



Evaluation of clinical outcome of post placental and intracaesarian intrauterine Cu T 380A device insertion

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ABSTRACT

Background: Intrauterine device (IUD) is an ideal method of contraception in post partum phase, as it is highly effective, safe, coitus independent, rapidly reversible method and has distinct advantage of ease of insertion at this time. The aim of our study is to evaluate the safety, efficacy and expulsion rates of post-placental and Intra-caesarian insertion of intrauterine contraceptive device (PPIUCD).

Materials & Methods: Prospective observational study. After counseling the antenatal women CuT 380A was inserted within 10 minutes of delivery of placenta in accepters who fulfilled the Medical Eligibility Criteria.

Results: Total 1845 women were eligible, but only 380 women accepted PPIUCD. Acceptance was seen more in literate and primipara women. Common complications were chronic lower abdominal pain, bleeding per vagina.

Conclusions: Postplacental intrauterine device is the most safer, effective and convenient contraceptive method for immediate postpartum period.

KEYWORDS : Intrauterine device, Post-partum contraception, Intracaesarian insertion

INTRODUCTION-

Unintended and unwanted pregnancies are still a major concern in India, despite the availability of safe and effective forms of contraceptive methods which contributes in rapid growth of population. As post partum period is highly vulnerable period to unintended pregnancy as there are limited contraceptive options available in the breast feeding women but on the same period specially during immediate postpartum period women are highly motivated for to accept the use of the contraceptive methods so postpartum women need a range of effective contraceptive methods to be able to prevent an unplanned pregnancy [1,2]. The National Family Health Survey (NFHS) 2005-2006 reported that 61% of births were spaced less than three years and that 22% of married women had an unmet need for family planning. A subsequent stratified analysis suggested that 65% of women in the first year postpartum had an unmet need for family planning and intrauterine devices are used by only two percent of current users of contraception in India[3,4]. As in our country most of postnatal women do not return to healthcare centers after delivery even for a routine postpartum check-ups, leave aside contraception, due to lack of education, awareness, social pressure, and nonaccess to facilities nearby. So we should more emphasize on strengthening of immediate postpartum family planning services. Intrauterine devices in this period is an ideal method of contraception as it is highly effective, safe, coitus independent, rapidly reversible method and has distinct advantage of ease of insertion at this time.

Many of antenatal women find more conveniences to accept this method of contraception if they counseled well. The opportunity for the success of this contraceptive method seems to excellent as now a days increasing institutional deliveries under JSY scheme, acceptors counseled by trained staffs.

This study was conducted to evaluate the clinical outcome in terms of safety and efficacy of immediate postpartum intrauterine contraceptive device (PPIUCD) insertion in women delivering vaginally and by caesarean section.

MATERIAL AND METHOD-

The study was prospective observational study, conducted in the department of obstetrics and gynecology, V.C.S.G.G.R.I. & M.S. Srinagar Garwal Uttarakhand from April 2013 March to 2015. The counseling on postpartum contraception was given during antenatal care visits and during the postpartum period. The

antenatal women who were admitted and delivered either by vaginally or by caesarian section were counseled and CuT 380A was inserted within 10 minutes of delivery of placenta in accepters who fulfilled the Medical Eligibility Criteria and had no contraindications for PPIUCD. CuT 380A was placed in uterine fundus with the help of long and curved Kelly's Placental Forceps for vaginal insertions, within 10 minutes of removal of placenta. During caesarean section ring forceps were used to place the IUCD in fundus of uterus through the lower segment incision which was closed subsequently as routine. The IUCD strings were not trimmed in both types of insertions and left in uterine cavity. Total 1845 women were eligible for PPIUCD insertion but only 380 women accepted PPIUCD insertion.

Inclusion Criteria- All antenatal patients admitted for delivery to our hospital were counseled for PPIUCD. Consent was taken from those, who opted for insertion. Among those who fulfilled the following criteria were considered for inclusion:

- 18–45 years old.
- Gestational Age 36–40 weeks.
- Desire to have CuT after counseling before insertion.
- No infections.
- Hb \geq 8g/dl.
- AMTSL universally provided after the delivery of the baby.

Exclusion Criteria

- Fever during labor and delivery.
- Having active STD or other lower genital tract infection or high risk for STD.
- Known to have ruptured membranes for more than 24 h prior to delivery.
- Known uterine abnormalities e.g., Bicornuate/septate Uterus, uterine myomas,
- Manual removal of the placenta.
- Unresolved postpartum hemorrhage or postpartum uterine atony requiring use of additional oxytocic agents in addition to AMTSL.

