Research Paper

Volume : 4 | Issue : 5 | May 2015 • ISSN No 2277 - 8179

Ppiucd As A Long Acting Reversible Contraceptive (Larc) –an Experience at A Tertiary care Centre

Medical Science

KEYWORDS : PPIUCD, LARC, Continuation rate, Complications

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ABSTRACT

Back ground

India is a country that needs to keep population explosion under control. About 40% of Indian women are not using any contraception. The need of the hour for controlling population growth is spacing. Usage of IUCDs or hormonal contraceptives is the most effective spacing methods. The post partum IUCD is an effective form of Long acting reversible contraceptive (LARC).

Aims: This study was done to evaluate the acceptance of IUCD as an immediate family planning method following delivery, its complications and continuation rates.

Material and Methods: This is a prospective study conducted at the tertiary care centre for a period of one year.11, 278 antenatal women were counseled and a total of 959 women who fulfilled the medical eligibility criteria were included in the study.

Results: A total of 11,278 women were counseled of which 959 accepted the method and10, 319 declined. Spontaneous expulsion was seen in 5 cases, with continuation in 881(91.8%) number of cases. Complications noticed were expulsion, pain, bleeding, and missing threads.

Conclusion: In the present study the continuation rate was 91.8%. Hence postpartum IUCD is an excellent method for spacing and long acting reversible contraceptive, in the current Indian scenario.

Introduction

A large proportion of women in the postpartum period want to accept a contraceptive method to regulate their fertility either by spacing or limiting future pregnancies. Access to safe and effective contraceptive services in the postpartum period is of utmost importance for a woman to prevent unwanted/mistimed pregnancy. Women are highly motivated and receptive to accept family planning methods during postpartum period. Demographic and Health survey show that 40% of women in 1st year postpartum intend to use a family planning method but are not doing so. Institutional deliveries have significantly increased all across the country, thereby creating new opportunities to provide quality post partum family planning services. It is important to engage experts in the field and professional organizations like FOGSI in program development [1]

Materials and Methods

This is a hospital based analytical study conducted at tertiary care centers attached to Medical College. It was conducted from December 2013 to December 2014. Study included 11,278 pregnant women who were admitted and delivered either by normal vaginal or instrumental delivery or caesarean section. Study included those pregnant women who fulfilled the medical eligibility criteria. All the women who were willing to come back for follow-up were included in the study. In all these women, copper T380A was used.

Exclusion criteria:

1) Ruptured membranes of >24 hours prior to delivery.
2) Uterine anomalies.
3) Active lower genital tract infections.
4) Postpartum hemorrhage requiring additional management.

Types of insertion

Post placental: Post placental insertion of the intrauterine contraceptive device is done immediately following delivery of the placenta, typically within 10 minutes. Post placental insertion can be done by two techniques: a) Instrumental insertion using the Kelly's ring forceps, in which the intrauterine contraceptive device is held by the forceps without a lock and inserted up to the fundus of the uterus and then it, is released.

b) Manual post placental insertion where the intrauterine contraceptive device is held in the providers hand and inserted up to the uterine fundus and placed there.

Intracaesarean: The intrauterine contraceptive device is introduced through the uterine incision during a caesarean section and placed at the uterine fundus and the uterine incision closed.

Follow up:

At discharge the patients are counseled regarding the need to trim threads if necessary, complications like foul smelling vaginal discharge, excessive bleeding, lower abdominal pain associated with chills and fever and when there is suspicion that the device has fallen out. The women are examined at the six weeks check up and any complaints are noted and treated accordingly. If the postpartum intrauterine contraceptive device is in place and the woman has no problem, no other follow-up visits are required. She was advised to return for removal as desired or at the end of the recommended period.

