POST-PLACENTAL INTRAUTERINE CONTRACEPTIVE DEVICE (PPIUCD) INSERTION -2 YEAR EXPERIENCE AT A GOVT. MEDICAL COLLEGE, VIMS, BELLARY, KARNATAKA

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ABSTRACT

Post-partum period is one of the critical times when both woman and new-born need a special and integrated package of health services as morbidity and mortality rates are quite high during this period and also the women are vulnerable to unintended pregnancy. Studies show that pregnancies taking place within 24 months of a previous birth have a higher risk of adverse outcomes like abortions, premature labor, post-partum haemorrhage, low birth weight babies, fetal loss and maternal death. In India, 65 percent of women in the first year post-partum have an unmet need for family planning. Hence, contraception needs to be practiced in this critical period.1 Intrauterine contraceptive device is the most commonly used reversible method of contraception worldwide with about 127 million current users.2 Insertion of an IUD immediately after delivery is appealing for several reasons. The woman is not pregnant and is motivated for contraception and the setting is convenient for both woman and provider. For women with limited access to medical care, the delivery affords a unique opportunity to address the need for contraception. The evidence for post-partum IUD insertion was weak when this study was undertaken. Therefore, the present study was planned to evaluate the safety and efficacy (In terms of pain, expulsion, excessive bleeding, foul smelling vaginal discharge) of insertion of immediate post-partum IUD in women delivering vaginally or by caesarean section.

KEYWORDS

Post-partum Contraception, Intrauterine Device, Expulsion, Intra-Caesarean Section.

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INTRODUCTION

MATERIALS AND METHODS

This prospective study was carried out in the Department of Obstetrics and Gynaecology. VIMS/HQH, Bellary, Karnataka, for 2013-2015. Women delivering in the hospital fulfilling inclusion criteria were included in the study after obtaining informed consent. The study protocol was approved by the ethics committee.The test of proportion (z test) was applied for statistical analysis.

Inclusion Criteria

A women delivering vaginally or by caesarean section, counselled for IUD insertion in pre-natal period or in labour and willing to participate in the study.

Exclusion Criteria

According to medical eligibility criteria for IUD by WHO

1. Women having anaemia (Haemoglobin <10g/dl),
2. PPH,
3. With pre-labour rupture of membranes >18h. or with obstructed labour.
4. Women having distorted uterine cavity by fibroid or congenital malformation of uterus.
5. Fever >38C.

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The IUD held by sponge holder was introduced in the uterine cavity and placed in the uterine cavity (Fundus) of women delivering vaginally. In the case of caesarean section, Intra-Caesarean Insertion of the IUCD uterine cavity was inspected for presence of malformations following placental delivery, which would limit use of IUCD. The IUCD was removed from the insertion sleeve and placed on the sterile field. Uterus is stabilized by grasping it at fundus. IUCD is held between middle and index finger. It was inserted into the uterus through uterine incision and released at fundus of uterus. Hand was removed slowly from the uterus. Enough care was taken not to dislodge IUCD as hand is removed. Strings were guided toward the lower uterine segment without disturbing IUCD's fundal position. Enough care was taken not to include IUCD strings during uterine closure.

Prior to Discharge

1. Discharge card showing type of IUCD and date of insertion were given.
2. She was informed about the IUCD side effects and normal postpartum symptoms.
3. Woman was told when to return for IUCD follow-up/PNC/new-born check-up (4-6 weeks).
4. She was advised to come back any time she has:
   a) Foul smelling vaginal discharge different from the usual lochia,
   b) Lower abdominal pain, especially if accompanied by not feeling well, fever or chills,
   c) Feeling of being pregnant,
   d) Suspicion that the IUCD has fallen out,

At the time of discharge from the hospital, women were advised to come for followup after four to six wks., as uterus takes around four wks., to involute to pre-pregnant size. During followup visits, women were asked especially for history of expulsion of IUD and excessive bleeding during post-partum period.

As IUD insertion can cause Pelvic Inflammatory Disease (PID), women were also asked about pain in abdomen or abnormal discharge per vaginum through vagina. Examination (Per abdomen, per speculum and per vaginum) was done and the findings were recorded. In per speculum examination, if IUD threads were long they were cut 2cm from external os. If threads of IUD were not seen and there was no history of expulsion of IUD, pelvic ultrasonography or X-ray pelvis was done to note for misplaced IUD.

RESULTS

Sl. No.	Year	ISCS	Normal	Total
1	2012-13	426	306	734
2	2013-14	358	224	582
3	2014-15	191	99	290
Total		**975**	**629**	**1606**

Table 1

DISCUSSION

As a contraceptive used during post-partum period, the IUD has a distinct advantage. It is free from systemic side effects and does not affect breast feeding as seen with hormonal methods. It is a reversible method. In addition, IUD does not require regular user compliance. It is also not coital dependent and there is no pain on insertion when used post-placentally.

