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REVIEW ARTICLE ON PPIUCD

Obstetrics & Gynaecology

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ABSTRACT

The intrauterine contraceptive device is a long acting reversible contraceptive, it is one of the most effective and safe method of contraception. Immediate postpartum IUCD service program approved by government of India in 2010. In most developing countries delivery time is the primary opportunity for women to access postpartum family planning method. PPIUCD it is of two types: IUCD 375 and IUCD 380-A. It is interfere with the ability of sperm to survive and to ascent the fallopian tubes where fertilization occurs and it alters sperm migration, ovum transport and fertilization. There are different timing of PPIUCD insertion such as Post placental insertion, Intra-Cesarean and within 48 hours after delivery. PPIUCD has no hormonal side-effects, but sometimes may lead to abnormal menstrual bleeding.

KEYWORDS

PPIUCD, Postpartum, Intra-Cesarean, Post placental

INTRODUCTION

Family planning (FP) is universally acknowledge as a life-saving and health improving intervention for women and children[1,2]. There is a chance for counseling women about using family planning methods because of the woman's regular interactions with the health system over a considerable amount of time[3].

The riskiest pregnancies for mother and child are those that occur within the first year after delivery; as a result, there is a higher chance that unfavorable outcomes will occur[4]. Despite the significance of contraception, only 36% of people use them regularly, and less than 1% of people have IUCD[5]. An IUCD (loop) is a small, "T-shaped" and made of flexible plastic with a thin copper wire coating contraceptive device inserted into a woman's uterus. And also post-partum IUCD is a contraceptive device inserted during the post-partum period (up to 48 hr after birth, ideally within 10 min of placenta delivery) [6].

The Postpartum period following child-birth during which the body tissues, especially the pelvic organs revert back approximately to the pre-pregnant state both anatomically and physiologically[7].

The government of India approved a programme for immediate postpartum IUCD services in 2010. One of the most reliable and secure methods of contraception is the intrauterine contraceptive device, which is a long-acting reversible contraceptive. In most developing countries delivery time is the primary opportunity for women to access post-partum family planning method, especially for those living in remote areas[8].

The clinical outcome of Cu-T375 PPIUCD using a novel dedicated inserter technique was studied in 2021, and the results demonstrate that there were fewer complications, such as pain and irregular bleeding, in the long inserter group as compared to the control group. Additionally, there were no cases of missing thread in the long inserter group[9].

Benefits

- Used right after delivery; long term protection
- 99% effective.
- Immediate return to fertility upon removal.

Types of Ppiucd [10]

1. IUCD 375:- Which is an inverted U-shaped device which provided protections for 5years.
2. IUCD 380-A: - Which is a T-shaped device which provided protection for 10 years.

Mode of Action [11]

The IUCD interferes with the ability of sperm to survive and to ascent the Fallopian tubes where fertilization occurs.

It alters sperm migration, ovum transport and fertilization. It stimulates a sterile foreign body reaction in endometrium potentiated by copper.

Side Effects

Copper bearing IUD's have no "hormonal side effects" but sometimes cause an increase in the amount, duration and painfulness of menstrual periods. These symptoms usually lessen or go away during the first few months after insertion.

Timing of Ppiucd Insertion [6]

Post Placental Insertion:-

Insertion of IUCD within 10 minutes after the placental expulsion following a vaginal delivery on the same delivery table.

Intra-Cesarean:-

Insertion that takes place during a cesarean delivery, after removal of placenta and before closure of the uterine incision.

Within 48 Hours After Delivery:-
Insertion of IUCD within 48 hours of delivery.

Importance of Proper Insertion Technique Of Ppiucd[12]
For the first 48 hours after birth:-
The length of the uterus is almost 30cm. This makes successful fundal placement of the IUCD with a typical interval. IUCD inserter tube is difficult, as the length of the tube is not sufficient. Instead, a long PPIUCD insertion forceps with a fenestrated end is used for insertion of the PPIUCD, to ensure the placement of fundus.

Problems At The Time of Insertion[11]
- Client discomfort or pain
- Displacement of the IUCD
- Cervical laceration
- Uterine perforation.

Problems Encountered After Immediate Ppiucd Insertion[11]
- Changes in menstrual bleeding pattern
- Cramping or pain
- Infection
- IUCD string problems
- Partial/complete IUCD expulsion

Postpartum Iucd Counseling [11]
1. Establish a supportive, trusting relationship.
2. Allows the client to talk and listens to her.
3. Engage patient husband or important family member with her consent.
4. Explore client's knowledge about the family planning and benefits of spacing pregnancies.
5. Ask patient about desired number of children, desired to space birth, desire for long term family planning.
6. Provides general information about benefits of spacing births.
- Advice that, it ensures her health and the health of her baby, she should wait atleast 2years after this birth before trying to get pregnant again.
7. Provide information about birth spacing methods.
- Based on client's prior knowledge and interest, briefly explains the benefits, limitations and use of following methods;- LAM, condoms, PPIUCD, POP's and post partum tubectomy.
8. Help and support the client to choose a method, by providing adequate information.
9. Discuss the key information about the PPIUCD with the client.
- Effectiveness.
- How does the PPIUCD prevent pregnancy
- How long does the PPIUCD prevent pregnancy
- The PPIUCD can be removed at any time by a trained professionals and fertility will return immediately.
10. Discuss about the advantages of PPIUCD.
11. Discuss about the limitations of PPIUCD.
12. Discuss the warning signs and explain that she should return to the clinic as soon as possible, if she experienced any of the warning signs.
13. Check the woman level of understanding.
14. If client cannot arrive at a conclusion on the visit, ask her to plan for a discussion with her family and follow up discussion on her next visit.

