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ORIGINAL ARTICLE

A PROSPECTIVE STUDY TO EVALUATE SAFETY, EFFICACY AND EXPULSION RATE OF POST PLACENTAL INSERTION OF INTRA UTERINE DEVICE

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ABSTRACT: AIM: This study was conducted to know the factors associated with acceptability of immediate post placental IUCD insertion in women and to know the level of safety efficacy and expulsion of post placental insertion of IUCD. **MATERIAL AND METHODS:** This study was conducted in Obstetrics and Gynaecology, Department of Gandhi Memorial Hospital, Rewa (M. P.) over period of 9 months. Women admitted and delivered at SGMH were counseled regarding IUCD like its advantage side effects and complications. CuT 380A was inserted within 15 minutes of delivery of placenta and membranes in women who had no contraindication for post placental IUCD and gave consent for this. All these women were followed up to 6 months post insertion period. **RESULTS:** Total number of counseled women was 600 over the period of three months from August 2014 to October 2014. Out of these only 400 women gave consent for PPIUCD insertion, 200 denied. 100 Lost follow-up only 300 women were followed-up. Among followed-up women 30 women had expulsion, 20 women had only bleeding problem, 20 women had only pain in abdomen, bleeding and abdominal pain together in found in 60 women, thread problem in 5 women and continuation on contraceptive method by 230 women, 70 women discontinued IUD because of bleeding, pain in abdomen, missing thread, family pressure etc. **CONCLUSION:** On the basis of our results it may be concluded that insertion of CuT 380A within 15 minutes after placental delivery has high retention rate, expulsion rate was not very high and it can be reduce with practice. Acceptability of this contraceptive method is high with proper counseling despite of low awareness level.
KEYWORDS: Post placental Intra Uterine Device insertion, Missing thread.

INTRODUCTION: After female sterilization the IUCD is the most widely used method of contraception. It is a reversible method of contraception in the world today around 30% of couples used an IUCD, more in the developing countries than developed (United Nation, 2006). IUCD is the most cost effective method of contraception today when women are counseled properly, the post-partum insertion of an IUCD is likely to bring about a revolutionary change in contraception use in India.

High level of acceptance for post placental IUCD can be achieved by proper counseling and as the introduction of Janani Suraksha Yojana, free of cost availability of emergency transportation facility and incentives for hospital delivery to ASHA, Aganwadi workers by government, labour room is attended by large number of beneficiaries day by day.

Immediately after birth of new born women not ready for next pregnancy. So it is the time when if she is counseled properly regarding contraception acceptance level will be very high and if she can be received contraception facility on the labour table it-self it is very comfortable for women for remote area in saving of time, cost and fear of next pregnancy immediately.

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IUCD can be inserted safely at any time during the first 48 hours after delivery, can also be inserted after six weeks postpartum (Extended PP) and after an abortion (post abortal). As a temporary contraceptive method use of IUD is only 1.8% (NFHS, 2006).

MATERIAL AND METHODS: The present study was carried out during the period of nine months in the department of Obstetrics and Gynaecology, S.G.M Hospital Rewa (M. P.). This study divided in two parts:

a) Insertion of IUD (3 months period from Aug. 2014 to Oct. 2014).
b) Follow-up (Till 6 months post insertion period) up to Apr. 2015.

Study Population: Women who delivered at SGM Hospital, Obstetrics and Gynaecological Department, during study period who fulfilled criteria for post placental IUCD.

Inclusion Criteria: Women between 18-40yrs of age group, women who delivered full term, haemoglobin ≥10gm/dl, women desiring to have CuT after counseling and consent.

Exclusion Criteria: Women with history of prolong rupture of membranes (>24hrs), women who had STDs or high risk of STDs, who had history of manual removal of placenta, who had post-partum hemorrhage/uterine atony required extra dose of oxytocin.

Insertion Technique: After taking consent of women who fulfilled eligibility criteria for post placental IUD insertion, uterus was palpated to evaluate the height of the fundus and tone of the uterus to know whether CuT thread are likely to protrude through the cervix. Under all aseptic precaution and care, after cleaning the perineum with povidone iodine Sim's speculum was gently inserted in vagina to visualize cervix, cervix and vaginal walls were cleaned with povidone iodine soaked swabs. Anterior lip of cervix was gently catch hold with ring forceps IUCD was inserted lower uterine segment. Other hand was moved to abdomen over the fundus and uterus was pushed upward gently to reduce the angle and curvature between the uterus and vagina. IUCD with forceps was moved upwards until it can be felt at the fundus, forceps were opened to release the IUCD and swept to side walls. Uterus was stabilized until forceps removal was complete, thread was inspected through cervix. Women allowed to take rest for some times on the labour table.

On discharge from the hospital she was told to return for follow-up and advised to come back any time if she has foul smelling, vaginal discharge, different from lochia, suspicion that IUCD fallen out, lower abdominal pain which is accompanied by fever or chills.

