

STUDY OF IMMEDIATE POST PARTUM INSERTION OF (CU-T 380A) TO EVALUATE ITS ACCEPTABILITY AND COMPLICATION

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Received : 16/07/2023
Received in revised form : 11/08/2023
Accepted : 23/08/2023

Keywords:

Immediate Post Partum Insertion of (Cu-T 380a), Acceptability, Complication.

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DOI: 10.47009/jamp.2023.5.5.342

Source of Support: Nil,
Conflict of Interest: None declared

Int J Acad Med Pharm
2023; 5 (5); 1742-1746



Abstract

Background: Postpartum period is one of the critical times when both woman and newborn need a special and integrated package of health services as morbidity and mortality rates are quite high and also the women are vulnerable to unintended pregnancy. PPIUCD insertion gives these women an extra edge of leaving the hospital with contraception after institutional delivery. **Materials and Methods:** The present study was prospective analytical study conducted at ANMMCH, Gaya in Obstetrics and gynaecology department from July 2022 to June 2023. All immediate postpartum (10 min to 48 hour of delivery of placenta) women of any age group delivered vaginally. After approval from institutional ethical committee, women delivered by normal vaginal delivery at P.C.M.S. and R.C included in this study. Known distorted uterine cavity, acute purulent discharge, Malignant or benign trophoblastic diseases, Chorioamnionitis, Prolonged rupture of membrane. Unresolved postpartum haemorrhage, Tear during delivery was excluded in this study. During ANC visits, during admission if not booked case. During early labour, on 1st post-partum day. The Performa was prepared in form of questionnaire the information for acceptability and rejection were analyzed by the same. After the active management of 3rd stage of labour, bimanual examination was performed. Written consent was taken from the women. **Result:** 132 eligible postpartum patients were counselled for PPIUCD insertion during their antenatal visits. Out of this 45-patient accepted PPIUCD insertion with proper consent. Acceptance rate was 34.09%. Out of 132 patients only 5 patients under 20 years accepted PPIUCD (3.78%), 34 patients PPIUCD (30.45%) and 78 patients declined PPIUCD (69.54%) in between the age group of 21-30 years , 6 patients accepted PPIUCD (40%) and 9 patients declined PPIUCD (60%) in between the age group of 31-40 years. Above 30 years, 60% refused IUCD insertion because they were inclined for accepting permanent method of contraception. **Conclusion:** Immediate postpartum IUCD insertion is safe, effective, low cost, long acting spacing method. It is concluded from our study that it is a feasible and acceptable method of contraception. The feasibility of accepting PPIUCD insertion can increase with antenatal counselling and institutional deliveries. Acceptance is high in primiparous patients where spacing method of contraception is of choice.

INTRODUCTION

Family planning is an essential fundamental human right for the welfare of the individual, family and society as a whole. Current population of India is 1,21,05,69,573 (2011 census).^[1] India is the second largest country in the world accounting for 17.5% of world's population. With roughly 25 million births annually, India at present contribute one fifth of total world population growth - more than any other country. In India, 65% of women in the first year

postpartum have an unmet need for family planning.^[2]

The common reasons for unmet need are lack of information, and fear about side effects of contraceptive method. Studies show that pregnancies taking place within 24 months of previous birth have higher risk of adverse outcome like abortion, premature labour, postpartum haemorrhage, low birth weight babies, foetal loss, and maternal death.

Women are highly motivated and receptive to accept Family Planning (FP) methods during the postpartum period. Demographic and health survey show that 40

percent of women in the first year postpartum intend to use a Family Planning (FP) method but are not doing so. Only 26% of women are using some method of family planning during the first year of postpartum.^[3]

Postpartum period is one of the critical times when both woman and newborn need a special and integrated package of health services as morbidity and mortality rates are quite high and also the women are vulnerable to unintended pregnancy.

WHO medical eligibility criteria³ state that PPIUCD is safe in postpartum lactating women with advantage outweighing the disadvantage.

An advantage of immediate postpartum insertion of the IUD include client motivation, safety, convenience, assurance of no pregnancy, do not interfere with lactation, facilitate adequate birth spacing, immediately reversible and does not require repeated health care visits for contraceptive refills.

PPIUCD insertion gives these women an extra edge of leaving the hospital with contraception after institutional delivery.

MATERIALS AND METHODS

The present study was prospective analytical study conducted at ANMMCH, Gaya in Obstetrics and gynaecology department from July 2022 to June 2023.

After approval from institutional ethical committee, all immediate postpartum (10 min to 48 hour of delivery of placenta) women of any age group delivered vaginally.

Inclusion Criteria

Women delivered by normal vaginal delivery at P.C.M.S. & R.C.

Exclusion Criteria

Known distorted uterine cavity, acute purulent discharge, Malignant or benign trophoblastic diseases, Chorioamnionitis, Prolonged rupture of membrane. Unresolved postpartum haemorrhage, Tear during delivery.

