

Clinical Outcome, Awareness and Acceptance of Post-partum/Post-placental IUCD in Our Community

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ABSTRACT

Aim: To determine the level of awareness, factors affecting acceptance and clinical outcome of Post-partum IUCD, in terms of efficacy, complications, continuation and removal rate.

Methodology: A questionnaire based prospective study conducted from September 2016 to September 2018 in Gynaecology/Obstetrics department of Social Security Hospital Gujrat. All patients delivered during this period were counselled and IUCD placed after 10 minutes of delivery with standard technique in women fulfilling eligibility criterion after taking informed consent. Regular follow-up done for 1 year to study its safety, efficacy, effects on menstrual cycle, expulsion, continuation and removal rate.

Results: Among 324 women 50 volunteered for PPIUCD, 274 declined, 45 women had regular follow-up and 5 patients didn't report back. The level of awareness was zero. Majority of acceptors were of age 30-35 years (44%), multi-para (64%), Educated till primary level (36%) and non-working (66%). Major complications were menstrual disturbances and thread problem.

Conclusion: Women and health care providers have little awareness of copper T as PPIUCD. Wrong information and myths associated with its use lead to low acceptance rate. The PPIUCD was demonstrably safe, effective with high retention rate and fewer side effects. String of PPIUCD is less visible after caesarean insertion as compared to vaginal delivery.

Keywords: PPIUCD, Multipara, post-partum

INTRODUCTION

Family planning is important not only for population stabilization but is also central to improve maternal and child health¹⁸. Demographic and Health survey shows that 40% of women in 1st year postpartum intend to use a family planning method but are not doing so⁴; this prospective definition ensures that women should offer a contraceptive method even while they are still amenorrhic and does not take into account the protection offered by amenorrhea and abstinence¹⁶.

A 2010 Cochrane Review concluded that PPIUCD was a safe and effective contraception³. Postpartum IUCD insertion can be done post-placental i.e. within 10 minutes of placental expulsion, Intra-caesarean at the time of caesarean section or within 48 hours of delivery⁹. IUCD Insertion immediately after delivery is feasible for both women and health-care provider as pregnancy is excluded, patient is motivated, clinical setting is convenient for practitioner and more clients are available³. It does not interfere with lactation, inserted before assumption of sexual activity, chances of perforation are almost nil due to thick-walled uterus, menstrual abnormalities do not occur as many women as such have amenorrhea or oligomenorrhea during lactation period⁹. Due to ignorance or fear of complications acceptance of contraceptive methods are low in our community⁷. The efficacy of intra-caesarean IUCD insertion without added risk of infection morbidity has also been reported by different studies. However, Obstetricians are still hesitant to implement the

advantage of Cu T-380 A to women undergoing caesarean delivery¹⁻⁴.

MATERIALS & METHODS

This is a prospective, cohort study conducted at Gynaecology & Obstetrics department of Social security hospital, Gujrat from September 2016 to September 2018. All women delivered during this period were included in this study. They were counselled and IUCD was inserted with standard technique within 10 minutes of delivery of placenta in acceptors who fulfilled eligibility criteria and had no contra indication after taking informed consent. Patients were followed up for 1 year on regular basis. On every visit, they were inquired about any complication and visibility of thread. Ultra sound was done to confirm proper placement of PPIUCD.

Inclusion Criteria

1. All antenatal patients admitted for delivery in our hospital and consented for insertion of PPIUCD.
2. Hb > 9 g/dl
3. Platelets count > 150*106/ul