Results

In the present study highest acceptance was in the age group above 30 yrs (14.5%) and primi gravidas (15.47%). Literacy contributed to increased acceptance (15.17%). Majority of employed women had higher acceptance as they understood the importance of birth spacing (27.47%). Demographic factors play a statistically significant role in acceptance of PPIUCD (p value < 0.05) (Table 1). Acceptance was more in women undergoing caesarean section (83.73%) which is statistically significant(p value < 0.05). (Table 2).The most common cause for refusal of PPIUCD was negative thoughts of parents and relatives (60%) (Table 3).The most common cause for acceptance was that it was a onetime procedure (42.5%) (Table 4). Complications such as pain, bleeding infection and string problems were minimal. Expulsion rates in this study were negligible (Table 5) and continuation rates were 91.8 % .Majority of women attended follow up at 6 weeks to confirm that the IUCD is in place (%) (Table 6). There were no cases of perforation.

Discussion

The PPIUCD is not a standalone service; it is integrated with

maternal health services during antenatal visits for counseling and method choice and with birthing and post partum services for provision of the method. In addition, women are at risk of an unintended pregnancy in the period immediately after delivery. In a study in which women were instructed to abstain from sexual intercourse until 6 weeks postpartum, 45% of participants reported unprotected intercourse before that time.

Somesh Kumar et al [2] studied 2,733 married women, aged 15–49 years, who received PPIUCD in sixteen health facilities, located in eight states and the national capital territory of India, at the time of IUCD insertion and six weeks later. The satisfaction of women who received IUCD during the postpartum period and problems and complications following insertion were assessed using standardized questionnaires. Their observations were mean (SD) age of women accepting PPIUCD was 24 years. Over half of women had parity of one, and nearly one-quarter had no formal schooling. Nearly all women (99.6%) reported that they were satisfied with IUCD at the time of insertion and 92% reported satisfaction at the six-week follow-up visit. The results showed self-reported expulsion rate of roughly 3.8% among clients, with more than three-quarters of women reporting no complaints with their PPIUCD. Only 5.4% of women suffered from symptoms suggestive of infection after the insertion. Symptoms that were considered suggestive of infection included lower abdominal pain, fever, foul smelling/abnormal vaginal discharge, painful intercourse, and bleeding after intercourse. Other self-reported side normal effects of PPIUCD insertion included cramps and abdominal pain which 8.9% of women reported experiencing, along with 5.5% reporting minor menstrual problems. There were no cases of uterine perforation.

The expulsion rate in other studies were 5.6% reported among 210 women in a clinic in Hubli, Karnataka state in India [3], 1.6% among 3000 women in a hospital in Paraguay [4], and 5.6% among women among 305 periurban Lusaka, Zambia [5]. Another study of 1317 women in north India reported a cumulative expulsion rate of 10.7% by six months [6]. Higher expulsion rates of around 9-16% have been reported in earlier studies [7, 8]. One recent study from Turkey of PPIUCD among women after C-section reported an expulsion rate of nearly 18% [9]. Requests for removal of IUCD was 5.9% in the present study, compared with 7.6% reported in Hubli, India [3], 3.4% among women in Paraguay [4], and 3% among women in Zambia [5].

Mishra S [10] in their study conducted at District Head Quarters Hospital, Bolangir, Odisha, counseled 3209 women. CuT 380A was inserted within 10 minutes of delivery of placenta in acceptors who fulfilled the Medical Eligibility Criteria and had no contraindications for PPIUCD. Their observations were acceptance in (17.57%), declined in (82.42%) and complications in (33.68%) and continuation in (62.41%). The acceptance of PPIUCD was higher among women with primary and secondary education. Acceptance of intrauterine contraceptive device was most common in primigravida(20.73%).In cases of multiparous it was 13.76%.About 74% of the PPIUCD acceptor had their last child birth less than 2 years. Expulsion rate was 6.4% at 4 weeks interval. Follow up in 59.98% and in 23.05% follow up was lost.

In our study, higher acceptance was among women above 30 years (14.5%), the reason may be that employed women have late marriages and are more amenable to contraceptive advice. Acceptance was more in women undergoing caesarean section (83.73%) which was statistically significant. Complications such as pain, bleeding infection and string problems were minimal. Expulsion rates in this study were negligible and continuation rates were 91.8 % .There were no cases of perforation.

The incidence of complications like pain and bleeding was low. We had a case of misplaced IUCD which was erroneously reported on ultrasound as partial perforation in the periphery. Repeat ultrasound at our centre showed no perforation. Missing threads is a problem inherent to PPIUCD insertion. Once ultrasound confirmation of proper placement of IUCD is done, no further action is required.

