Women’s experience with post placental intrauterine contraceptive device use in a tertiary care Centre in Pakistan

Zahra Safdar 1, Sumaira Fatima Sabir 2, Sumaira Zaib 3, Saleeha Abid 4
1-4 Senior Registrar Obstetrics and Gynecology Lahore General Hospital, Lahore, Pakistan
Corresponding Author: Zahra Safdar

Abstract

Background: Insertion of post placental intrauterine contraceptive device (PPIUCD) has been recommended by the WHO, as one of the safe and effective methods of temporary contraception. In the immediate post delivery period, women are highly driven and in need of an effective method for contraception so that the child rearing can be easy without unintended pregnancy.

Objective: To assess the outcome of women accepting PPIUCD in terms of insertion, complications and discontinuation rate at 6 weeks and 6 months.

Subjects & Methods

Study Design: Retrospective cross sectional study
Study Setting: Department of Obstetrics & Gynecology, Lahore General Hospital, Lahore, Study Duration: May, 2015 till August, 2019.

Data collection and analysis: After approval from hospital ethical committee, Data was retrieved from Maternal and Neonatal Child Health (MNCH) program. Record of clinical visit and telephonic survey for miscellaneous complaints at 6weeks and 6 months were evaluated from the medical records department and relevant data were extracted. The data were analysed using SPSS version 21 and the results expressed in descriptive statistics in frequency and percentages.

Results: Total live births during study period were 43065. PPIUCD was inserted in 5275 women (12.24%). Only 13% presented for clinical follow up, 87% had telephonic conversation. Of these, 33% were advised clinical visit. 83% reported no complaints. Reassurance was needed in 11%, threads trimmed in 2%. Problems reported were displaced IUCD 3.3%, spontaneous expulsion 24%, vaginal infections 4.7%, missing strings 3%, cramping 25%, dyspareunia, 6%, spotting 52% vaginal discharge 16%. Ultrasound was advised to 3%, symptomatic treatment to 14%, antibiotics and IUCD removal in 0.7%. IUCD discontinued by 6.7% women for various reasons e.g family pressure 0.3%, wanting a further child 0.7% and 14% opted for another method of family planning. IUCD removed and reinserted in 4.9%.

Conclusion: PPIUCD has a low turnover rate of follow-up but has high compliance with devices and low complication rate and complications can be reduced by improving patient selection and clinical follow up. It provides an excellent window of opportunity for providing effective long term contraception to the patients who need it most.

Keywords: Contraception, Post placental, IUCD

Introduction

In the world, Pakistan is referred as 6th most populous country. In 37% females, the time period of gap between two births is almost less than 24 months. The contraceptive use is highest in ages between 34 and 36 years. Between various reversible family planning methods, couples usually use either condoms or injectable contraceptives, rather female sterilization method is used as permanent method. Recently, family planning resources have 64.4% unmet needs, which is leading to low contraceptive prevalence in Pakistan [1].

One-third maternal deaths and 10% of child mortality can be averted by the family planning and it happens when pregnancies are spaced by the couples for more than two years apart [2]. Small gap between the births are linked with higher child mortality, maternal and as well as morbidity [3]. With respect to the previous birth, pregnancies taking place within the time period of 24 months show higher risk of premature labor, miscarriages, low birth weight babies, postpartum hemorrhage and fetal loss. From 2005-2006 in India’s National Family Health as NFHS confirmed that, 61% of births were spaced less than three years [4] and that 22% of married women had an unmet need for family planning. In India, 65% women have an unmet need of contraceptives in first year postpartum, for family planning [5].
Post-placental intrauterine device as PPIUCD insertion is a convenient, safe and as well as effective method for the postpartum contraception \(^6\). After the removal of placenta, immediate IUD insertion has not been associated with uterine sub involution, increased risk of uterine perforation, postpartum bleeding or increased infection \(^7\). It was observed that expulsion rate was higher in immediate post placental IUD insertion when compared with insertion at interval of 4 to 8 weeks.

Intrauterine devices are highly safe, effective and long acting form of contraception. Since the 1960s, the concept of IUD insertion as postpartum intrauterine device has become acceptable and has been investigated worldwide. By having access to medical care for women, delivery provides a significant opportunity for the contraception need. Postpartum family planning (PPFP) is accepted to prevent from closely spaced and unintended pregnancies in first twelve months, following childbirth \(^7\). Effective contraceptive methods are a major need in order to prevent an unplanned pregnancy within a short interval \(^8\).

