

## **Study of Awareness, Acceptability and Safety of Postpartum Copper T (IUCD) In Postpartum Women Attending Obstetrics and Gynaecology Department of Tertiary Care Hospital**

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### **ABSTRACT**

**Objectives:** In India knowledge of awareness of contraceptive methods is inadequate and many misconceptions are present in the society. The objective of this study is to assess the awareness, acceptability, safety and efficacy of postpartum IUCD among study population

**Methods:** This is a Prospective study carried out from January 2017 to June 2017 in a tertiary care hospital in which 100 antenatal patients were counseled for contraception out of which 30 underwent postpartum copper T insertion.

**Result:** Mean age distribution was 27.5 years. 10 patients (33.33%) underwent post LSCS CuT insertion and 20 patients (66.67%) after vaginal delivery .80% were para 1 who were counselled antenatally .70% women were aware of this technique and 30% were not aware 30% (30) underwent the postplacental Cu T insertion. Reasons for non acceptance were husband not willing in 42.85% cases, fear of complication in 42.85%, fear of failure in 14.28%. Only 3 women had bleeding which were controlled with NSAIDs and Hematinics. None had any perforation or expulsion. Nobody had any infection postpartum and thread was visible in all cases who came for follow up.

**Conclusion:** Immediate post-partum insertion of IUCD appears to be safe and effective method of contraception. The method may be particularly beneficial in our setting where women do not come for post natal contraception counselling and usage.

**Keywords:** postpartum copper T, contraception

### **INTRODUCTION**

India launched the national family welfare programme in 1951. The objective was reducing the birth rate to the extent necessary to stabilise the population at a level consistent with the requirement of the national economy. Despite this India is world's 2<sup>nd</sup> largest populated country. [1] In India knowledge of awareness of contraceptive methods is inadequate and many misconceptions are present in the society. [2] Modern intra uterine contraceptive device (IUCD) is a highly effective, safe, private, long-acting, coitus independent and rapidly reversible method of contraception with few side effects. [3] Intrauterine contraception is the most cost effective method of contraception today. The postpartum insertion of an IUCD provides a convenient opportunity for the woman to receive IUCD services. This is particularly important for women who have limited access to medical care. The postpartum period is potentially an ideal time to begin contraception as women are more strongly motivated to do so at this time, which also has the advantage of being convenient for both patients and health-care providers. [4]

### **MATERIALS AND METHODS**

100 women attending obstetrics and gynaecological department of tertiary medical college and hospital for antenatal and labour care were included in the study. They were counselled for insertion of

multiload CuT375 immediately after delivery vaginally and intra-caesarean antenatally itself. Their awareness regarding postpartum CuT was noted and if refused reasons for the same were noted. On acceptance CuT 375 was inserted immediately after delivery of baby and placenta in Lscs and in vaginal delivery with long placental forceps. Patients were followed up for 6 months for the outcome like spontaneous expulsion, infection, bleeding perforation.

**Inclusion criteria:** All postpartum mothers who gave consent for postpartum CuT insertion.

**Exclusion criteria:** Patients with uterine anomalies, post partum haemorrhage, chorioamnionitis, premature rupture of membranes greater than 12 hours, severe anemia, fever, retained placenta, active STD, wanting tubectomy.

Statistical analysis was done by SPSS software version 18. Institutional ethical committee consent was obtained.

## RESULTS

Mean age distribution was 27.5 years. 10 patients (33.33%) underwent post LSCS CuT insertion and 20 patients (66.67%) after vaginal delivery .80% were para 1 who were counselled antenatally .70% women were aware of this technique and 30% were not aware .30% (30) underwent the postplacental Cu T insertion. Reason for non acceptance were husband not willing in 42.85% cases, fear of complication in 42.85%, fear of failure in 14.28%. Only 3 women had bleeding which were controlled with NSAIDs and Hematinics. none had any perforation or expulsion. Nobody had any infection postpartum and thread was visible in all cases who came for follow up