Request for removal because of pressure from family and neighbors is a significant problem we have encountered during follow up visits even if the woman has no complaints.

The expulsion rate associated with immediate insertion is higher than that for interval insertion and may be as high as 24%. Differences in expulsion rates are similar with manual insertion versus use of Kelly's forceps. Immediate insertion after caesarian delivery may be associated with lesser expulsion rate compared to vaginal delivery. The benefit of immediate insertion may outweigh the increased rate of expulsion. Health care providers both in private sector and in public sector should be aware of the follow up care of PPIUCD, for example trimming of threads when visible and management of missing threads. We have identified that we need to strengthen our counseling services and continually motivate trained personnel to improve the acceptance rate.

Conclusion

PPIUCD is a safe, long acting reversible contraceptive method with minimal complications. Its use must be propagated. Reliable data exist to support the safety and efficacy of immediate postpartum insertion of copper IUCD. However we are still in the initiation phase and have a long way to go to improve the acceptance rate. As of now acceptance rates are low and need to be improved with proper counseling. The biggest hurdle we face is the strong myths and misconceptions in our society regarding IUCD. The PPIUCD (Inserting CuT 380 A by 10 minutes after placental delivery) was demonstrably safe, effective, has high retention rate. The expulsion rate was not very high and it can be reduced with practice. With the high level of acceptance despite low levels of awareness, the government needs to develop strategies to increase public awareness of the PPIUCD through different media sources. It is also important to arrange training on PPIUCD in order to increase knowledge and skills among healthcare providers especially at the grass root level. This will also further promote PPIUCD use and aid in reduction of the expulsion rates. Cash incentives to the accepter, motivator and of course provider would bring about a substantial progress in the PPIUCD use in developing countries like India.

Increase in facility based births offer opportunities to provide women with this long acting reversible method before they leave the hospital rediscovering a "languishing innovation" – PPIUCD.

TABLE – 1 DEMOGRAPHIC FACTORS

Parturient	Total counseled No (%)	Accepted No (%)	Declined No (%)
Age			
< 20 yrs	3818(33.8%)	88(2.3%)	3730(97.6%)
20 – 29 yrs	6269(55.5%)	698(11.1%)	5571(88.8%)
> 30 yrs	1191(10.5%)	173(14.5%)	1018(85.4%)
Parity			
Primi	5459(48.4%)	845(15.47%)	4614(84.52%)
Gravida II	4254(37.7%)	83(1.95%)	4171(98.04%)
Gravida III or >	1565(13.8%)	31(1.98%)	1534(98.01%)
Literacy			
Illiterate	7641(67.7%)	407(5.32%)	7234(94.67%)
Literate	3637(32.2%)	552(15.17%)	3085(84.82%)

Volume : 4 | Issue : 5 | May 2015 • ISSN No 2277 - 8179

Occupation			
Employed	2231(19.7%)	613(27.47%)	1618(72.52%)
Unemployed	9047(80.21%)	346(3.82%)	8701(96.17%)

TABLE 2 PPIUCD INSERTIONS

INTRA CAESARIAN	803(83.73%)
VAGINAL DELIVERY	156(16.26%)
TOTAL	95

TABLE 3 REASONS FOR REFUSAL

Heavy bleeding	1032(10%)
Abdominal pain	516(5%)
Prefer alternative method	2579(25%)
Negative thoughts of parents /relatives	6192(60%)

TABLE 4 REASONS FOR ACCEPTANCE

Long term	145(15.1%)
Safe	220(22.9%)
One time procedure	408(42.5%)
Reversible	138(14.3%)
No effect on breast feeding	48(5%)

TABLE 5 COMPLICATIONS

Expulsion	Pain	Bleeding	Missing threads	Misplaced IUCD	Request for removal	Infection
5/892(0.5%)	3(0.3%)	2(0.2%)	10/892 (1.1%)	1/892 (0.1%)	6/892(0.6%)	Nil

TABLE – 6 CONTINUATION RATES

Total period users	959
Total followed up	892
Expulsions	5
Removal	6
Continuation	881(91.8%)

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