According to WHO Medical Eligibility Criteria, the insertion of IUCD can be done within first 48 hours postpartum \(^9\). According to availability of options, Copper T380A IUD by having a multiyear cost, is considered as most cost effective contraceptive option available. The Copper T30A IUD is non-hormonal and effective method used by all women regardless of breast feeding status \(^10\). IUCD is a long acting reversible method of contraception with 12 million current users worldwide.

**Discussion**

This retrospective study of post placental IUCD insertion was conducted from May 2015 till August 2019 in a tertiary center of Pakistan. PPIUCD insertions in 5275 women showed that a large number of women agreed for spacing out their next pregnancy with the choice of insertion of an IUCD immediately after removal of placenta within 30 minutes of delivery. To signify the use of post placental IUCD counseling of the couple in the antenatal period and before delivery would be very effective to have them leave the hospital already protected against the next unplanned pregnancy. After the removal of placenta, immediate insertion of IUD satisfies the basic requirements of contraceptive methods \(^11\). Other women accepted this contraceptive method because they did not want any child more. The complications and problems associated with this method were also very low. To limit the future childbirth, mostly women accepted the method, by indicating the PPIUCD as a long-acting reversible method \(^12\).

<table>
<thead>
<tr>
<th>Total Births</th>
<th>43605</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPIUCD</td>
<td>5275</td>
</tr>
<tr>
<td>Clinical Follow up</td>
<td>13%</td>
</tr>
<tr>
<td>Telephonic Conversation</td>
<td>87%</td>
</tr>
<tr>
<td>Advised Clinical visit</td>
<td>33%</td>
</tr>
<tr>
<td>No complain</td>
<td>83%</td>
</tr>
<tr>
<td>Reassurance</td>
<td>11%</td>
</tr>
<tr>
<td>Thread trimmed</td>
<td>2%</td>
</tr>
</tbody>
</table>

The majority of women as high as 83% were reported to accept PPIUCD as a method of contraception because of the fact that it is long-acting (Table 1). 22% of women accepted the PPIUCD insertion due to its free-of-cost service. Significantly, half of the women had heard of the IUCD before they were consulted at the facility and only 7% had used one before they visited the facility hence vast majority of clients had accepted the PPIUCD service \(^13\). During this study, it was also observed that nearly all women were satisfied at the time of IUCD insertion. It was reported that they were happy with IUCD at six weeks following insertion of the device.

![Fig 1: Data of Problems reported](image_url)

In the present study, out of the women who discontinued the use of PPIUCD 1% women faced family pressure for discontinuation of the method while 4% wanted a future child so discontinued the use of this method and 70% women opted another method of contraception 25% of users experienced side effects and reported removal and reinserted IUCD because of some reasons. The common problems (Figure 1) associated with this method of contraception were noted to be displacement of IUCD in 3.3% of users and 4.70% vaginal infections, 3% missing strings, 25% cramping, 6% dyspareunia, 62% vaginal discharge, 52% vaginal spotting and bleeding. 3.8% women had removed their PPIUCD within the first six weeks of insertion. For these minor problems, 14% of the users were advised symptomatic treatment, 3% had to undergo a pelvic ultrasound while 0.70% had infections for which they needed antibiotics and
IUCD removal (Figure 2). There is a room for strengthening PPIUCD counseling services in regards of complications like uterine perforation and common side effects that arise from IUCD use leading to discontinuation of a suitable method of contraception [14, 15]. Awareness of the common problems associated with the use of the PPIUCD in the antenatal period prior to insertion would be expected to have positive effect on continuation of the use of this method. Counseling about minor problems and their easy treatment can be associated to reduce the discontinuation of the use of PPIUCD. Fears of users should be addressed early and most probably way before its insertion just after delivery.

In our series, continuation rate of use of PPIUCD was observed as >75 per 100 users for CuT 380 devices, showing the acceptability of post placental insertion of IUCD as an effective and safe method of long term contraception.

![Treatment for problems by IUCD](image)

**Fig 2:** Treatment for problems by IUCD

**Conclusion**

PPIUCD when compared to interval IUCD has higher expulsion rates and other minor complications. It is a tradeoff between greater contraceptive coverage versus a slightly higher complication rate, but complications can be reduced by improving patient selection and comprehensive clinical follow up. The use of PPIUCD provides an excellent window of opportunity for providing effective long term contraception to the patients who need it most as well as the nations who are bound to have population explosion.

**References**

15. Afshan A, Asim SS. Immediate postpartum IUCD
