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POSTPARTUM IUCD – BOON FOR WOMEN

Gynaecology

Dr. Savita Kamble Associate Professor, Department of Obstetrics& Gynecology, B. J. GovernmentMedical College, SGH, Pune.

Dr. Tejaswini Kale (Pingle)* Associate Professor of Obstetrics &Gynecology, B. J. Government Medical College, SGH, Pune. *Corresponding Author

ABSTRACT

Pregnancies which occur too frequently have adverse impact on health of mother as well as the child. The postpartum period is the most convenient time for health care provider and the mother for Cu T insertion as in this period the pregnancy is ruled out and the procedure requires less time and can be done in same hospital visit. Majority of women conceive in lactationalamenorrhea due to lack of awareness about contraception and land up with unwanted pregnancy. This leads to morbidity & mortality related to abortion as women usually come in second trimester fortermination. This study is an attempt to establish PPIUCD as a safe and effective method of contraception which helps to increase interpregnancy interval. In our study 25% of patients at 6 weeks and 16% at 6 months had minor complications as pain and bleeding.Removal rate and expulsion rate were 5% and2.5% respectively. Continuation rate was 91.89%.Postpartum Intrauterine Contraceptive Device is a safe and effective method of contraceptive with less complication.

KEYWORDS

postpartum IUCD, Kelly's forceps

INTRODUCTION

National Population Policy of India was formulated in year 2000 with long term objectives of achieving stable population by 2045 at level consistent with requirements of sustainable economic growth and social development. One of the immediate objectives of the policy is to address the unmet needs for contraception(1). Pregnancies which occur too frequently and early have adverse impact on health of mother as well as the child. WHO has recommended an interval of at least 24 months (36 months for healthier outcome) between two consecutive pregnancies(2) The reason for non use of contraception are due to lack of awareness, limitations due to cultural and social factors and non-availability of accessible family planning devices(3). Postpartum contraception prevents women from unwanted pregnancies and hence it indirectly prevents high incidence of abortion resulting from such unintended pregnancies and their complications.

WHO Medical Eligibility Criteria 2009 classifies Copper T Intra Uterine Device as Category 1 which can be used in both breastfeeding and non breast feeding women in immediate postpartum period(4). It does not have any effect on breastfeeding.(5)It is a very effective and reversible method of contraception. In developing nations like India, time of delivery at a health care set up may be the only time she can be motivated for contraception. As once the woman delivers a child and goes home it is less likely that she will come back for contraception to health care facility due to her household responsibilities and social and cultural factors. So there is definite need of conducting studies to see the feasibility of PPIUCD insertion, to meet with the unmet needs of the mothers in developing countries like India.

In today's scenario in India, maternal mortality is 178 per 1 lakh live births(6). Post Partum Family Planning (PPFP) enables the women to achieve healthy birth interval potentially averting 25% to 40% maternal deaths(7)Thus postpartum IUCD can reduce the complications.

MATERIALAND METHODS

This study was a prospective study carried out in the department of obstetrics and gynecology at tertiary care centre with a sample size of 80 from October 2012 to October 2014. PPIUCD was inserted within 48 hrs of delivery using Kelly's forceps method.

Inclusion criteria- All women admitted and delivered in tertiary care centre. Those women who were fit as perWHO Medical Eligibility Criteria (MEC), and ready to give consent for the procedure were selected.

Exclusion criteria-All women with rupture of membranes for more than 18 hours, chorioamnionitis, puerperal sepsis, excessive genital trauma, prediagnosed and clinically suspected uterine malformation ,immediately after septic abortion and patient not willing for consent. Patients who were full term and came for routine ANC check up and those patients who were admitted in labour room were counseled for PPIUCD. Detailed history was taken and examination was done of patient who fulfilled the inclusion criteria. Written informed consent of patient was taken before procedure. Women were screened for clinical situations as WHO Medical Eligibility Criteria(MEC).All PPIUCD insertions were done bytrained obstetricians under aseptic precautions .

