

Original Research Paper

Obstetrics & Gynecology

STUDY OF POSTPARTUM IUCD(PPIUCD) INSERTIONS IN TERTIARY **HEALTH CARE CENTRE, ODISHA**

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ABSTRACT

Objective: In India there is an unmet need for contraception. Intrauterine device is a long acting reversible method. Post partum period is ideal time for family planning counseling. Accessibility to health care facility is more during this period in our country. In view of repeated pregnancies with less gap between pregnancies, the present study was undertaken to determine efficacy, safety and complications of postpartum IUCD(PPIUCD) insertions in tertiary health care centre in Odisha where total fertility rate(TFR) and unmet need for contraception is high.

Method : This is a prospective study carried out at Veer Surendra Sai Medical College and Hospital, Burla, Odisha from October, 2013 to October,2015.Women who fulfilled inclusion and exclusion criteria underwent PPIUCD insertion after vaginal and caesarean deliveries after proper counseling these women were advised to follow up after 6 weeks & 6 months in OBGY OPD No.4.

Result: Total number of cases of 2546 PPIUCD insertions were done during this period and number of cases that reported for follow up was 1540.Therefore 1006 cases were lost during follow up. Out of these 24.22% were post placental, 12% were immediate Post Partum while majority 63.78% were intra caesarean. No major complication was observed .Most common complaints were that of heavy menstrual bleeding (21.5%), missing thread (18.32%). Spontaneous expulsion observed was 4.74% while reported infection cases was 4.22%.

Conclusion: PPIUCD is a strong weapon in family planning armoury. It is a cost effective and safe method of contraception which if implemented properly can help meet the unmet meet for contraception to a large extent.

KEYWORDS:

Introduction:

In India, 65% of women in the first year of post-partum period have an unmet need for family planning. In view of high rate of unintended pregnancy in our country, particularly in postpartum women, Ministry of Health and Family Welfare, Government of India developed a national strategy to expand Post-Partum Intrauterine Device (PPIUCD) services among public sector facilities IUCDs are among the most commonly used long acting reversible method of contraception in women of reproductive age worldwide which reverts fertility quickly as soon as withdrawn and fertility is not impaired at all 1,2. Copper IUCDs are the most commonly used type of IUCD and the CuT 380A has been found to be most effective IUCD 3. Studies show that pregnancies taking place within 2 yrs of a previous birth have increased risk of adverse out comes like abortions, premature labour, post-partum hemorrhage, low birth weight babies, foetal loss and maternal morbidity and mortality. Postpartum period is crucial time when both women and new born require special and integrated package of health services as morbidity and mortality rates are quite high. Cochrane reviews provide evidence of safety & feasibility of post partum IUCD insertions in various settings 4,5.

The evidence for post partum IUCD insertion was weak when this study was undertaken. Hence the present study was planned to evaluate the safety, efficacy and complications of insertion of immediate post partum IUCD in women delivering vaginally or by cesarean section.

Methods

This study was carried out in Veer Surendra Sai Medical College and Hospital, Burla, Odisha in patients coming to labour room, OPD No. 4 from October 2013 to October 2015.

Inclusion criteria

- 1. Immunised cases
- 2. Primi and multiparous women
- 3. Uncomplicated vaginal deliveries and LSCS
- Exclusion criteria

- 1. Prolonged leaking (more than 18 hrs)
- Obstructed labour 2.
- 3. Cases handled outside
- 4. Uterine anomalies
- 5. PPH, APH
- 6. Chorioamnionitis

All the patients coming to labour room were counseled, screened and medically assessed. Risks and benefits were discussed during first stage of labour. Consent for insertion was taken and PPIUCD insertion was done in labour room, operation theatre.

Vaginal PPIUCD insertions were done either within 10 minutes of removal of placenta(post placental), or within 48 hours following child birth(immediate post partum) for which patient was put in lithotomy position. Parts cleaned and draped anterior lip of cervix was held with sponge holding forceps. Copper T 380 A was held by Kelly's forceps. With left hand pressing over fundus of uterus, IUCD was introduced with the help of kelly's forceps till it reached fundus. IUCD was released and forceps withdrawn slowly against lateral wall of uterus.

During caesarean section after expulsion of placenta, both angles of uterus were secured. Cu-T 380 A was introduced with the help of sponge holding forceps or manually till it reaches the fundus. String was left against posterior wall of lower uterine segment and uterine incision stitched taking care to keep IUCD and its string away.

Post insertion counseling was done and women were advised to follow up for examination at our centre at 6 weeks and then after 6 months post partum. At the follow up visit, the women were asked for any complaints like-heavy bleeding per vaginum, vaginal discharge, missing thread and any expulsions if noticed.

Pelvic examination was done, on per speculum examination if threads were not visible, an ultrasound was performed to check for expulsions and confirm presence of IUCD. If the women

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requested for removal of IUCD for any medical or personal reason, she was counseled and IUCD was removed. Women were offered reinsertion of IUCD or alternative methods of contraception in case of expulsions, removal.

Results

Total number of cases that were inserted PPIUCD were 2546 which included post placental(617 or 24.22%), immediate post partum (305 or 12%) and intra caesarean (1624 or 63.78%). Total number of cases reported in OPD 4 were 1540.

Table 1: Baseline	characteristics	(n= 2546))
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No. of women	Percent
311	12.2
1461	57.4
642	22.6
132	5.2
1517	59.58
1029	40.42
1645	64.61
769	30.21
132	5.81
	No. of women 311 1461 642 132 1517 1029 1645 769 132

Table 2 (Parity distribution) (n = 2546)

Parity	No. of women	Percent
1	458	18
2	1184	46.5
3	764	30
>3	140	5.5

Table 3 (Types of PPIUCD insertion) (-2546)



Acceptability of age group 21-25 years was highest, i.e 57.4% (Table 1), while acceptability was highest after 2 living children (46.5% Table 2). Intra caesarean acceptability was being more 1624 women i.e 63.78% Table 3. All these women were asked to come for follow up after 6 weeks and then after 6 months post partum. Total number of cases reported in OPD 4 were 1540. Therefore, 1006 patients were lost to follow up. A significant number of women were literate (59.58% Table 1). Most of the women belonged to lower socioeconomic status(64.61% Table 1).

