

# Study the efficacy and compliance of postpartum intrauterine device

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## Abstract

**Background:** Postpartum period in any woman's life is very important as it demands care of newborn and also prevention of unwanted pregnancies. This is a period where female can be motivated most for contraceptive advice and unmet need of contraception can be tackled. Postpartum IUCD is one method of long acting contraception which can be used immediately after child birth or within 48 hrs. **Result:** Out of 1800 patients counselled 400 accepted the PPIUCD. The mean age accepting the facility to maximum was 20-24 yrs and 55% were second gravida who had second child earlier than was supposed. 86.5 % patients were educated showing impact of education of female on contraception. 72.5% patients preferred intracarean PPIUCD to prolong the next conception due to operative delivery. The preference to use this method was mainly due to no need for a second visit for contraception and also it is devoid of hormonal side effects. Inspite of counselling to 1800 patients only 400 (22.2%) patients accepted this method mainly because they were not accompanied by partners and not able to take decision. During follow up at 6 weeks 72 % patients had no complaints while after 6 months 95% patients had no complaints. There was not a single patient of infection and perforation. We had 6 patients of expulsion at 6 weeks and 1 patient at 6 months follow up. Only 12 patients requested for removal of IUD. **Conclusion:** PPIUCD is a very effective, nonhormonal, long acting, reversible method of contraception. It needs extreme motivation, counselling from the antenatal period of the couple to increase the usage of this method.

**Key Words:** PPIUCD, 380 A, unmet need, long acting reversible contraception.

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period. Pregnancies taking place within 24 months of previous child birth have a higher risk of adverse outcomes like abortion, preterm labour, postpartum haemorrhage and low birth weight babies.<sup>2-10</sup> The concept of unmet need points to the gap between women's reproductive intention and their contraceptive behaviour. Immediate postpartum i.e. within 48 hrs of child birth and early postpartum is within 7 days. During this period women are highly motivated and receptive to family planning services. The present study aims to study the efficacy and compliance of patient for Postpartum Intrauterine Device.

## INTRODUCTION

Postpartum period is one of the critical times when both women and newborn need a special and integrated packaging of health services. This is the time where a woman is vulnerable to unintended pregnancies. Studies have shown that about 60 % of women resume the sexual activity in 8 weeks and almost 100 percent by the end of one year.<sup>1</sup> Emphasis on sexual and contraceptive education is very important in immediate postpartum

## MATERIAL AND METHODS

This is retrospective study carried out at district hospital PVPGHS Sangli, Maharashtra during a period of December 2015 to December 2016. Total 400 patients who were inserted Postpartum Intrauterine contraceptive device (380A intrauterine copper device) were studied.

### Inclusion Criteria

All women participating in study undergone insertion of Postpartum IUD irrespective of age, parity. Written informed consent was taken from all patients with type of insertion specified as 1. Postplacental 2. Postpartum (within 48hrs) 3. Intracaeasarean.

### Exclusion Criteria

1. Prolong PROM more than 18 hrs
2. Established chorioamnionitis
3. Severe form of anteaprtum haemorrhage
4. Any active genital tract infection in third trimester
5. HIV positive women with cd4 count <200 /cmm not on ART



Figure 1:

In Postpartum IUD the IUD inserted within 48 hrs of delivery and during LSCS directly in the fundus with hands. The thread of IUD is guided towards lower segment. All patients are given a PPIUCD client card with her details like name, age, reg. no, address, phone number follow up visit and any complaints. Patients are followed up after one and half month for any complaints or as a routine. The complaints of patients recorded. The white discharge, excessive, bleeding were treated with appropriate antibiotics and tranexamic acid respectively. Any evidence of infection, expulsion and removal of PPIUCD along with reason were noted. Patients were regularly taken follow up on phone and the next visit being after 6 months.

## RESULTS

Following are the results of study.

