

Study of Intra Caesarean Insertion of Intra Uterine Contraceptive Device at District Hospital Chamarajanagar

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Abstract

Number of caesarean delivery and its complications are in rising trends in past and present decade. Proper spacing between births is essential to decrease maternal and neonatal morbidity and mortality. Intra-caesarean insertion of Intrauterine contraceptive device (IUCD) plays an important role in preventing pregnancy maintaining birth spacing The aim of this study is to find out a safe and temporary method of contraception during post-partum period in women undergoing caesarean delivery. This study is undertaken to evaluate the acceptance of intra-caesarean insertion of IUCD as a temporary method of contraception, its safety and complications during follow up. A prospective hospital based study was conducted in the department of Obstetrics and Gynaecology, at Chamarajanagara institute of medical sciences (CIMS) , Chamarajanagara from Jan 2017 to Aug 2018 Counselling of women for PPIUCD (Postpartum Intra Uterine Contraceptive Device) insertion, was done during Antenatal period and before caesarean delivery. Details of the patient and PPIUCD insertion were entered in the proforma. Follow-up of the patients was done at six weeks. Study was analysed by appropriate statistical analysis. Total of 1492 pregnant women counselled for PPIUCD during ANC and during caesarean delivery. Among those 912(61.1%) accepted PPIUCD. Majority women who

accepted PPIUCD were in the age group of 20- 30 years (58.4%). Majority of Primi gravida accepted PPIUCD (89.9%). Most common complaints encountered during follow up were missing strings (19.4%). Intra-caesarean insertion of PPIUCD is accepted more in primi parous women as compared to multiparous women. Side effects are less. It appears to be safe as well as effective temporary method of contraception after caesarean delivery. Repeated and effective counselling of pregnant women, family members and ASHA (accredited social health activist) workers is needed for high acceptance rate.

Keywords

Postpartum Intra Uterine Contraceptive Device Contraception, Intra-caesarean insertion, Accredited social health activist

I. Introduction

Number of caesarean delivery and its complications are in rising trends in past and present decade. If the birth spacing is short, complications like preterm labour, uterine rupture, placenta praevia and placenta accreta and increta are more in post caesarean delivery [1]. A short interval pregnancy within six months after live birth has increased risk of induced abortion, miscarriage, preterm delivery, still birth, neonatal deaths, low birth weight and maternal anaemia and low birth weight [2-6]. Some of these complications are life threatening to both mother and the newborn baby.

Intra-caesarean insertion of Intrauterine contraceptive device (IUCD) plays a important role in preventing early pregnancy , maintaining birth spacing and also helpful in decreasing maternal deaths by 25-40% and reducing child mortality by 10% [7] . Immediate insertion of IUCD during caesarean

delivery does not have any effect on lactation and for intercourse.

So it is one of the safe temporary method of contraception during postpartum period.

Objectives

This study is undertaken to evaluate the acceptance of intra caesarean insertion of IUCD as a temporary method of contraception, its safety and complications during follow up of six weeks.

II. Material and Methods

This is a prospective hospital based study, conducted in the department of Obstetrics and Gynaecology, at Chamarajanagara institute of medical sciences, Chamarajanagara from Jan 2017 to Aug 2018.

Counselling of women for PPIUCD insertion, was done during Antenatal period and before caesarean delivery. Details of the patient and PPIUCD insertion were entered in proforma.

Manual Insertion of CUT380A inside the uterus of all consenting women undergoing caesarean delivery was done after the expulsion of the placenta. CUT380A is placed manually at the fundus with strings directed towards cervix. Care was taken during caesarean delivery, strings not to be placed in the cervical canal and it should not come in between during suturing of uterus. Follow up of the patients was done at six weeks.

Study was analysed by appropriate statistical analysis.

Inclusion criteria:

a) All women undergoing caesarean delivery.

Exclusion criteria:

a) Prolonged premature rupture of membranes (PROM) of > 18hours

b) Signs and symptoms of chorioaminonitis

c) Unresolved post-partum haemorrhage (PPH)

d) Uterine anomaly

e) HIV infected women not on antiretroviral therapy

III. Results

It was a prospective study done in the department of Obstetrics and Gynaecology at Chamarajanagara institute of Medical Sciences from Jan 2017 to Aug 2018.

Table 1: Shows total number of caesarean delivery, total women counselled for PPIUCD, women who accepted PPIUCD and women who underwent concurrent tubectomy.