Table 4 (Acceptability of PPIUCD) (n - 1540)



Table 5 (Complications of PPIUCD) (- 1540)

Complications	No. of women	Percent
Heavy menstrual bleeding	331	21.5
Missing thread	282	18.32
Spontaneous expulsion	73	4.74
Infection	65	4.22
Pelvic pain & back ache	208	13.5
No complications	581	37.72

Large number of patients had no complaints(37.72%), while 4.74 % had spontaneous expulsion. Cases reporting with infection were 4.22 %, while 13.5 % had pelvic pain & backache. Heavy menstrual bleeding was reported by 21.5 % while 18.32 % had missing thread (Table 5). About 8.05% women wanted removal of IUCD, while the rest were willing to continue after proper counseling (Table 4)

Table 6 (Reasons for removal)



Discussion

Women are highly motivated to initiate contraception in post partum period 6,7. This study was conducted to evaluate safety, efficacy & complications of PPIUCD. In majority of our patients i.e 63.78% was intra caesarean while 24.22% was post placental, 12% was immediate post partum. In a study by Anjum Afsan8 56% insertion were after vaginal delivery. Somesh Kumar9 reports similar reports with 51% insertion post placental & 31% intra caesarean. Higher intra caesarean rate in present study was due to the fact that the need for contraception was better appreciated in operative delivery in our patients for fear of complication in next pregnancy if it occurred at short interval.

We lost nearly 39.5% of our cases in follow up this further emphasizes the need to provide women with contraception before they are discharged after delivery as they are the most vulnerable group at increased risk for unintended pregnancy at short interval. Anjum Afsan8 reports 51% follow up at 6 weeks while Kittur et al 10 had nearly 80% patients reporting for follow up.

Main complaint of patients in this study was heavy menstrual bleeding (21.5%), missing thread(18.32%). Shukla et al 11 reported 27.2% with menorrhagia, 24.7% patient had to undergo ultrasound for missing thread in study by Kittur et al 10. This compared well with our study.

In this study 8.05% women wanted removal at the time of follow up mainly due to heavy menstrual bleeding or pelvic pain & back ache. Kittur 10 et al reported 6.7% wanting removal, while Afsan8 reported 10% removal, which was similar to our study.We had low rates of expulsion in our study 4.74%. Afsan8 had reported expulsion rate of 6% while Shukla 11 et al have reported expulsion of 10.68%, Katheit 12 reports expulsion of 10.5%. Our low rate could be due to high percentage of patients lost in follow up as also we had high intra caesarean insertions.

Limitation of this study was low follow up rate. Therefore, we could not accurately estimate expulsion rate or patients willing

to continue with PPIUCD.

Conclusion

Post partum IUCD insertion is cost effective and highly acceptable means of contraception. Apart from mild increase in heavy menstrual bleeding and missing thread, no other major complications were observed. Increased institutional delivery provide opportunity to easy access to contraception in form of PPIUCD in immediate post partum period.

References

- Sivin I, Stern J, Diaz S, Pavez M, Alvarez F, Brache V, Mishell DR et al. Rates and 1. outcomes of planned pregnancy after use of Norplant capsules. Norplant II rods, or levonorgestrel releasing or copper T Cu T 380 A intrauterine contraceptive devices. Am J Obstet Gynaecol. 1992; 166(4): 1208-13.
- Skjeldestad F E. The impact of intrauterine devices on subsequent fertility. 2. Current Opinion Obstet Gynaecol 2008;20(3):275-80.
- Kulier R, O' Brien PA , Helmerhorst F M, Usher Patel M, D'Areangues. Copper 3. containing, framed intrauterine devices for contraception. Cochrane database Systemic review, 2007;(4): CD005347.
- Grimes D A, Lopez L M, Schulz K F, Van Vliet H A, Standwood N L, Immediate 4. post partum insertion of intrauterine devices, Cochrane Database Systemic . Review; 2010;5:CD003036
- 5. Grimes D, Schulz K, Van Vliet H, Stanwood N, Lopez L M, Immediate post partum intrauterine devices, Cochrane Database Syst Rev; 2003;1:CD003036
- Kopp N Curtis KM, Intruterine device insertion during the post partum period, a 6. systemic review; Contraception 2009;80:327-36
- Celen S Moroy P, Sucak A, et al, Clinical outcomes of early Post placental 7. Insertions of intra uterine contraceptive devices. Contraception 2004;69:279-82 Afsan Anjum, Asim Shabnam Shamim, ASH & KMDC June 2014;19(1):15-20
- 8
- Kumar S, Sethi R et al Reproductive Health 2014;11:32 9. 10. Kittur S, Kabadi YM. Int. J Reprod Contracept Obstet Gynaecol 2012 Dec; 1(1): 26-32
- 11. Shukla M, Qureshi S et al, Post placental intrauterine device insertion- A five year experience at tertiary care centre in North India, Int. J Med. Res. 2012; 136: 432-5
- 12. Katheit G, Agarwal J, Evaluation of Post Placental intrauterine device in terms of awareness acceptance & expulsion in tertiary care centre. Int. J Reprod Contracept Obstet Gynaecol. 2013; 2(4): 539-43
- 13. Sample Registration System, RGI Census of India, 2008 14. District Level Household Survey-III, 2007-2008