



Retrospective Evaluation of Post Placental Intrauterine Copper T in Terms of Acceptance and Complications Following Cesarean or Vaginal Delivery in a Tertiary Care Centre in The Year 2015

Sonal Palod^{1*} and Trupti Nayak

¹Booma Nursing Home, Madurai Tamil Nadu, India

²Dept. of Gyne & Obst., M P Shah Medical College Jamnagar Gujarat, India

ABSTRACT

Background: The study was conducted to assess the acceptance of PPIUCD (Post Placental Intrauterine Contraceptive Device) in terms of age, parity, education, residence and any complications of PPIUCD in cesarean or vaginal delivery.

Method: This is retrospective study of 919 women who accepted PPIUCD insertion. analysis was made as per the data of their history available, and follow up records. those who didnt come for follow up were telephonically asked for any complaints due to PPIUCD.

Results: the acceptance of PPIUCD was higher in para 2 females in both cesarean and vaginal delivery(38.3 %). it was more in age group 21-25(47.66%)and higher in educated group(56.9%). there was no case of perforation or any other major complication.

Conclusion: PPIUCD is a safe, highly effective, long acting, cost effective method of contraception.

Keywords: PPIUCD, Acceptance, Expulsion.

introduction

India's population has crossed one billion in the year 2000. In recent censuses of 2011 it has reached 121 crores and it is estimated to reach a figure of 1.53 billion by 2050, making it the most populous country in the world. Government of India has launched several programmes which emphasize on promotion of adequate birth spacing. One of the major hurdles in the way to achieve the goal of family planning in India is unmet needs for contraception. According to NFHS- 3 (2005-06) data, the contraceptive prevalence rate in India is 56.3% and more than 40% of the couples are not using any method of contraception. The countries with the highest percentage of unmet need are in Sub-Saharan Africa in which only 22% of the population use contraceptives.

In the developing world like India, the various government plans promoting institutional deliveries all across the country create opportunities for providing quality postpartum family planning services. After childbirth, most of the couples need proper counseling to space their next pregnancy or, if they have completed their family size, to terminate the child bearing altogether. IUCDs are among the most commonly used reversible method of contraception in women of reproductive age worldwide. 1 in 5 (or 153 million) married contraceptive users are using IUCDs. It is the ideal method for spacing births. IUCDs

are the Long Acting Reversible Contraceptive which reverts fertility quickly as soon as withdrawn and fertility is not impaired at all. IUCDs are use and forget type of method for contraception thereby it is good choice for illiterate population.

IUCD may be inserted in post partum period, post abortion or in interval period. Immediate PPIUCD insertion has distinct advantages of ease of insertion, availability of skilled personnel and appropriate facilities and convenience for the women, as the side effects of Copper-T insertion (menstrual problems, lower abdominal pain & cramps) get masked with the after pains of delivery. IUCD inserted within 10 min of delivery of placenta has much lower expulsion rates as compared to insertion later in the post partum period but the expulsion is still higher than the interval insertion. PPIUCD appears an ideal method for limiting & spacing births.

Insertion of IUCD has additional advantage of safety due to blunt insertion technique, and certainty of non pregnancy of women. Integrating IUCD insertion with delivery services optimises opportunities for women to obtain a long term, reversible family planning method before returning home. Also it is seen that women are highly motivated and receptive to accept family planning methods during the post partum period and this is the best time when a women

is in contact with the health care facility. survey show that 40% of women in the first year post partum intend to use family planning methods, but are not doing so. the purpose of this study was to highlight the benefits of PPIUCD.

Material & Methods.

Study Design: retrospective study

Duration ; Jan 2015 to Dec 2015

study setting. Rasulzanana Hospital. , PDU Medical College Rajkot

In Vaginal Delivery: After the active management of 3rd stage of labour was complete, bimanual examination was performed. Empty uterine cavity was ensured. All the required things were arranged in a tray. Written consent was taken from the women. Perineum was again properly inspected for lacerations. Cervix was visualized using speculum and retractor. Cervix and vagina were again cleaned up. IUCD pack was aseptically opened and copper-T was held in Right hand and slowly inserted through the cervix to the lower uterine cavity, left hand was moved to abdomen, to place it on top of sterile towel over the fundus of uterus. Copper-T was slowly moved upward until fundus of uterus can be felt. 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. The strings were always visible at the cervix after the insertion

After Cesarean Section: after partial closure of uterus IUCD was inserted IUCD was with kellys forcep and

thread looped in such a way that it is directed towards cervix .IUCD is inserted gently till fundus and forceps removed. it should be cared of that thread does not come into suture line.