Routine postnatal care was given and patients were discharged. Patients were followed up at 6 weeks and again at 6 months and later if she had any queries or concerns regarding PPIUCD. At follow up visit, patients were assessed for following complications such as

1) **Pain in abdomen** was assessed by using Numeric Pain Rating Scale(NRS) .The patients were asked to rate the intensity of their pain ranging from 0 to 10 with 0 represents no pain and 10 represents worst possible pain. These patients were treated by Tab Mefenamic acid 250 mg TDS for 5 days.
2) **Excessive per vaginal bleeding** –It was defined as soakage of more than 3 pads/ day with or without passage of clots for more than 5 days. Tab Tranexamic acid 500mg TDS for 5 days was given for treatment.
3) **Infection** was defined as presence of foul smelling lochia/discharge per vaginally with without fever, uterine subinvolution or fornicial or cervical tenderness.
4) **Perforation** was non-visualization of IUCD strings on per speculum examination with confirmation of its location outside the uterine cavity using ultrasonography.
5) **Expulsion** was non-visualization of IUCD strings on per speculum examination withabsence of IUCD in uterine cavity or in abdomen using ultrasonography
6) **Failure** (Pregnancy) on clinical suspicion ultrasonography was done to rule out pregnancy

RESULT-

Total 80 patients came for 6 weeks follow up but at 6 months visit only 74 patients turned up for follow up. Two patients had IUCD expulsion at 6 weeks visit and opted other method of contraception so were out of study group and remaining 4 patients neither came for follow up nor could be contacted on phone.Continuous variables like age, parity were represented as Mean ±SD.Categorical variables were expressed in percentages. In this study the mean age was 24.5years ±3.96. Maximum cases belonged to the age group of 21 to 25 years.

Parity –Majority of the cases who were willing for PPIUCD had parity of 2 who were not willing for permanent tubal sterilization. Total of 13 (16.25%)patients out of total 80 cases had parity of 3 or more who did not have proper knowledge of contraception or were eager for male

child. The number of patients with 1 child which accounts to total 29(36.25%) patients were educated, well aware of contraceptive methods available and wanted healthy birth spacing for at least 3 years. The maximum parity was 4 and minimum was 1.

Distribution according to the time of counseling- Out of the 80 patients in this study 23 (28.75%)patients were primarily registered in the same tertiary care centre and were counseled in the antenatal OPD of same tertiary care centre. The remaining 65(81.25%) patients were counseled in the postnatal ward as they were admitted in emergency labour room and delivered later.

Incidence of complications

Complications	6 weeks follow up (80)	%	6 months follow up (74)	%
Pain	15	18.75%	5	12.16%
Excessive Bleeding	6	7.5%	3	4.05%
Infection	0	0	0	0
Perforation	0	0	0	0
Failure	0	0	0	0
Missing threads	4	5%	3	4.05%
Expulsion	2	2.5%	1	1.35%
Total	27	33.75%	12	16.21%

In present study total of 15 patients experienced moderate to severe pain at 6 weeks visit .These patients were treated by Tab Mefenamic acid 250 mg TDS. Out of these 15 patients one patient did not come for 6 month follow , one had no relief at all and came for early removal within next 2 months and remaining 13 had pain relief and wanted continuation and 5 of which had persistence of symptom but in milder form so continued to use PPIUCD.

At follow up at 6 weeks 29 patients had attained their first menses post delivery. Out of these6 patients had excessive vaginal bleeding defined previously. All these patients were counseled properly and were treated by Tranexemic acid 500mg TDS for 5 days and called for follow up before 6 months if it persists. At 6 months follow up visit 56 out of 74 patients had attained their menses. Total 3 patients had excessive bleeding out of which in 1 patient PPIUCD removal was done due to non response to treatment while other patients responded well to the treatment.

Incidence of missing thread

Among the cases studied, 4 had missing threads at first 6 weeks visit. These patients were reassured, confirmation was done with ultrasonography for location of IUCD and to rule out perforation. Out of 4 two had spontaneous expulsion and two other hadIUCD in the uterine cavity and were willing for continuation. At 6 months follow one more had spontaneous expulsion so total 3 had missing threads.

Incidence of expulsion of PPIUCD

At follow up visit at 6 weeks, 2 patients out of 80 had their IUCD expelled. It was confirmed by ultrasonography. Both the patients offered alternative method of contraception (Barrier method was chosen by the both patients).These patients had no other complaints. And at 6 months follow up one more patient had expulsion of IUCD.