Timing Of Counselling For Ppiucd[11]
1. During antenatal visits.
2. During admission, early labor and prior to scheduled cesarean section.
3. On the first day of postpartum period or within 48 hours of delivery.

Post-insertion Counselling[11]
- Following insertion of PPIUCD, reinforce the key messages related to PPIUCD and inform the woman regarding follow-up visits.
- Points to be stressed are importance of breastfeeding and assurance that the IUCD does not affect breastfeeding.
- Follow up after 6 weeks for IUCD/Postnatal care.
- To come back any time if she has experiences any warning sign if the IUCD is expelled.

Warning Signs[12]
- Foul smelling vaginal discharge difference from the usual lochia.
- Lower abdominal pain, especially by not feeling well, fever or chills, especially the first 20 days after insertion.
- Concerns that IUCD has fallen out.

Ppiucd Misconceptions[13]
- PPIUCD perforates uterus and enters abdomen.
- PPIUCD expulsion is more common as compared to normal IUCD.
- PPIUCD causes cancer.
- PPIUCD alters breast milk composition.

Contraindications For Insertion Of Ppiucd[14]
- Chorioamnionitis
- Unresolved Postpartum hemorrhage
- Postpartum endometritis or Puerperal Sepsis
- More than 18 hours from rupture of membranes to delivery of the baby.
- Extensive genital trauma.

Ppiucd Service Delivery Guidelines[12]
- Both Cu-IUCD 380A and Cu-IUCD 375 are approved for PPIUCD insertion.
- Every woman must be counseled on the family planning options available for her in the post-partum period. If she chooses PPIUCD, then she should be counseled regarding advantages, limitations, effectiveness and side-effects related IUCD.
- The provider must explain the procedure for insertion and/or removal of the IUCD.
- The PPIUCD must be inserted only by a service provider who has been trained to competency in PPIUCD service provision according to national standards, as the technique of PPIUCD insertion is different from interval IUCD insertion.
- The provider must insert the IUCD using a PPIUCD insertion forceps and should take care to follow all recommended clinical and infection prevention measures for successful insertion.
- The provider must maintain records regarding PPIUCD insertions and follow up visits as per protocol.
- Woman must be followed by a provider oriented to PPIUCD service.

Advantages Of Ppiucd[11]
Advantages for the women
- Convenient method
- Immediate return to fertility on removal
- Safe and effective method
- High motivation for a reliable birth spacing method
- No risk of uterine perforation because of the thick wall of the uterus.
- Less chance of heavy bleeding, especially among Lactational amenorrhea method users, since they are experiencing amenorrhea.
- No effect on amount or quality of breast milk.

Advantages for the service provider or service delivery site:-
- Saves the time as performed on the same delivery table for post placental/intracesarean insertion.
- Need for minimal additional instruments, supplies and equipment.
- Convenience for clinical staff; helps relieve overcrowded outpatient facilities.

Limitations[11]
- Increased risk of spontaneous expulsion. The skilled clinicians with right technique of insertion are associated with lower expulsion rate.
- Perforation of the uterus, while placing a PPIUCD immediately after delivery of placenta or during cesarean section or during the first 48 hours postpartum is unlikely because of the thickness of the uterine wall in the postpartum period. No such cases are reported in the literature.
- Does not protect against STI's/HIV.

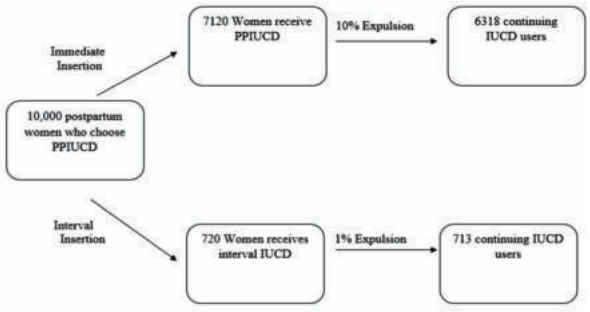
Standards[11]
The Following Standards Of Care Must Be Maintained
- Woman must be counseled regarding advantages, limitations, effectiveness, side effects and problems related to IUCD.
- The provider must explain the procedure for insertion and or removal of immediate PPIUCD.
- Woman must be screened for clinical situations as per WHO

medical Eligibility Criteria [MEC]. Screening should take place in the antenatal period, as well as immediately prior to insertion, immediately postpartum.

- The woman must be counseled and offered another suitable postpartum Family planning method, if her clinical situation does not allow for insertion of the immediate PPIUCD.
- The provider must insert the IUCD by following the recommended clinical and infection prevention measure for successful insertion.

Public Health Approach Ppiucd[15]

Weighing Convenience And Expulsion For Public Health Impact



CONCLUSION

PPIUCD is an effective, safe, reversible method of long term contraception with high reported expulsion and low perforation rate, compared to interval insertion. More research is needed in the field of PPIUCD to enhance awareness and acceptance in the community. Awareness and counseling the eligible couples during antenatal care can improve acceptance and compliance of PPIUCD continuation rates.

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