Follow up; was scheduled at 6 weeks .those from far away places were asked to get their IUCD checked in nearby healthcare center. telephone number of all clients was kept in records.

Results

A total of 7635 deliveries took place in year 2015 in RZ hospital, out of which only 919 were inserted PPIUCD. So total acceptance rate was 12.03%

Table one show the demographic characteristics of 919 clients. Majority of cases were between age group of 21-25 (47.66%). most of them were para 2(38.31%) and 56.9% were literate .Residence did not seem to have any major impact on PPIUCD acceptance.

Out of 919 only 183 came for routine follow up in OPD. 650 were telephonically asked for their experience with PPIUCD. Most of them had got there PPIUCD checked in nearby health care center and had no complaints. 86 were lost to follow up.

In PPIUCD recipients most common complaint was missing thread (16) . there were no cases of perforation or any other major complication. PPIUCD had no effect on lactation. there were 20 clients who came for removal of PPIUCD. The most common cause for removal was menorrhagia

Table 1

Groups	Normal Delivery	LSCS	Total	Percentage (%)
Age (years)				
15-20	81	45	126	
21-25	185	253	438	
26-30	137	125	262	
>30	53	40	93	
Total	456	463	919	100.0
Parity				
Primipara	92	142	234	
Para- 2	156	196	352	
Para-3	123	94	217	
>3	85	31	116	
Total	456	463	919	100.0

Groups	Normal Delivery	LSCS	Total	Percentage (%)
Educational Status				
Illiterate	200	196	396	
Primary	100	105	205	
Secondary	98	101	199	
Higher	35	44	79	
Graduate	23	17	40	
Total	456	463	919	100.0
Residence				
Rural	241	225	466	50.7
Urban	215	238	453	49.3
Total	456	463	919	100.0

Table2 : Follow up of clients

Total PPIUCD inserted	Follow-up within 6 wks	After 6 weeks	telephonic	Lost to follow-up
919	74	109	650	86

Table 3: follow up details of clients

complaints	No. of cases
Expulsion	8
Infection/pain	3
Missing thread	16
Menorrhagia	13
Long thread	10
Removal	20
Satisfaction	763
Total	833

Table 4: table showing causes of removal

Cause	Number of cases
Partial expulsion	3
Pain	2
Menorrhagia	12
Wants tubal ligation	3
Total	20

Discussion

PPIUCD seems to be a safe long acting highly effective, easily accessible, reversible and cost effective contraceptive method for most postpartum women specially lactating women. According to UN 1997, Cu-T380A confers contraceptive protection similar to that achieved with tubal sterilization.^{1,2}

In our study total acceptance rate was 12.03%. Majority belonged to age group of 21-25 years (47.66%). This was

probably because they considered PPIUCD as an effective spacing method. Alvarez Peyalo et al (1996) also found that average age of PPIUCD acceptors was 20.6%.³

The results of our study showed that 38.31% of total PPIUCD acceptors were having 2 children, as they wanted some form of contraception awaiting permanent sterilization. According to Patel and Khan, men approve use of contraceptive only after having 2 or 3 child.⁴ Bhalerao AR et al had 46.5% of the women para-1, 46%

were para-2 and 69% had accepted IUDs because they had at least 1 living male child.⁵

During this study, it is seen that 56.9% of clients were literate indicating that education is an important factor in awareness and acceptance of PPIUCD. Education renders people more receptive to new ideas and practices, spacing methods, and importance of small family norms. Education is also a major factor in fertility control. Choudhary et al found secondary and higher education influenced contraceptive use.⁶ Ullah and Chakraborty showed women's education as the most important determinant of contraceptive use.⁷

