

Post placental intrauterine contraceptive device (PPIUCD): Women's experience at Combined Military Hospital Lahore

Saima Qamar, Pakeeza Aslam, Shazia Tufail, Hajra Omar,
Maria Ahmad, Faiza Ibrar

ABSTRACT

Background & Objectives: The objective of this study was to evaluate post placental intrauterine contraceptive device (PPIUCD) in terms of awareness, acceptance, and expulsion in women.

Place & duration of study: It was a prospective longitudinal study, conducted at Department of Obstetrics and Gynecology, Combined Military Hospital Lahore over a period of six months.

Methods: All patients visiting antenatal clinic or labor room in early labor were counselled for insertion of Cu T -380A after vaginal delivery or at lower caesarean section. A total number of 232 women were included in the study after informed consent. Women with ruptured membranes for more than 18 hours, antepartum, postpartum hemorrhage, and evidence of chorioamnionitis were excluded from study. All the collected data was entered and analyzed through SPSS version 20.

Results: Total number of deliveries were 1814 and acceptance rate is 12.8%. Only 4.5% of patients were aware about PPIUCD insertion. Maximum patients were between 25-29 years of age (36.6%). Patients with two children have highest acceptance rate of 32.8%. At six week postpartum, the expulsion rate is 1.9% while 3.3% of patients have missing strings which were coiled up in the uterus. The discontinuation rate is 6.5% (15), the reason being irregular vaginal bleeding in 3.5% cases, infection in 1.3% cases and other causes in 1.7%. The patients willing to continue PPIUCD were 93.5%.

Conclusion: Insertion of IUCD in immediate postpartum period is an acceptable, effective, safe and convenient contraceptive intervention in both caesarean section and vaginal deliveries.

Keywords: Contraception, Copper T, Post placental Intrauterine Contraceptive Device

INTRODUCTION

Pakistan ranks number six in the list of countries by population and is equivalent to 2.57% of total world population on 0.53% of world's surface area. In 2015, the total population of Pakistan was estimated to be 189.9 million. Family Planning (FP) in Pakistan has been increasing by almost 1% per year since 1990. At present, about 30% of married women, use some form of family planning method. In Pakistan, the unwanted birth rate is 16% and total fertility in Pakistan is 3.1% per woman. Total demand for family planning in Pakistan is 55% while contraceptive prevalence rate is 35% and unmet need for family planning is 20%.¹ The methods that can be used during postpartum period are barrier methods, progesterone only pills, sterilization and intrauterine contraceptive device (IUCD). IUCD insertion has many advantages over other methods like simplicity, very little motivation, reversibility, free of cost availability, nearly no systemic side effects and high continuation rate. According to the World Health Organization Medical Eligibility Criteria, an IUCD can be inserted in the first 48 hours postpartum, known as a postpartum IUCD (PPIUCD). The other option is after six weeks postpartum. A woman with short

interpregnancy interval faces risk of miscarriages, preterm delivery, premature rupture of membranes, anemia and maternal mortality². The short pregnancy interval results in increased risk of prematurity, small for gestational age and early neonatal death.^{3,4} In developing countries delivery may be the only time when healthy women comes in contact with health care service and it is the best time for counseling of patient as chances of returning for contraceptive device is uncertain. Greater attention, communication and counseling is very important to improve maternal health.⁵ It is also observed that women are highly motivated and acceptive to get contraception during postpartum period. A patient may conceive during or immediate after puerperium as return of ovulation is not predictable after delivery. PPIUCD provides exceptionally useful contraception during puerperium & afterwards.⁶ The papers cited in the Cochrane review were from studies that were more than two decades old, and a lot of the IUCD's mentioned are no longer preferred. That being said, it remains a valuable source of information concerning the safety and feasibility of IUCD usage in the immediate post-partum period. We undertook the study in order to improve the safety and acceptability of IUCDs and to determine a contraceptive method which is acceptable, safe and feasible for patients.

Correspondence: Dr. Saima Qamar

Assistant Professor

Department of Obstetrics & Gynecology

CMH Lahore Medical College

E-mail: saimaomar@gmail.com

MATERIAL AND METHODS

This was a Prospective longitudinal study, conducted in the Department of Obstetrics and Gynecology, Combined Military Hospital Lahore during six months from 1st January 2015 to 30th June 2015. All patients visiting antenatal clinic or labor room in early labor were counseled for insertion of Cu T -380A after vaginal delivery or lower caesarean section. Informed and written consent was obtained before delivery from patient and husband. Those willing for immediate postpartum insertion were placed with CuT 380, with the help of Kelly's Forceps within 10 minutes of removal of placenta. During caesarean sections, the CuT 380 was placed directly into the uterine fundus with fingers and the incision was closed. PPIUCD insertion was done by residents, midwives and consultants who had been trained for this purpose. Women with ruptured membranes for more than 18 hours, antepartum, postpartum hemorrhage, and evidence of chorioamnionitis were excluded from study. Follow up was scheduled at six weeks postpartum. The patient was then assessed for desire to continue IUCD as method of contraception. Women who wished for removal of IUCD were considered for discontinuation. Complications such as expulsion, infection, irregular bleeding and missing strings were also noted. All the collected data was entered and analyzed through SPSS version 20.