Table 1: Age wise distribution

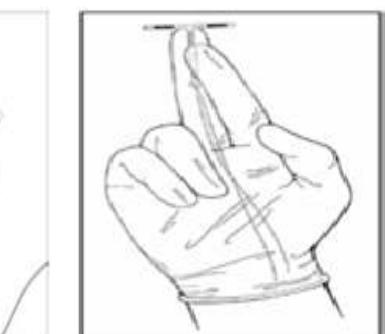
Age	No of patients	percent
15-19	70	17.5%
20-24	220	55%
25-29	85	21.25%
30-35	20	5%
>35	5	1.25 %
<b>Total</b>	<b>400</b>	<b>100%</b>

Table 2: Paritywise distribution

6. Severe anaemia, heart disease
7. Known uterine malformation
8. Patient refusing for Postpartum IUD

### Method of Insertion

In postplacental, the IUD inserted immediately after expulsion of placenta even before suturing of episiotomy. Active management of third stage of labour is mandatory before insertion of postplacental IUD. It uses a specialized forceps called Kelley's forceps which is devoid of lock with a specialized curvature at the proximal end to accommodate the angulation while entering in the uterus. The IUD used is 380A and inserted at the fundus after pushing the fundus up and making the uterine axis straight.<sup>11</sup>



Parity	No of patients	percent
primi	126	31.5%
second	220	55%
third	52	13%
fourth	2	0.5%
<b>Total</b>	<b>400</b>	<b>100%</b>

250 (62.5%) patients were from urban area while 150 patients (37.5%) patients were from rural area.

Table 3: Education wise distribution

Education	No of pts	Percent
Uneducated	54	13.5%
Upto 10 th std	272	68%
Upto 12th	54	13.5%
graduation	12	3%
postgraduation	8	2%
<b>Total</b>	<b>400</b>	<b>100%</b>

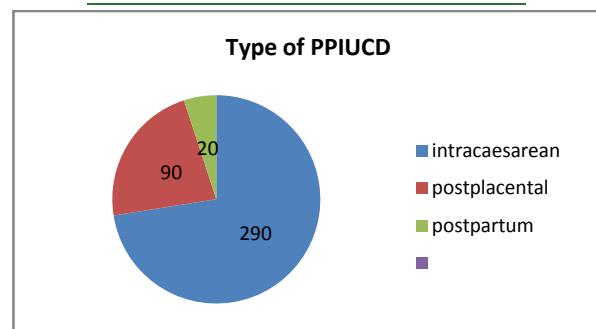


Figure 3: Type of PPIUCD

**Table 4:** Reasons for acceptance of PPIUCD

Reason	number of patients	Percentage (%)
Start with immediate contraception	20	5%
No need of second visit for contraception	254	63.5%
Least compliance is required	40	10%
Faith in the doctor	40	10%
Previous use of IUCD	10	2.5%
Previous use of other contraception that failed	18	4.5%
Gained knowledge from media, neighbourhood	8	2%
Cost effective	10	2.5%

**Table 5:** Inspite of counselling the reasons for not accepting the PPIUCD

Reason	Number of patients	Percentage
Not able to take decision inspite of counselling	700	50%
fear	250	17.8%
Risk of perforation	200	14.2%
Belief of interference in sex	90	6.4%
Myth that it is a permanent method	30	2.1%
Want permanent contraception later	40	2.8%
Not happy with previous IUCD	12	0.8%
Could not define	48	3.4%
Never heard of PPIUCD ever	30	2.1%

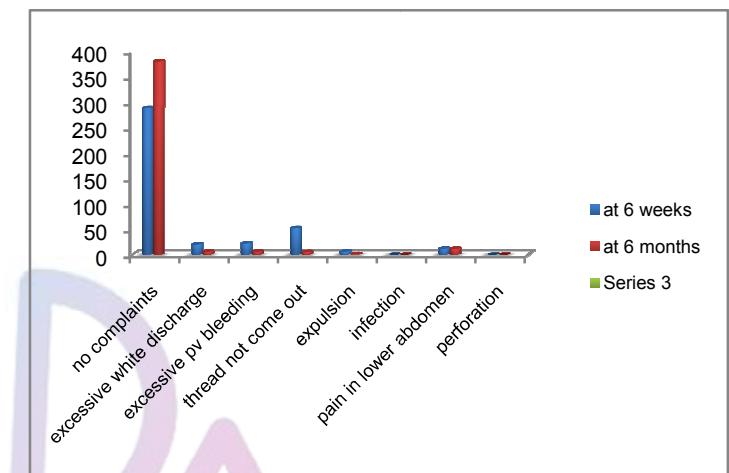
**Table 6:**

Sr. No	Patient	number
1	Total number of patients delivered in the study period	4822
2	Patients fulfilling medical eligibility criteria	2500
3	Patients counselled for PPIUCD	1800
4	Patients who accepted the service and participated in the study	400
6	% of patients accepting the method after counselling	30.5%

During follow up patients were asked to bring the PPIUCD client card. At first follow up i.e. after one and half month following complaints were noted. The thread was cut on patients request or if it at all interfered with sex on couple's request.

