

Evaluation of Safety of Postplacental Intrauterine Contraceptive Device (IUCD) Insertion in Lower Segment Caesarean Section (LSCS)

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ABSTRACT

Background: Increasing population is a threat and burden on resources in developing countries so effective use of contraception may reduce this burden.

Aim: To evaluate safety of post placental insertion of IUCD in LSCS in term of maternal complication.

Place and Duration: DHQ Teaching Hospital Mirpur, AJK during 1st January, 2017 to 30th June, 2018.

Methods: Total 100 cases were selected and follow up done on 6 week postpartum and 6 month after delivery. Patients demographic data and record with follow up dates and all complication like expulsion, displace IUCD, perforation, hemorrhage and sepsis were noted on pre-design proforma. IUCD was inserted at time of LSCS after excluding condition like anemia, major degree placenta previa, cardiac diseases, uncontrolled GDM, fibroid uterus chorioamnionites and patient not willing for this method.

Results: The mean age of the patients was 29.42±3.96. Total 86 patients out of 100 completed their follow up up to 6 month while in one patient IUCD was removed due to her persistent pelvic pain at 6 week postpartum. Menorrhagia was observed in 03 patients, no other complication like expulsion, perforation and sepsis observed.

Conclusion: It is a safe procedure of contraception should encourage without hesitation.

Keywords: Intrauterine Contraceptive Device, Lower Segment Caesarean Section, Fibroid Uterus.

INTRODUCTION

Without effective contraception our women are at risk of unintended pregnancy at short interval after delivery of last born.¹ At 6 week post-partum more than 50% women ovulate and sexually active.² Sometime patient willing but never came for IUCD³. Due to social barrier like lack of transport and money these women unable to attend contraceptive clinic^{4,5,6}.

Intrauterine contraceptive device insertion within 10 minutes after LSCS may reduce unintended LSCS rate although less data available at post placental insertion in LSCS^{7,8} existing data showed less expulsion rate after LSCS insertion as compare to NVD⁹⁻¹¹. The purpose of this study was to evaluate safety of post placental insertion in LSCS to reduce hesitancy of obstetrician regarding its frequent use.

MATERIAL AND METHODS

This study was conducted in Divisional Head Quarter Teaching Hospital Mirpur AJK during 1st January 2017 to 30th June 2018. Total 100 patients were selected inclusion criteria like informed written consent alive and healthy previous children at least 2 kids and exclusion criteria like chorioamnionites. Fibroid uterus, anemia, uterine anomalies, patients underwent primary PPH during surgery, allergy to IUCD known or suspected genital tract tumor. IUCD was inserted and thread was directed toward cervical os.

Women kept admitted for 3 days and stitches were removed on 7th post-operative day first follow up on 6 week post-partum and all data registered on pre-design proforma

regarding visibility of thread on speculum examination, patient satisfaction in yes or no displacement lost IUCD thread excessive bleeding infection and desire for continuation noted. Same data was entered on 6 month visit. All demographic data and follow up chart were analyses to reach conclusion.

RESULTS

In this study 100 patients were included. The age range was 25-40 years in my study and 65 patients (65%) between 25-35 years while 25 (25%) were between 36-39 and remaining 10 (10%) patients above 39 years. The mean age of patients was 29.42±3.96 years. Out of 100 patients only 13 patients were lost (13%) after 6 week. Eighty seven patients out of 100 regularly registered at 6 week and 6 month follow up, (87%) prior studies showed that financially and socially deprived women are less likely to attend post-partum clinic.

Thread was visible in all cases 87 cases with one patient (1.15%) it was removed on 6 week follow up due to persistent pain. In 3 (3.4%) patients Menorrhagia was observed. Twenty seven patients (31%) presented at 6 week were not fully satisfied and they thought that backache and generalized symptom of being unwell were due to it but all of them were counseled about normal physiological changes in purpurem and iron, calcium supplement were advised and they were satisfied after counseling. No IUCD was removed.

Regarding their socioeconomical class 70% were middle class, 30% lower class, 72% fall in parity more than 4 and 28% parity more than 5. 7.8% was graduate, 10% matriculate and 12% were below matric. All of them belong to district Mirpur AJK. At 6 month follow up all patients 86 were back and happy with this method of contraception.

Table 1: Age distribution of patients (n=100)

Age in years	n	%
25 – 35	65	65.0
36 – 39	25	25.0
>39	10	10.0
Mean±SD	29.42±3.96	

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Table 2: Frequency of socio-economic class of patients (n=100)

Socioeconomic class	n	%
Middle class	70	70.0
Lower class	30	30.0

Table 3: Complications of patients (n=87)

Complications	%
Displaced IUCD	0
Perforation of uterus	0
Chronic pelvic pain	1.15%
Menorrhagia	3.4

DISCUSSION

After offering free insertion of IUCD in government set up with remain registered with us for 6 month created wonderful follow up rate at 6 weeks postpartum (87% cases) literacy rate among my patients was high 78% were graduate that was probably one reason for good follow up. Secondly all of them were belong to district Mirpur so easy accesses to hospital.

In our study among 87 patients IUCD thread visible in 86 cases at 6 month follow with 0% expulsion rate. Various studies found that after 6 month cumulative expulsion rate was 9%¹². Another study conducted by Celen et al cumulative expulsion rate was 11.3%¹³. Post-partum reference manual New Delhi showed expulsion rate high after 48 hours delivery.¹⁴ In these studies expulsion rate higher than our study may be due to our small sample size and secondly expulsion rate higher in NVD but as our study focused on only LSCS that why we have low expulsion rate. However studies conducted by Tjahjanto et al¹⁶. Another study conducted by Wildemeersch¹⁷ showed 0% expulsion rate. They said that use of correct anchor has ability to expulsion rate close to zero. These studies showed almost similar result as in our study because only three consultants who involved in this study placed IUCD and correct technique of placement may the reason for low expulsion rate.¹⁸ A similar study conducted by Levi et al¹⁹ also showed very low expulsion rate.

No case of perforation or displaced IUCD in my study observed. Global health technical brief on safety and efficacy of immediate insertion postpartum and some reported that relative safety of immediate PPH insertion. In our study sample size is small so it may not reflect those rare event accurately.²⁰ No case of PID observed in our study, while studies by Szpir et al also showed similar results²¹.

Study conducted by Welkovic et al found that no difference of excessive bleeding in postpartum IUCD insertion.²² In our study there was history of menorrhagia in 3.4% patients after post placental insertion of IUCD. Satisfaction on 6 week post-partum less as compare 6 month but after counseling about normal physiological changes in pregnancy there were convinced and no one insisting for removal .its mean adequate counseling is key for success in any intervention.

CONCLUSION

It is to be considered safe procedure so must be practice with full confidence but large sample size should be considered for future studies to enlighten the complication in more detail so that more confidence on its insertion during LSCS can be achieve.

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