Table no 1 Age wise distribution of ANC patients who were counselled

Age	Number	Percentage
20-25	35	35%
26-30	40	40%
30- 35	25	25%

Table no 2 Mode of delivery in whom Cu T was inserted

Mode of delivery	Number	Percentage
LSCS	10	33.33%
Vaginal	20	66.67%

Table no 3 Parity of patients who were counselled

Parity	Number	Percentage
1	80	80%
2	10	10%
3	10	10%

Table no 4 Degree of awareness

Awareness of Postpartum CuT	Number	Percentage
Aware	70	70%
Not aware	30	30%

Table no 5 Acceptability of postpartum cut

Acceptance of CuT	Number	Percentage
Yes	30	30%
Non acceptance	70	70%

Table no 6 Reasons for non acceptance of Cu T

Reason for non acceptance	Number	Percentage
Husband not willing	30	42.85%
Fear of complication	30	42.85%
Fear of failure	10	14.28%
Total	70	100%

Table no 7 Complications after insertion

Complications	7 days	15 days	4 weeks	6weeks	6 month
Bleeding	1	2	o	o	o
Perforation	o	o	o	o	o
Expulsion	o	o	o	o	o
Infection	o	o	o	o	O

## DISCUSSION

As a contraceptive used during post-partum period, the IUD has a distinct advantage. It is free from systemic side effects and does not affect breast feeding as seen with hormonal methods. It is a reversible method. In addition, IUD does not require regular user compliance. It is also not coital dependent and there is no pain on insertion when used post-placentally.

Timing of insertion, counseling and provider training are important factors for IUD insertion in post-partum period as quoted in United Nations Population Information Network (UN-POPIN) report. [5] Of these, the timing of insertion is important as it influences the risk of expulsion. Ideally post-partum insertion should take place within 10 min of placental delivery (post-placental application) or later till 48 h of delivery. The risk of expulsion is higher if inserted after 48 h of delivery. [3] In

the present study, IUD was inserted post-placentally in women delivering by caesarean section or vaginally (within 10 min of delivery of placenta). Four studies in UN-POPIN report found that after six months, the cumulative expulsion rate was 9 per cent for immediate post-placental insertion compared with 37 per cent for insertions done between 24 to 48 h after delivery. [5] A study conducted in India on 115 women undergoing IUD insertion within first 10 days post-partum reported high rate of expulsion; 67 per cent of cases retained IUD, 4.3 per cent of cases had IUD slid in cervical canal and 6.1 per cent women had complete expulsion of IUD. The author concluded positively on post-partum insertion of IUD especially in the rural setting where women come to the hospital only for delivery. [6] Another Indian study conducted on 168 women reported 16.4 per cent as IUD expulsion rate in women undergoing post-puerperal IUD insertion. [7] As the insertion was done in post-puerperal period, the expulsion rate was higher in this study as compared to the present study. Another study by Celen *et al* in 2003 had 11.3 per cent cumulative expulsion rate for CuT 300B. [8]

There were no cases of perforation or misplaced IUD in the present study. Global health technical briefs on immediate post-partum insertion safety and efficacy said that there are a few reports addressing the relative safety of immediate post-partum insertion. [9] A multisite trial found no instances of perforation or infection due to post-partum IUD.

In the present study, there were no cases of PID. A study conducted in 13 countries studied infection (PID) due to IUD. They have reported similar rate of infection with immediate insertion and interval insertion. [10] Another trial did not find any instance of infection due to post-partum IUD insertion. [11]

## CONCLUSION

Insertion of IUCD in immediate postpartum period is an effective, safe, and

convenient contraceptive intervention in both cesarean and vaginal deliveries. PPIUCD insertions by trained clinicians, principles of fundal placement using long placental forceps, and timing of insertion are instrumental in reducing complications and expulsions. Early follow-up examinations are important to identify spontaneous expulsions and provide alternative contraceptives or IUCD reinsertions.

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