Research Instrument: Cu-T 380A

During ANC visits, during admission if not booked case. During early labour, on 1st post-partum day. Women who accepted PPIUCD were interviewed for their cause of acceptance and women who were reluctant for PPIUCD were interviewed for their reasons for rejection and their choice for other method of contraception. The Performa was prepared in form of questionnaire the information for

acceptability and rejection were analyzed by the same.

After the active management of 3rd stage of labour, bimanual examination was performed. Written consent was taken from the women. All the required things were arranged in a tray. Cervix was visualized using speculum and retractor. IUCD pack was aseptically opened. Copper-T was held in right hand and slowly inserted through the cervix in to the lower uterine cavity, left hand was placed on top of a sterile sheet over the abdomen, Copper-T was slowly moved upward till the fundus of uterus. The hand over the fundus and copper-T are approximated and then IUCD was left at the fundus and the hand was slowly moved out, while stabilizing the uterus with outside hand. Strings were cut to the level of the cervix.

RESULTS

132 eligible postpartum patients were counselled for PPIUCD insertion during their antenatal visits. Out of this 45-patient accepted PPIUCD insertion with proper consent. Acceptance rate was 34.09% [Table 1].

[Table 1] show the acceptance vs. rejection of PPIUCD. In which out of 132 patient's 45 patients accepted PPIUCD (34.09%) and 87 patients rejected PPIUCD (65.90%).

[Table 2] shows the distribution of patients according to age group. Out of 132 patients only 5 patients under 20 years accepted PPIUCD (3.78%), 34 patients PPIUCD (30.45%) and 78 patients declined PPIUCD (69.54%) in between the age group of 21-30 years , 6 patients accepted PPIUCD (40%) and 9 patients declined PPIUCD (60%) in between the age group of 31-40 years. Above 30 years, 60% refused IUCD insertion because they were inclined for accepting permanent method of contraception.

[Table 3] shows distribution of patients according to their education. Out of 132 patients 70 patients (53.03%) had achieved primary education in which 26 patients (37.14 %) accepted PPIUCD and 44 (62.85%) rejected PPIUCD, 36 patients(27.27%) had achieved secondary education in which 6 patients (16.66%) accepted PPIUCD and 30 patients (83.33%) rejected PPIUCD and 26 patients (19.69%) were graduated in which 13 patients (50%) accepted PPIUCD and 13 patients (50%) rejected PPIUCD, equal number 50% was there in acceptance & rejection group.

Table 1: Acceptance vs. rejection of PPIUCD.

Acceptance vs. rejection	No. of cases	Percentage
Accepted	45	34.09%
Rejected	87	65.90%
Total	132	100%

Table 2: Age variables for different groups.

Age	Accepted	Declined	Total
<20 years	5(3.78%)	0(0.00%)	5(3.78%)
21-30 years	34(30.35%)	78(69.64%)	112(84.84%)

31-40 years	6(40%)	9(60%)	15(11.36%)
Total	45(34.09%)	87(65.90%)	132(100%)

Table 3: Acceptance and rejection according to education.

Education	Acceptance	rejection	Total
Primary	26(37.14%)	44(62.85%)	70(53.03%)
Secondary	6(16.66%)	30(83.33%)	36(27.27%)
Graduate	13(50%)	13(50%)	26(19.69%)
Total	45(34.09%)	87(65.90%)	132(100%)

Table 4: Acceptance and rejection according to parity.

Parity	Accepted	Declined	Total
1	27(46.55%)	31(53.44%)	58(43.98%)
2	8(20.51%)	37(79.48%)	39(29.54%)
>3	10(28.57%)	25(71.42%)	35(26.51%)
Total	45 (34.09%)	87(65.90%)	132(100%)

Table 5: Distribution of subjects according to antenatal care.

	Accepted	Rejected	Total
Booked	33(44.00%)	42(56.00%)	75(56.81%)
Unbooked	25(43.85%)	45(78.94%)	57(43.18%)
Total	45(34.09%)	87(65.90%)	132(100%)

Table 6: Reasons for Acceptance of PPIUCD among parturient whom IUCD was inserted.

Reasons	
Long acting	12(26.66%)
Fewer follow up visit	9(20.00%)
Reversible	6(13.33%)
Safe	5(11.11%)
Non hormonal	5(11.11%)
Less attention for the use	6(13.33%)
No interference with breast feeding	2(4.44%)
Total	45(100%)

Table 7: Reasons for declining PPIUCD.

Reason	
Inclination for other forms of contraception	27(31.03%)
Permanent method	17(9.54%)
No contraception	13(14.94%)
Menstrual irregularities, pain	10(11.49%)
Fear of future fertility	5(5.74%)
Fear of future fertility	7(8.04%)
No reason	8(9.11%)
Total	87(100%)

Table 8: Preferences for other forms of contraception, among those declining PPIUCD.

Method	Total
Male condom	38(43.67%)
DMPA	4(4.5%)
Internal IUCD	12(13.79%)
Pills	6(6.89%)
Abstinence	9(10.34%)
Natural method	18(20.68%)
Total	87(100%)

Table 9: Follow-up.