We found in our study that the acceptance of PPIUCD was almost equal among rural (50.7%) and urban (49.2%) women. Though women of urban areas have easy access to other methods of contraception like condoms, permanent sterilization they still prefer PPIUCD because of its various benefits like free of side effects, free of cost availability, reversibility. It was also evident from the study that proper guidance, information and motivation lead to high acceptance of PPIUCD among rural women. This clearly indicates that training to ASHA, ANMs and anganwadi workers and integrating this method in national programmes like National rural health mission could contribute significantly in family planning programme. But contrary to my findings Choudhary found that urban residence strongly influenced contraceptive use.⁶

In our study only 19.9% cases returned for follow-up while 70.7% were telephonically followed up and 86 i.e. (9.3%) cases were lost to follow-up. Only 20 cases wanted removal of Cu-T of which 3 were motivated for permanent sterilization (laparoscopic TT) by ASHA worker due to vigorous family planning program running in the state. This shows that these ground level workers can play an important role in motivating people for this method, if they are given proper information, adequate training and motivation in the form of honorarium. The women who did not return for follow up were mostly from far off rural areas. Lack of family support, non-availability of transport facility could be the reason for non-compliance. Xu JX et al found that the follow up rate in their study was 95.5%.⁸

The importance of follow up visit after PPIUCD insertions is that women as well as we (health care providers) can be reassured of IUCD placements. In case of expulsion reinsertion/other contraceptive method can be provided

Out of total women who accepted post-placental IUCD insertion 99.1% post-placental IUCD's were retained while 0.3% of post-placental insertions were partially expelled and 0.5% fully expelled. The gross cumulative

expulsion rate found in my study was 0.9%. The reason for expulsion noted in my study could be lack of experience leading to low placement of Cu-T in the uterine cavity, resulting in more expulsions. Women who had their Cu-T expelled, partially or fully, were motivated for reinsertion of IUCD, those willing were provided reinsertion of copper-T and if unwilling, were advised other suitable contraceptive method.

No cases of uterine perforation or pregnancy with IUCD-in-situ were reported during the study. This is in accordance with the study of El Shafei MM et al (2000)⁹ and Ricalde et al (2006)¹⁰ where no perforations were observed in PPIUCD.

No case reported interference of Cu-T with lactation as also found by Diaz S et al (1993)¹¹, Diaz S et al (1997)¹² and Zacharias S et al (1986).¹³

Tatum HJ et al found that the gross cumulative expulsion rate in their study was 16.2%.¹⁴ According to Bhalerao et al the expulsion rate was 16.4%. The high incidence was considered due to atrophic or bulky uteri present in some women and due to the fact that only one size IUD was available.⁵ Chi IC et al found that there is a lower expulsion rate with immediate post-placental insertion than with immediate postpartum insertion. As well, insertion during caesarean section has a lower expulsion rate than insertion during the postpartum (first 48 hours) period.¹⁵ This is likely due to the fact that it is easier to reliably reach the uterine fundus during post placental or caesarean section.

Conclusion

It is concluded from my study that Post-placental IUCD is an effective method of contraception.

Assuming that women will return later often can leave women with no option at all. Despite the potentially higher expulsion rate for PPIUCDs, the public health benefit of the service must be considered. The expulsion rate in my study was as low as 0.9%, In situation of limited access to care and infrequent postpartum care, this level of programmatic achievement can be considered as success.

Considering the fact that 70% population of our country is rural, education and proper training of ground level workers like ANMs (auxiliary nurse midwives), TBAs (trained birth attendants), and integration of the post-placental IUCD contraceptive method with national programs like national rural health mission, can lead to more awareness and better acceptance of the method among rural population, thus contributing significantly to family planning programs, helping to reduce the population of the country and securing better health of mother and child.

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*Corresponding author:

Dr Sonal Palod, 5/8A Shree Jaishree Apartment 2. Bharathi Ula Street . Near Passport Office. Tamra Totti Madurai. Tamilnadu Pin Code 62014. India

Phone: +91 9752875076

Email: drsonal1234@gmail.com

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