RESULT-

Table 1- Sociodemographic characteristics of the cases (n=380)

i)Age (yrs)	N	Percentage %
<19	8	2.1

20-29	201	52.9
30-39	170	44.7
>40	1	0.3
ii)Education		
Illiterate	5	1.3
Primary	160	42.1
Secondary	200	52.7
Higher	15	3.9
iii)Religion		
Hindu	370	97.8
Muslim	10	2.2
iv)Occupation		
Housewife	324	85
Employed	56	15
v)Parity		
1	172	45.3
2	142	37.3
3	56	14.8
>3	10	2.6
vi)Last child birth		
0-2years	218	57.4
2-3years	160	42.1
>3years	2	0.4
Follow up	278	73.1%
i) clinic	134	35.3%
ii) over phone	144	37.8%

Table 2- Complications among PPIUCD acceptors

Complications	N (%)	PPIUCD	IntraCaesarian IUD
i)chronic pain	58 (20.8%)	27(9.7%)	31 (11.1%)
ii)expulsion	15 (5.4%)	10(3.6%)	5 (1.8%)
iii)bleeding	52 (18.7%)	20(7.2%)	32 (11.5%)
iv)string problems	30 (10.8%)	8 (2.8%)	22 (8%)

Table 3- Timing and rate of expulsion of Cu-T

Time of expulsion	N	Percentage %
< 7 days	4	1.4
7 days to 4weeks	9	3.3
>4weeks	2	0.7

Table 4- Reasons of removal of Cu-T (N-39)

Reasons	N	PPIUCD	IntraCaesarian IUD
i)Severe PID	1(0.3%)	1	0
ii)Bleeding p/v	8(2.9%)	3	5
iii)missed string	30(10.7%)	10	20

Discussion-

In this study majority of women who accepted postpartum IUCD were primary and secondary educated i.e. 42.1% and 52.7% respectively, while only 1.3% illiterate women were accepted the postpartum IUCD which shows the education plays an important role in the decision of future pregnancy plans. This was similar to a study done in Egypt by Safwat et al., where women with no formal education had an acceptance of 9.4 %, while those with formal education were 19.4 % [5].

Acceptance of postpartum IUCD was maximum amongst the primigravida (45.5%) and minimal in multigravida women (17.4%).this finding is similar as by sujnanendra et al.[6]. contrary to that of the study by Grimes et al.[7].where they found higher acceptance in multiparous clients (65.1 %).As duration of last child birth is an important factor for acceptance of PPIUCD, this study shows about majority of acceptors of PPIUCD (57.4 %) had their last childbirth less than 2 years. As this is well known fact that proper timing and spacing between pregnancies have a positive effect on maternal health and neonatal outcomes [8]. This finding in the study indicates toward a positive maternal health in future. This study had

follow up of 73.1% of PPIUCD acceptor rest 27% were lost to follow up. Amongst follow up 35.3% follow up in the hospital and 37.8% were followed over phone.

Most common complication after PPIUCD insertion was chronic lower abdominal pain (20.8%) which is more than half i.e. (11.1%) in intraCaesarian PPIUCD insertion. Second most common complication was excessive bleeding per vagina (18.7%) which was again more common in intraCaesarian PPIUCD (11.5%). String related problems were third another common complication (10.8%) which was 8% in intraCaesarian PPIUCD insertion.

Expulsion of PPIUCD amongst acceptors were 5.4% in which more than half were PPIUCD insertion after vaginal delivery (3.6%). Majority of expulsion of PPIUCD was between seven days to four weeks(3.3%).This was almost similar to a multi country study done in Belgium, Chile and Philippines which showed the rate of expulsion at 1 month, ranging from 4.6-16.0%[9]. Simillar differences in expulsion rate was also observed in a recent systematic review of PPIUCD insertions [10]. In the course of follow up 14% of acceptors were removed the PPIUCD, most common reason was string problems (10.7%) second commonest reason was bleeding per vagina (2.9%) and 0.3% removal due to severe PID.

Conclusion- Postplacental intrauterine device is the most safer, effective and convenient contraceptive method for immediate postpartum period. Acceptance for PPIUCD is high amongst primigavida and those who had a short duration from their last child birth (less than 2 years). Education has positive impact on the acceptance of PPIUCD. Postplacental IUD during cesarean delivery are associated with lower expulsion rates but higher complications in form of chronic abdominal pain, bleeding per vagina and string problems than postplacental vaginal insertions.

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