in Postplacental insertion has to be given a second thought.

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Conflict of interest: None

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