Timing of insertion, counseling and provider training are important factors for IUD insertion in post-partum period as quoted in United Nations Population Information Network (UN-POPIN) report.[3] Of these, the timing of insertion is important as it influences the risk of expulsion. Ideally, post-partum insertion should take place within 10 min. of placental delivery (Post-placental application) or later till 48h. of delivery. The risk of expulsion is higher if inserted after 48h. of delivery.[1] In the present study, IUD was inserted post-placentally in women delivering by caesarean section or vaginally (within 10 min. of delivery of placenta). In all studied women, 129 had expulsion of IUD and the cumulative expulsion rate at the end of 6 months was 10.68 percent. Four multisite studies in UN-POPIN report found that after six months, the cumulative expulsion rate was 9 percent for immediate post-placental insertion compared with 37 percent for insertions done between 24 to 48h. after delivery.[3]

A study conducted in India on 115 women undergoing IUD insertion within first 10 days post-partum reported high rate of expulsion; 67 percent of cases retained IUD; 4.3 percent of cases had IUD slid in cervical canal; and 6.1 percent women had complete expulsion of IUD. The author concluded positively on post-partum insertion of IUD, especially in the rural setting where women come to the hospital only for delivery.[4] Another Indian study conducted on 168 women reported 16.4 percent as IUD expulsion rate in women undergoing post-puerperal IUD insertion.[5]

As the insertion was done in post-puerperal period, the expulsion rate was higher in this study as compared to the present study. Another study by Celen, et al. in 2003 had 11.3 percent cumulative expulsion rate for CuT 300B.[6]

There were no cases of perforation or misplaced IUD in the present study. Global health technical briefs on immediate post-partum insertion safety and efficacy said that there are a few reports addressing the relative safety of immediate post-partum insertion.[4]

A multisite trial found no instances of perforation or infection due to post-partum IUD. As the present study had small number of patients, it does not accurately reflect the incidence of the rare event of perforation or misplaced IUD.

In the present study, there were no cases of PID. A study conducted in 13 countries studied infection (PID) due to IUD. They have reported similar rate of infection with immediate insertion and interval insertion.[7] Another trial did not find any instance of infection due to post-partum IUD insertion.[8]

The literature mentions menorrhagia due to IUD. (I) in the present study, 27.23 percent had menorrhagia. Of these, IUD had to be removed as menorrhagia did not respond to mefenamic acid in 65 women. Welkovic, et al. studied post-partum bleeding and infection after post-placental IUD insertion and found no difference in the incidence of excessive bleeding.[8]

In conclusion, immediate post-partum insertion of IUD appears to be safe and effective method of contraception. There was no case of IUD perforation. The method may be particularly beneficial in our setting where women do not come for postnatal contraception counseling and usage. The limitations of the study were a small sample size being followed up for 6 months only. The lost to follow-up rate (21.38%) was also high. The patients should have been followed for at least one year to comment on the failure rate of this technique.

REFERENCES

1. Post-partum IUCD reference manual. New Delhi: Family Planning Division, Ministry of Health and Family Welfare, Government of India; 2010.
2. Nelson A. Intrauterine contraceptives. Vol. 6. Philadelphia: Lippincott Williams and Wilkins; 2004. Gynaecology and Obstetrics.
3. United Nations Population Information Network (POPIN), UN Population division, Department of Economic and Social Affairs with support from UN Population Fund. Network Intrauterine devices. Family Health International. Winter. 1996;16 (No. 2).
4. Sofat R. Postpartum CuT insertion- a trial. Indian J Maternal Child Health. 1990;1:23–4. [PubMed].
5. Bhalerao, Purandare Post puerperal CuT insertion: a prospective study. J Postgrad Med. 1989;35:70–3. [PubMed].
6. Celen, Moroy, Suvak, Aktulay, Danisman Clinical outcomes of early post-placental insertion of intra-uterine contraceptive devices. Contraception. 2004; 69:279–82. [PubMed].
7. Immediate postpartum insertion of an IUD is safe and effective. Global health technical briefs. 2007. USA: USAID (United States Agency for International Development and Family Health International); 2007. Lopez, Grimes, Szpir (Family Health International/CRTU programme).
8. Welkovic Stefan, Costa L, Faundes A, Ximenes R, Costa C. Postpartum bleeding & infection after postplacental IUD insertion. Contraception 2001;63:155–8. [PubMed]