RESULTS: In the present study total number of women counseled were 600 among those 400 women accepted post placental insertion of IUD as a method of contraception while 200 denied. Among these 400 women only 49% women educated up to secondary level, 23% had primary education, 13% had higher education and rest 15% had no exposure to formal education. Women who accepted the method most of the women (48%) were had 2nd parity, 14% primipara, 28% women had 3rd parity and 10% women were remained in multipara group (≥4 parity).

Among the study group 56% women had space of <2yrs in between last child birth and present delivery, 24% women had 2-3 yrs spacing while ≥4yrs of spacing was found only in 7% of women.

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In the present study 62% of women belonged to low income group while 23%, 15% women belong to medium and high income group respectively.

Most common cause of refusal among parturient (n=200) in the study was fear of pain and bleeding (41%) while 35% women need to discuss with the partner and 22% preferred to use another method, 3% had fear of cancer, 5% had no reason and 1% denied because of some religious belief.

Among the accepted group of women 100 women lost in follow-up, only 300 women followed-up to 6 months of post insertion period.

Among the women who came for follow-up (n=300), 10% gave history of expulsion in whom 20% had expulsion within 7 days, 70% had within 7-30 days and 10% after 30 days.

Out of 300 women who came for follow-up 20 women (15%) insisted for removal of CuT. Reason of removal of IUCD among these women bleeding problems (30%), Pain in abdomen 20%, pressure from family 20% did not want to continue 5% and women who had history of lost thread 25% but diagnosed on ultrasound in situ CuT also did not want to continue and insisted for removal.

Continuation of post placental IUD insertion as contraception method by women divided in two groups:

A) Women with one or more complication and,
B) Women with no complications with IUCD.

Some women with post placental IUCD insertion came with one or more complications (Missing thread 5 (1.66%), only bleeding problem 20 (6.66%), only pain in abdomen 20 (6.66%), bleeding with pain in abdomen 60 (20.0%) and expulsion of IUCD in 30 women (10%).

Women with no complications (165 women out of 300) 13 women (4.33%) insisted for removal of IUD under family pressure. Overall 70 women (23.33%) including expulsion of IUD pain in abdomen, bleeding problem, missing thread and family pressure did not continue IUCD. Only 230 women (76.67%) continue IUCD up to 6 months follow-up.

DISCUSSION: In this study majority of the women (75%) had at least primary level of education. Acceptance of post placental IUCD was higher among women with primary 23% and secondary education 49% so finding confirms importance of education in deciding future pregnancy. Women who completed secondary education were about twice as likely to used modern contraceptive methods as women who did complete primary education.[1]

This study shows roll of education in acceptance of contraceptive methods as studied by Safwat et al[2] in Egypt a significant number of women denied PPIUCD because of partner's unwillingness. This reveals the importance of partner and family in involvement during counseling and decision making. Healthy timing and spacing of pregnancies have a positive effect on maternal health and newborn outcomes.[3]

In the present study acceptance of IUD was the most common among 2nd and 3rd gravida (76%), this is similar to the study by Grimes et al[4] where they found higher acceptance in multiparous women (65.1%).

During the short post-partum period which is not appropriate for counseling, afford to get consent from a partner having no knowledge about PPIUCD is difficult therefore it is most important to include proper counseling of the couple together to choose a contraceptive method which will intern increase the compliance. Husband and other family member's pressure was a significant reason for IUCD removal. Findings emphasize the importance of involving the husband in prenatal

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counseling. Like the other studies[5] bleeding 26.66%, out numbers other complications. It is really worrying but only 20 out of 80 insisted of removal rest remain IUCD with reassurance and symptomatic treatment only, which speaks the importance of positive attitude.

Expulsion rate of IUCD in our study was 10%, expulsion of PPIUCD usually occur in the first few month. In present study expulsion rate of PPIUCD within 7 days was 2% and within 4 weeks was 7%. This was similar to multi country study done in Belgium, Chile and Philippines which showed the rate of expulsion at one month ranging from 4.6 to 16%.[6]

In present pregnancy 62.25% women visited follow-up clinic up to 6 months while 25% were lost to follow-up. Women who visited for follow-up were counseled about importance of birth spacing, advantage of IUD as a contraceptive method and women with PPIUCD as a contraceptive methods came with complications like bleeding problems and pain in abdomen were managed symptomatically. It should be noted that there were no serious complications in this study.

CONCLUSION: The acceptance of PPIUCD was high in the present study and it is comparable to other studies done globally. Awareness of the PPIUCD among these women was very poor despite high acceptance. Majority of the women never heard about the PPIUCD before admission to labour room. Parturient who had a short duration from their last child birth <2years, had greater acceptance of the PPIUCD. Acceptance of higher among women who had primary and secondary education.

The PPIUCD was demonstrably safe, having no reported incidence of perforation, with low rates of expulsion, pelvic pain and few missing threads.

We can conclude that inserting CuT 380A after 15 minutes of placental delivery is safe and effective and has high retention rate. The expulsion rate was not high and further can be reduced with practice.

RECOMMENDATION:

1. With the high level of acceptance despite low level of awareness we should need to develop strategies to increase public awareness regarding post placental IUCD through different media sources.
2. It is also important to arrange training programs on PPIUCD in order to increase knowledge and skill among health care providers.

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