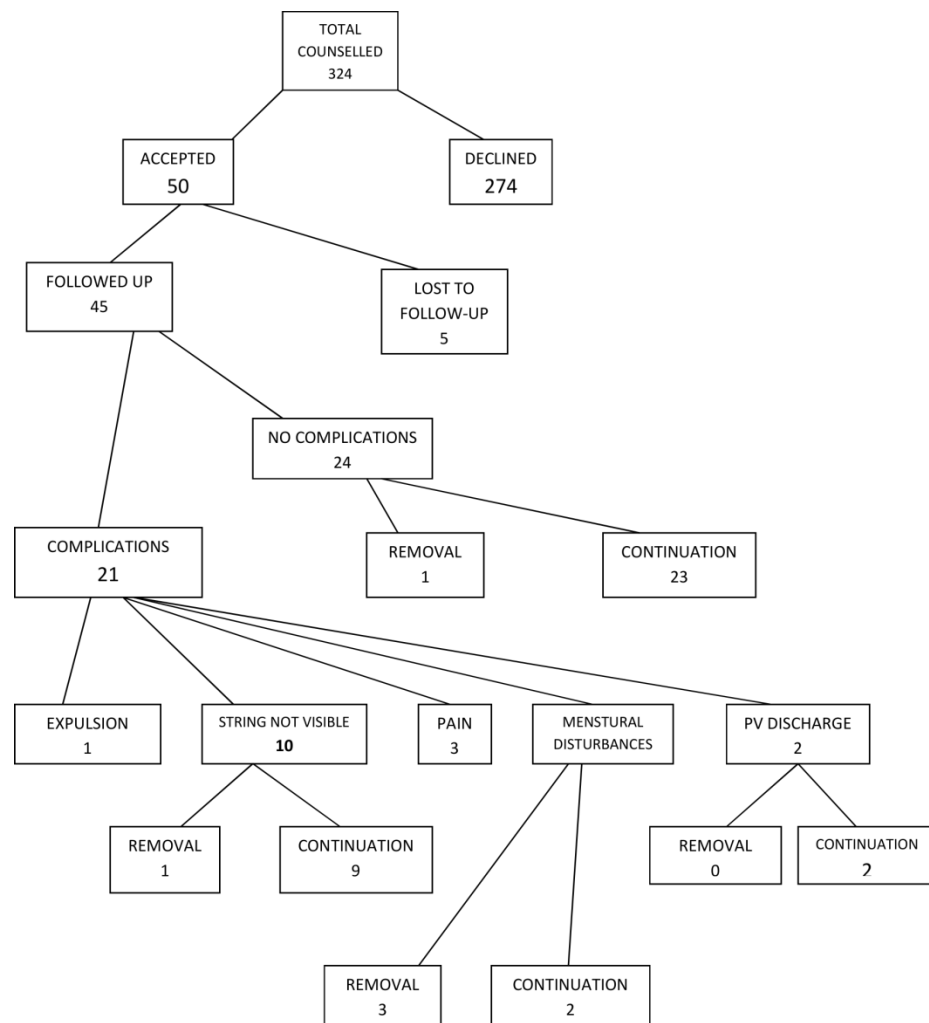
Exclusion Criteria

1. PROM > 24 hours
2. Uterine abnormalities
3. Active lower genital tract infection
4. Post-partum haemorrhage
5. Women in active labour with medical disorder.
6. Manual removal of placenta.
7. Women allergic to copper.

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RESULTS



Total Removal = 5 / 45 (11.1 %)
 Total Continuation = 40 / 45 (88.8%)

Table 1:

Characteristics	Accepted		Declined	
	(N=)	N(%)	(N=)	N(%)
Age				
< 20	Nil			
20-25	10	20		
25-30	15	30		
30-35	22	44		
35-40	2	4		
40 >	1	2		
Parity				
Primipara	13	26		
Multi para	32	64		
Grand Multip	5	10		
Educational status				
Primary	20	40	50	18
Matric	12	24	56	20
Higher education	8	16	56	20
No formal education	10	20	112	40
Occupation				
House wife	33	66	213	77
Employed	17	34	61	22

Complications

COMPLAINS	6 weeksN (%)	3 monthsN (%)	6 monthsN (%)	12 months N (%)
Pain abdomen	2 (4.4)	1 (2.2)	-	-
Menstrual abnormalities	3 (6.6)	1 (2.2)	1 (2.2)	-
Discharge P/V	-	1 (2.2)	1 (2.2)	-
Perforation	-	-	-	-
Pregnancy	-	-	-	-
String Visibility with CuT in uterine cavity				
String visible	26(76.4%)	4(11.7%)	4(11.7)	-
String Not visible	10 (22.2)	-	-	-
Spontaneous Partial expulsion	1 (2.2)	-	-	-

DISCUSSION

Post-placental IUCD is a long-acting reversible contraceptive used in immediate post-partum period which avoid unwanted conception without interfering with breast feeding². Due to lack of awareness of PPIUCD among clients and staff, its acceptance is low⁷. Although 48.4% female were aware of Cu T as a method of contraception only 21.9% of 48.4% have awareness of PPIUCD⁵. In our study not a single client among 342 was aware of PPIUCD.