Follow up	
Yes	35(77.77%)
No	10(22.22%)
Total	45(100%)

Most of the patients were para-1 (48%). Maximum number of patient interviewed were primi gravida 44% (N=98), out of them 48% accepted PPIUCD. Only 27% of grand multipara accepted PPIUCD [Table 4]. In my study acceptance of the PPIUCD was lower among grand multiparous (27%) compared to primiparous (48%) which is statistically significant.

[Table 8] show preferences of other form of contraception, among those declining PPIUCD. Out 87 patients 38 patients preferred male condom (43.67%) , 4 patients approved for DMPA (4.5%),12 patients were approved for Internal IUCD (13.79%),6 patients preferred for contraceptive pills (6.89%) ,9 patients were agreed for abstinence (10.34%) and 18 patients were approved for natural method (20.68%).

DISCUSSION

Looking into the exploding population of India, population control and stabilization is the demand of the nation for its socioeconomic development and welfare of country. Although the available contraceptive methods are many, need of a single efficacious, feasible, and cost-effective method is desirable especially in low resource country like, India.

The present study was conducted to assess the acceptability, feasibility and complications of IUCD insertion in immediate postpartum period of women delivering in our setup. This study included 132 postpartum subjects. All participants after informed consent were included in the study and divided into two groups based on the acceptance or refusal for IUCD insertion.

In present study, 45 (34.09%) women were willing for PPIUCD insertion. 87 (65.90%) women refused PPIUCD insertion.

A study done by Mohamed et al.^[4] Shows that making contraceptive methods easy and convenient for women makes a big difference in ultimate acceptance. In their study, 1024 women were counselled for immediate postpartum insertion of IUCD. Of those who agreed for immediate insertion, 71.2% had the IUCD inserted. Compared to this study acceptance rate in our study is low, possible reasons could be lack of awareness, low education, family pressure and various misconceptions for IUCD insertion.

In our study it was observed that PPIUCD acceptance was more with booked antenatal patient. This was concluded in the study done by Mohamed et al,^[4] which suggests integration of family planning with maternal and child-care services in order to effectively promote the use of contraceptive devices in these women who otherwise would not seek the use of such a device.

In this study maximum patient (53.03%) was educated up to primary and 36 (27.27%) women had achieved secondary education. Women that was graduate, acceptance and rejection rate was 50%. Education has a positive effect on acceptance of PPIUCD insertion but various misconceptions overpowered the acceptance. Choudhary et al. found secondary and higher education influenced contraceptive use.^[5] Ullah and Chakraborty showed women's education as the most important determinant of contraceptive use.^[6]

In our study acceptance of the PPIUCD was lower among grand multiparous (27%) compared to primiparous (48%) which is statistically significant. Study done by Safwat et al,^[7] in Egypt where 30% of primiparous accepted the use of PPIUCD compared to 15% of multipara. In our study majority of multipara patient were interested in permanent method of contraception & inclination of primiparous remains towards spacing methods. Advantages of immediate post-partum insertion include high

motivation, assurance that the woman is not pregnant, and convenience Grimes D.^[8]

In our study, 87 cases that refused for post-partum IUCD insertion were interviewed for cause of refusal and also their choice for other contraception. Out 87 patients 38 patients preferred male condom (43.67%) , 4 patients approved for DMPA (4.5%),12 patients were approved for Internal IUCD (13.79%),6 patients preferred for contraceptive pills (6.89%) ,9 patients were agreed for abstinence (10.34%) and 18 patients were approved for natural method (20.68%) . This was consistent with the study of Rajni Gautam, K. N. Arya.^[9] However 20% were interested in permanent method of contraception at a later date. 14% did not accept any contraception. 13% had fear of menstrual problems like irregularities and pain. 5% had fear of future infertility. 9% patients refused accepting PPIUCD insertion under family pressure (the deciding factors were husband and mother in law) and 8% could not specify the reason. Priya et al,^[10] they explored the reasons behind low acceptance of PPIUCD. They found most common reason for low acceptance of PPIUCD is lack of involvement of husband.

In our study 35 cases (77.77%) reported for follow up. 43% of cases were comfortable with PPIUCD, with no complaints. 57% had few problems with the IUCD use. Tatum HJ et al,^[11] found that the gross cumulative expulsion rate in their study was 16.2%. According to Bhalerao et al,^[12] the expulsion rate was 16.4%. The high incidence was considered due to atrophic or bulky uteri present in some. Post insertion pain was there in 8%. Irregular bleeding was present in 6% patient. There was no case of perforation, PID, endometritis reported in our study. This was consistent with the study of Katheit G.^[13,14] As per Kapp N, Curtis KM,^[15,16] there was no increase in risk of complications with PPIUCD insertion.

CONCLUSION

Immediate postpartum IUCD insertion is safe, effective, low cost, long acting spacing method. It is concluded from our study that it is a feasible and acceptable method of contraception. The feasibility of accepting PPIUCD insertion can increase with antenatal counselling and institutional deliveries. Acceptance is high in primiparous patients where spacing method of contraception is of choice.

Although PPIUCD has high expulsion rate, but looking into current increasing population of India, it is better to give this contraceptive option than leaving a postpartum women on risk of another pregnancy with in short interval.

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