

COMPARATIVE STUDY OF EARLY POSTPARTUM, POSTABORTAL AND INTERVAL INSERTION OF Cu T 200 mm² DEVICE

by

K. PREMA,* M.D., D.G.O., M.A.M.S.

T. L. GAYATHRI,** M.B.,B.S., D.G.O.

and

F. S. PHILIPS,*** M.B., B.S., D.G.O., M.R.C.O.G.

IUD offers a safe simple effective and inexpensive method of contraception, especially in the indigent poorly motivated population in the developing countries (Population reports 1975). In spite of several promising reports (Rosenfield and Castadot 1974, Hue 1974, Faundes 1973) early postpartum and immediate postabortal IUD insertion have met with considerable resistance. Such resistance is mostly related to the theoretically higher risk of infection perforation and expulsion in these groups. Recent reports indicate that though expulsion rate is high, incidence of sepsis and perforation are quite low in the immediate postpartum period (Laes 1975) and that insertion of Cu T immediately after abortion does not increase the incidence of postabortal complications. (Nayren and Johansson 1973) Continuation rates are reported to be satisfactory in both these groups (Rosenfield and Castadot 1974, Timonen and Lukkainen 1974).

Material and Methods

During the 50 months period from August 1971 to September 1975, 1531 women had had Cu T 200 mm² device in-

*Sr. Research Officer, I.C.M.R.

**Asst. Research Officer. I.C.M.R.

***Officer-in-charge, Contraceptive Testing Unit, Madurai.

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sertion done in the Peripheral Contraceptive Testing Unit of Indian Council of Medical Research at Madurai. Two hundred and fifty-four insertions were done within one month after delivery and 238 within one month after abortion. The rest were interval insertions. An age and parity matched group of 250 interval insertions were compared with the postpartum and postabortal insertion groups to find out the effect-if any-of the time of insertion on the safety, effectivity and continuation rate.

Observations

Table I, shows the net cumulative termination rate at 24 months in the 3 groups. The figure in parenthesis indicate the event rates. Both at 12 months and at 24 months. the interval insertion group had a higher continuation rate because of lower expulsion and removal rates.

High expulsion rate was the main reason for lower continuation rate in postpartum insertions. Poor motivation and consequent removal for personal reason account for the low continuation rate in the postabortal groups.

Pregnancies

There were no pregnancies in the postpartum group in the first 12 months. This is most probably due to the relatively lower fertility during the lactation

Net Cumulative Termination Rate in Postpartum, Postabortal and Interval Inserting of Copper T200 mm² Device at 24 Months

| | 12 MONTHS | | | 24 MONTHS | | |
|------------------------------------|--------------|---------------|---------------|---------------|----------------|---------------|
| | Post-abortal | Post-partum | Interval | Post-abortal | Post-partum | Interval |
| 1. Pregnancy | 0.5 | 0.0 | 0.9 | 1.4 | 0.8 | 1.7 |
| 2. Expulsion | 5.2 (7.7) | 9.4 (15.5) | 2.7 (4.5) | 7.8 (10.3) | 14.7 (22.7) | 4.2 (6.8) |
| 3. Removal for menstrual disorders | 5.2 (8.2) | 3.1 (6.3) | 5.2 (16.2) | 6.2 (11.6) | 5.1 (12.8) | 9.4 (24.8) |
| 4. Removal rate | 20.8 | 16.1 | 15.2 | 36.2 | 30.4 | 31.0 |
| 5. Closure rate | 26.5 | 25.5 | 18.8 | 45.4 | 45.9 | 36.9 |
| 6. Continuation rate | 73.5 | 74.5 | 81.2 | 54.6 | 54.1 | 63.1 |
| 7. Months of use | 2121 | 2432 | 2617 | 3041 | 3416 | 3021 |
| 8. Total acceptors | 238 | 254 | 250 | — | — | — |
| 9. Lost for follow up | 5.6 | 5.5 | 4.8 | 8.2 | 8.6 | 7.8 |

period. Incidence of pregnancies during the second year of use was similar in all the 3 groups.

Expulsion

Expulsions were almost thrice as common in the postpartum group as compared to the interval group. Majority of expulsions in all groups occurred within the first 3 months. Higher termination rates due to expulsion were the reason for comparatively higher closure rates among the postpartum insertions.

Side Effects

During the first year, incidence of menstrual disorders were least in the postpartum group because majority of the women were having lactational amenorrhea. Both in the first year and in the second year incidence of menstrual disorders were more in the interval insertions. The reason for this higher incidence of menstrual disorder among interval insertions is not known.

Removal

Removal rate for menstrual disorders were least among the postpartum inser-

tion due to the effect of lactational amenorrhea. At 24 months removal rate for menstrual disorders were higher in the interval groups who had maximum incidence of menstrual disorders. Removal rate was highest in the poorly motivated postabortal patients who accepted IUD mainly because of the insistence of medical personnel at the time of M.T.P. In spite of higher removal rate for menstrual disorders over all removal rate remained lowest in the interval group because these women were well motivated and often came voluntarily to the clinic for IUD insertion.

Complications

There were no cases of pelvic infection or perforation in any of the 3 groups.

Discussion

IUD insertion requires trained health personnel. In a vast country like India, where nearly 80% of the population live in rural areas it is quite difficult for medical personnel to reach all the women requiring contraceptive care. However, a fairly large segment of these women come under the care of maternity and child

welfare services at the time of delivery or abortion. Psychologically also women are most receptive to contraceptive advice during this period. World wide clinical trials and our trials have shown that immediate postpartum and post-abortion insertions are safe and effective and can provide contraceptive care to an otherwise inaccessible segment of population. Concurrent IUD insertion at the time of abortion is safe and effective and such insertion will not only provide a measure for fertility control but also prevent 'recedevisim' and its attendant dangers among abortion seekers.

From our data it looks as if there is no 'ideal' time for IUD insertion. What the postpartum group gains by the relative freedom from side effects was lost in higher expulsion rate. Menstrual disorders were more frequent among interval insertion and poor motivation was the problem in postabortal group. So we continue to insert IUD as and when the patient is accessible and could be persuaded to accept the device.

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