Lack of adequate knowledge, wrong information and believes are common hurdles in acceptance of contraception⁷. Also family and peers played very important role in decision making². In our study acceptance rate was 15.4% as 50 clients among 324 opted for PPIUCD after counselling. This was close to study done by Mishra's et al, where acceptance rate was 17.5% (564 accepted among 3209 women)¹.

A study held in Zimbabwe showed positive effect of education on contraceptive usage. In our study 80% women who opted for PPIUCD had a formal education up to primary level thus confirming this fact.

Majority of acceptor in our study were multi-gravidae 64%. This result was contrary to study done by Yadave's et al, where majority of acceptor (49.5%) were primiparous² but it was similar to study conducted by Borthakur's et al, who found that multipara opted for PPIUCD more than primipara³. Only 10% grandmultip accepted PPIUCD as they were more interested in permanent method of contraception or sterilization.

In a study conducted by Vidyarana R et al women undergoing caesarean section opted more for PPIUCD than normal vaginal delivery i.e. 83.73% which is statistically significant (P value < 0.05%)⁴. Similarly in our study majority of PPIUCD acceptor were delivered by caesarean delivery (37 out of 50) (74%) as compared to client delivered vaginally (20%). One reason behind this may be more patient in our set-up delivered by elective-caesarean section. Yadave S et al contradict this fact by proving 82% acceptance in clients delivering vaginally². However whether IUCD inserted vaginally or intra-caesarean efficacy is same¹².

Visibility of string is important as it assures proper placement and easy removal. Mostly string is visible through cervical os in intra – caesarean insertion but in few cases initially it is not visible but later on with involution of uterus became visible in few weeks. This may cause apprehension to healthcare worker as missing string may indicate expulsion, mal-positioning or perforation¹⁴. Bhutta et al stated that visibility of string is 92% & 96% at 6 months after intra-caesarean and interval insertion

respectively¹⁴. Ergoglu et al reported that the rate of curling-up of thread is 3.3% and 7.8% at 6 months and 12 months after postnatal IUCD insertion respectively¹⁷. Missing thread in our study after 1 year was 24.4% but in all cases Copper T was in situ on ultrasound with no misplaced IUCD or perforation among 45 clients with only one expelled IUCD i.e., 2.2%. So it negates the belief that IUCD insertion immediately after delivery is associated with higher expulsion rate than interval IUCD insertion¹².

CONCLUSION

Awareness of PPIUCD among women was very poor despite high acceptance. Majority of women never heard about PPIUCD. Acceptance was higher among women who had primary education, multi gravida, belong to age group 30-35 and house wives. Women who underwent caesarean section opted more for PPIUCD as they were more concerned about birth spacing and contraception. The PPIUCD was demonstrably safe, having no reported incidence of perforation with lower rates of expulsion, pelvic infection, menstrual abnormalities and few lost strings. The Government needs to develop strategies to increase public awareness of PPIUCD and arrange training programs in order to increase knowledge and skills among health care provider and community.