Incidence of removal of PPIUCD

Reason for removal of PPIUCD	No of patients	%
Family pressure	2	2.5%
Severe pain not responding to medication	1	1.25%
Excessive vaginal bleeding	1	1.25%
Total	4	5%

Outof total 80 patients in this study 4 (5%)patients were not satisfied with this method of contraception and opted for PPIUCD removal for different reasons. One patient had abdominal pain NRS more than 4 not relieved on treatment wanted PPIUCD removal, while other 2 patients removed due to social reasons as their family did not approve of IUCD as a method of contraception later and one more patient got it removed due to excessive vaginal bleeding during her first menstrual period.4 patients did not come for follow up can be due to their not satisfaction with this method ,which indicates that 90%patients were satisfied with this method of contraception.

DISCUSSION - In this study the mean age was 24.5years ±3.96. The total number of multiparous women in our study contributed to 63.75% of the study population. Overall acceptance of IUCD was good in multiparous women. Maximum number of patients 81.25% received counseling after admission to labour room as they were not antenatally registered and were counseled in post natal ward and 28.75% received antenatal counseling for PPIUCD as they were registered at our institute.

The incidence of excessive per vaginal bleeding in our study was 7.5% at 6 weeks and 4.05% at 6 months follow up.All the patients in our study group responded to the treatment of Tranexamic acid and counseling well except one who eventually opted for removal.

The incidence of pain in abdomen was 18.75% at 6 weeks and 12.16% at 6 months visit. All responded to symptomatic treatment except one who was not satisfied and opted for removal.

Total 4(5%) of patients in this study missing strings detected on 6 weeks follow up visit,out of which 2 had spontaneous expulsion and in remaining there was coiling of thread which was confirmed using ultra sonography. One more patient spontaneous expulsion at further 6 months visit hence total 3 (4.05%) patients had missing threads at 6 months visit.

The incidence of expulsion in the study cases was 2.5% at 6 weeks visit and 1.35% at 6 months follow up visit. In our study the PPIUCD insertions were done by trained obstetricians which reflected low expulsion rate of only 2% as the expulsion rate is also dependant on the skill and expertise of the obstetrician. This finding is supported from the study done on postpartum women in Kenya and Mali.(8). The expulsion rate was 1% in the group where insertion was done by the trained doctors as compared to 15% in the group where insertion was done by midwives. In our study the insertion was done within 48 hours of delivery which is proven to as effective as insertion within 10 minutes after placental delivery.

The removal rate of PPIUCD in our study was 6% (4 out of 80). One patient(1.25%) had abdominal pain NRS≥ 4 not relieved by treatment and wanted removalwhile two(2.5%) patients removed due to social reasons as their family did not approve of IUCD as a method of contraception later. One patient(1.25%) had excessive vaginal bleeding not relieved on treatment and hence got it removed. The removal rate due to medical reason was 2.5% %in all.

There were no cases of pelvic inflammatory disease, uterine perforation or pregnancy in the study cases. Most studies in India and around the world have demonstrated low rates of infection and no cases of perforation with PPIUCD.

Limitations – There were less number of total patients in our group. With more information in antenatal period and proper counseling, more women may optfor PPIUCD to maintain healthy spacing between two children. There should have been long follow up to find the real incidence of expulsion, failure and satisfaction towards this method of contraception.

CONCLUSIONS

Majority of women conceive in lactationalamenorrhoea due to lack of awareness about contraception and health hence adequate counseling of the women in the antenatal period itself is very important. The emphasis should also be given over counseling of the relatives too because another reason for non use of any form of contraceptive are the myths, cultural beliefs and wrong information regarding the contraceptive method. There was no contraceptive failure, less complications in our study thus proving the safety and efficacy of PPIUCD as contraceptive method.Continuation rate was 91.08%. Thus Immediate PPIUCD can be the solution in a country like India currently facing population crisis and high maternal morbidity and mortality due to great number of births occurring at short intervals. As it can be propagated bywell-trained health workers in rural sectors who also provide antenatal services, there is need to develop strategies to increase public awareness of the PPIUCD through different media sources.

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