Sl. no	Year	Total no of Caesarean delivery	Total no of women Counsellled for PPIUCD	Total no of women who accepted PPIUCD	% women who accepted PPIUCD	Women who underwent Concurrent tubectomy
1	jan2017 to dec 2017	1330	896	489	54.5%	249(18.7%)
2	Jan 2018 to Aug 2018	878	596	423	71%.	189(21.5%)
Total		2208	1492	912	61.1%	438

In our hospital during Jan 2017 to Aug 2018 total of 1492 pregnant women counselled for PPIUCD during ANC and during caesarean delivery. Among those 912(61.1%) accepted PPIUCD.

Acceptance of PPIUCD was 54.5% in 2017 same has increased to 71% in 2018. It may be because of effective and repeated counselling and involvement of ASHA workers for counselling the contraceptive methods. Out of Total number of 2208 caesarean delivery in our hospital, 438 (19.84%) underwent concurrent tubectomy. 238 pregnant women were either referred cases or not counselled for PPIUCD or had not met the criteria for PPIUCD.

Table 2: Age distribution and number of PPIUCD accepted and its percentage

Age in years	Total no of women who accepted PPIUCD	Percentage
Less than 20 years	334	36.7%
20-30 years	532	58.4%
30-35 years	45	4.9%
Total	912	100%

Majority of women who accepted PPIUCD were in the age group of 20- 30 about 58.4% and next common was less than 20years (36.7%).

Table 3: Parity and PPIUCD acceptance rate

Parity	Total no of women who accepted PPIUCD	Percentage
Primi gravida	819	89.9%
Second gravida	91	10%
Third gravida	01	0.1%
Total	912	100%

PPIUCD was accepted by primigravida in majority of about 90%. Counselling during ANC and before caesarean delivery for time spacing is very effective. Most of the primigravida accepted this method as the temporary method of contraception. On the other hand post-caesarean women were more inclined towards permanent sterilisation methods rather than temporary methods.

Table 4: Follow up of PPIUCD and its complications at six weeks

Follow up findings	Jan 2017- Dec 2017	Jan 2018- Aug 2018	Total	Percentage
Expulsion of PPIUCD	42	17	59	6.4%
PPIUCD with infection	02	Nil	02	0.21%
Number of finding as Missing strings	145	32	177	19.4%
Bleeding per vagina	51	09	60	6.5%
Pain abdomen	27	08	35	3.8%

Most common complaints encountered during follow up of intra-caesarean insertion of IUCD were missing strings of about 19.4%. CUT380A in situ was confirmed by ultrasound and reassurance was given. Second common complaint was spontaneous expulsion of PPIUCD after six weeks of about 6.4%. (Two of PPIUCD removed during post-operative period because of post-partum haemorrhage).

We also encountered spotting and irregular bleeding per vagina of 6.5%, and pain abdomen in 3.8% of pregnant women. These complaints were subsided by Anti fibrinolytics and antispasmodics and counselling of reassurance was done to these parturient women.

IV. Discussion

In our study of 20 months at Chamamarajanagar institute of medical sciences we counselled for 1492 women undergoing caesarean section and 61.1% (912) women accepted as an effective temporary method of contraception. Acceptance rate is higher in our study compare to study in [8] of 44%, may be because of effective and repeated counselling during ANC and before caesarean section with family members and respective ASHA workers. In our study acceptance of PPIUCD is 58.4% between 20-30years of age and 36.7% in less than 20 years group. Whereas same is about 77% in 20-30yr age group in study [9] and about 70% in 20-29 years age group in study [10]. In our study acceptance of PPIUCD is less in 20-30year group and more in less than 20 year group, probably because of early marriages in this area.

In our study majority of primiparous women of 90% accepted PPIUCD as a temporary method of contraception, similarity is seen with high acceptance rate in primiparous women in work [9] of 70.47%.

During follow up missing strings and expulsion of PPIUCD is about 19.4 %and 6.4% respectively in our study and almost similar in study [11], with invisible strings of 20% and expulsion rate of 6.25%. During follow up bleeding per vagina is a common symptom observed in 6.5% after PPIUCD insertion which can be compared with similar

finding in [10], of around 8.5% with excessive menstrual bleeding pattern. Pain abdomen following insertion of PPIUCD is seen in very few patients of 3.8% which can be compared with almost same findings in [12] of 4.3%.

V. Conclusion

Intra-caesarean insertion of PPIUCD is accepted more in primiparous women as compared to multigravida. Side effects are very few. It appears to be safe, highly effective, temporary method of contraception after caesarean delivery. Repeated and effective counselling of pregnant women, family members and ASHA workers needed for high acceptance rate.

VI. References

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