REFERENCES

1. Mishra S. Evaluation of safety, Efficacy, and Expulsion of Post-Placental and Intra-caesarean Insertion of Intrauterine Contraceptive Devices (PPIUCD). J Obstet Gynaecol India. 2014 Oct; 64(5):337-343.
2. Yadav S, Joshi R, Solanki M. Knowledge, Attitude, Practice and Acceptance of Post-partum IUCD among post-partal women in a Tertiary Care Center. IJRCOG ISSN: 2320-1770.
3. Borthakur S, Sarma A, Alakananda et al. Acceptance of post-partum IUCD among Women attending Gauhati Medical College and Hospital (GMCH) for delivery between January 2011 to December 2014 and their follow-up. J Evol Med Dent Sci. 2015;4:2278-4748.
4. Vidyarama R, Nagamani T, Usha P. PPIUCD as a long acting reversible contraceptive (IARC)-an experience at a tertiary care center. Int J Scientific Res. 2015;4(5):5-7.
5. Nigam A, Ahmad A, Sharma A. Post-partum intrauterine device refusal in Delhi: reason analyzed. J Obstet Gynaecol India. 2015;1-6.
6. Postplacental IUCD insertion- 2 years experience at a Government Medical College, VIMS, BELLARY, KARNATAK???
7. Sharma A, Gupta V. A Study of factors affecting acceptance of PPIUCD in South-East Rajasthan. Int J Community Med Public Health. 2017;4(8):2706-10.

8. Tomar B, Saini V, Gupta M. PPIUCD: Acceptability and safety. *International Journal of Reproduction, Contraception Obstetrics and Gynaecology* 7(5) 2011-2017,2018.
9. Kathpalia SK, Mustafa M.S. Awareness about postpartum insertion of intrauterine device among antenatal cases. *Med J Armed Forces India* 71(2015)221-224.
10. Katheit G, Agarwal J. Evaluation of post-placental intrauterine device (PPIUCD) in terms of awareness, acceptance and expulsion in a tertiary care center, *Int J Reprod Contracept Obstet Gynaecol.* 2013;2(4):539-43.
11. Chethan R et al. Study of post partum intrauterine contraceptive device practices and causes for discontinuation of PPIUCD at follow-up in a tertiary hospital, *Int J Reprod Contracept Obstet Gynaecol.* 2018 june,7(6):2299-2303.
12. Halder A et al. A prospective study to evaluate vaginal insertion and intra-caesarean insertion of post-partum intrauterine contraceptive device. *The Journal of Obstetrics and Gynaecology of India* (January-February 2016)66(1):35-41.
13. Hooda R et al. Immediate post partum intrauterine Contraceptive Device insertion in Caesarean and Vaginal Deliveries: A comparative study of follow-up outcome. *International Journal of Reproductive Medicine* 2016, 7695847(5).
14. Singal S et al. Clinical outcome of post-placental Cu T 380 A insertion in women delivering by Caesarean Section. *Journal of clinical and Diagnostic Research: JCDR.* 2014 sep;8(9)
15. Gupta G et al. The clinical outcome of post-placental Copper –T 380A insertion with long placental Forceps(Kelly's Foreceps) after normal vaginal delivery and Caesarean section. *The Journal of Obstetrics and Gynaecology of India*(November-December 2015)65(6):386-388.
16. Nguyen Toan Tran et al. Effectiveness of a package of postpartum family planning interventions on the uptake of contraceptive methods until twelve months postpartum in Burkina Faso and the Democratic Republic of Congo: The YAM DAABO study protocol. *BMC Health Services Research*(2018)18:439.
17. Best practice in postpartum family planning(Best Practice Paper No.1)RCOG(24 june, 2015)
18. Chauhan R, Sahni S, Hanumantaiya S.Evaluation of Acceptability, safety and expulsion rate of PPIUCD. *IJRCOG*(2018).
19. United Nations Development Programme/UN population Fund/WHO/ World Bank Special Programme of Research Training in human reproduction. Long-term reversible contraception. Twelve years of experience with the T Cu 380 A and T Cu 220C. *Contracept.* 1997;56:341-52.
20. Eroglu K, Akkuzu G, Vural G, Dilbaz B, Akin A, Takin L et al. Comparison of efficacy and Complications of IUD insertion in immediate post-placental/early postpartum period with interval period: 1 year follow-up. *Contracept* 2006;74(5):376-81.
21. Celen, Sugal A, Yildiz Y, Daniman N. Immediate post placental insertion of intrauterine contraceptive device during Caesarean Section. *Contraception.* 2011;84(3):24-43.