**Table 7**

	At 6 weeks	%	At 6 months	%
No complaints	288	72%	380	95%
Excessive White discharge	20	5%	6	1.5%
Excessive pv bleeding	22	5.5%	6	1.5%
Thread not come out	52	13%	5	1.2%
Expulsion	6	1.5%	1	0.2%
Infection	0	0%	0	0%
Pain in lower abdomen	12	3%	2	0.5%
Perforation	0	0%	0	0%



12 patients requested for removal of PPIUCD. The reasons for removal were 1. Willing for permanent method (6) 2. extreme insistence by in laws to remove the PPIUCD (4) 3. excessive pv bleeding during menses leading to anaemia so shifted to other method (2).

## DISCUSSION

Postpartum Family Planning services are ideal platform to reposition family planning. It is shown that a vast majority of women are not ready to have the next child at least in two years.<sup>12</sup> The provision of quality family planning services in the postpartum period has the potential to reduce the voluntary termination of unwanted pregnancies and effect a reduction in both maternal and childhood mortality and morbidity arising from unsafe abortions and inadequate spacing of births, respectively.<sup>13,14</sup> Although for many environments geographic access to services remains a problem the principle reasons for nonuse are lack of knowledge, fear of side effects and social and familial disapproval. Our study is to benefit the patients with long acting reversible contraception immediately after the child birth. In our study the age group benefitted by PPIUCD was between 20-24 yrs. The optimum age of marriages in India range from 19 to 23 hence women 80-90 % women conceive in

the same age group. Advancing age or parity has more impact on using a permanent method instead of a temporary method. The acceptance rate increases with at least one living issue (31.5%) and with second issue (55%). We had 62.5% patients from urban area and 37.5% from rural area. 86.5% patients were educated. This shows that urbanization and education in females definitely improve the access and knowledge about contraception. Indian study carried out by Dr Srivastav R. concludes the same.<sup>15</sup> We had 72.5 % patients for intracaeasarean method, 22.5% for postplacental and only 5% for immediate postpartum method. The exact reason for more preference for intracaeasarean could not be lined out but probability of fear of early next conception over the scarred uterus was of more consideration. This was similar to the study carried out by Dr Reetu Hooda<sup>16</sup> The reasons for acceptance of PPIUCD were fair enough as no need to follow up, no hindrance with sex or breast feeding. 55% patients were second para who had their second child within 2 years which motivated them for this long acting contraception. Out of all patients only 5 % patients had knowledge about PPIUCD; rest of the patients had to be counselled very strongly for its benefit. The acceptability also increased with low socioeconomic status because of cost effectiveness 2.5%, no need of second visit for contraception 63.5% where extra burden of travelling is avoided. During follow up 72 % patients had no complaints in 6 weeks and 95% were without complaints at 6 months. 6 patients had expulsion in 6 weeks while 1 had in the 6 months. Expulsion rate was 1.5% in 6 weeks. This was lesser to a multi country study done in Belgium, Chile, and Philippines which showed the rate of expulsion at 1 month ranging from 4.6 to 16.0 %<sup>17</sup>. There was not a single patient of perforation or infection. This was similar to the Indian study carried by Sujnanendra Mishra.<sup>18</sup> Out of 1800 patients counselled only 400 accepted for the insertion (30%). The reasons were multiple. The table no 5 has elaborated the reasons for not accepting the PPIUCD. The patients are many a times not accompanied by partners and hence not able to take decision. The fear of perforation, infection and misbeliefs have overrided the acceptability of the method. Out of 12 patients who requested 6 underwent tubectomy and simultaneous removal of PPIUCD. The most important reason for removal of PPIUCD was excess bleeding which was bothering. (3 patients) The PPIUCD is a highly effective method of contraception that is underused. We came to the conclusion that it requires motivation right from the beginning of pregnancy and counselling to family and not the patient alone. There is a need for various workshops to be carried out even at periphery to improve the access and acceptability amongst patients.

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