RESULTS

Of these 232 patients included 143 had received education only up till the primary level, 48 had received secondary education as well, and 41 had undergraduate

degrees. 139 (59.9%) of patients earned more than Rs 20,000/month. 80(34.5%) earned between Rs 10,000 and Rs 20,000, and 13(5.6%) earned less than Rs 10,000/month. Only 5 (2.2%) of patients had jobs; 227(97.8%) were housewives. Patients with higher income were more likely to use contraception.

Total number of deliveries were 1814 and acceptance rate is 12.8%. Only 4.5% of patients were aware about PPIUCD insertion. At six week postpartum, the expulsion rate is 1.7% (4) while 3.3% of patients have missing strings which were coiled up in the uterus. The discontinuation rate is 6.5% (15) ,the reason being irregular vaginal bleeding in 3.5% cases , infection in 1.3% cases and other causes in 1.7%.The patients willing to continue PPIUCD were 93.5%.

DISCUSSION

PPIUCD is long acting, highly effective method of contraceptive with easy accessibility. It is also reversible and cost effective. It has good acceptability because it has no adverse effects on breast feeding.⁷ Cu T has to be proven with family planning method similar to that achieved by tubal sterilization according to UN 1997.⁸ The total acceptance rate in our study was 12.8% when compared with the study conducted in 2003 by S. KargerAG and Basel, it was 28.9% which was quite high. In other study in 2013 done by Abhilasha Gupta , the total acceptance rate was 14.4%.⁹ Majority belonged to age group of 25-29 years (36.6 %), as they considered

Table 1: Age Distribution

Age ranges	N	(%)
15-19	3	1.3
20-24	44	19.0
25-29	85	36.6
30-34	71	30.6
35-39	22	9.5
40+	7	3.0
Total	232	100

Table 3: Place of Counseling

Place of counselling	N	(%)
OPD	93	40.1
early labour	129	55.6
post partum	10	4.3
Total	232	100.0

Table 2: Number of Children

Number of living children	N	(%)
0	19	8.2
1	62	26.7
2	76	32.8
3	38	16.4
4	16	6.9
5	18	7.8
6	2	.9
7	1	.4
Total	232	100.0

Table 4. Mode of Insertion

Mode of insertion	Mode of delivery	N	(%)
Kelly	SVD	134	57.8
	Assisted delivery	2	.9
Manual	LSCS	96	41.4
Total		232	100.0

PPIUCD, an effective method of spacing. R. Sethi (2014) found that majority of PPIUCD acceptors were with average age of 24 years.¹⁰ Our study results show that 76(32.8%) of total women who accepted PPIUCD have two children as they want some contraception other than sterilization. Two other studies showed that 35.76% and 37% of total PPIUCD receivers had two children.^{11,12} S Jairaj (2016) study found more acceptance in those who completed their secondary school level education is 23.3%.¹³ while in our study 61% of patients were in educated up to primary level, the reason being that patients with higher education had more knowledge and excess to other methods of contraception. During this study only 4.5% of the patients were familiar with the PPIUCD insertion. So there is strong need of increasing awareness and knowledge about this by health education in antenatal period if possible. In a study by A. T. Alukal (2018) the awareness regarding PPIUCD was 11%¹⁴ In this study, the desire to continue PPIUCD is 93.5% which is comparable to study conducted by Reetu Hooda¹⁵ which showed a continuation rate of 90.6%. No cases of uterine perforation or pregnancy were reported in this study. It was comparable to a study 2016 in which no cases of uterine perforation were reported.¹⁶ The expulsion rate in our study is 1.7%. It was comparable with study conducted by Alibasha Gupta in 2013 where expulsion rate was 2% in caesarean section and 6.6% in vaginal deliveries.⁹

CONCLUSION

Insertion of IUCD in immediate postpartum period is an effective, safe and convenient contraceptive intervention in both caesarean section and vaginal deliveries. In situations of limited access and improper postpartum, counselling and education, women leave with no return later for contraception. Seventy percent of our country has rural population with low literacy rate. So proper training of birth attendants and integration of PPIUCD with national programmes can lead to more awareness and better acceptance especially in rural areas. Women who received this method of family planning shows high level of satisfaction. It can help in reduction of population in our country and to achieve better health of mother and child.

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