POST PLACENTAL INSERTION OF COPPER IUD

By

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SUMMARY

Post placental insertion of IUD was carried out on 200 women and followed up at the end of 6 weeks. The retention rate (83.5%) removal rate (6%) expulsion rate (10.5%) and perforation rate (nil) are comparable to insertions carried out post menstrually, and our figures compare favourably with those of other series. Immediate post placental insertion is recommended for effective implementation of post partum family planning programme.

Material and Methods

Two hundred were motivated in the antenatal period to accept IUD in the immediate post placental period. Women with more than two children who could not adopt a permanent method of contraception due to personal/medical reasons were also included in this study. Women with history of pelvic inflammatory disease, abnormal endometrial cytology and uterine abnormality and caesarean section were excluded from this study. The IUD chosen for this study was CUT_{200} well known for, low rate of perforation and expulsion and ease of insertion.

For post partum use a longer inserter or hand insertion is most effective (population reports May 1979). In this study insertion was done with the hand using withdrawal technique. In this technique the inserter is placed in position, the IUD released and the inserter then withdrawn from the uterus.

The objective is to place the device as high as possible in the endometrial cavity without perforating the myometrium. If the device is not placed high in the uterine fundus, the contractions can easily expel it from the lower segment.

All women were asked to attend the post-natal clinic at 6 weeks after discharge or sooner if the IUD had fallen out and thereafter at 12 weeks and 24 weeks post partum.

Two hundred women fitted with CUT_{200} in the immediate post partum period were followed up at the end of 6 weeks. The parity, expulsion—complete and partial, time interval between insertion and expulsion, number of removals and the percentage of expulsion, removal and retention are summarised in Table I and Table II.

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TABLE I
Parity

Primi Para	110
Para II	58
Multi Para	32
	200

major events that determine continuation of use, like pregnancy, expulsion, bleeding, pain sepsis and perforation (population reports May '79). There is a consensus in literature that IUD should not be inserted within 8 weeks post partum, because of reported greater incidence of pregnancy, expulsion and perforation. The primary basis for this belief is a report from Singapore Hospital in 1970 quoting a perforation rate of 1.8% for IUD inserted between 4 to 8 weeks post partum.

TABLE II
Time Interval Between Insertion and Expulsion Removal and Retention

Parity	Complete Expulsions I wk.	II wk.	III wk. & aove	Partial expulsions	No. of removal	% Removal	% Expulsion	% Retained
Scond para	2	5	3	—	8	7.3	9.1	83.6
Primi	3	1	1	—	4	7	8.6	84.4
Multipara	2	1	1	2	—	—	18.7	82.3

Observations

There were 14 expulsions within the first two weeks after insertion and 21 in total, giving and overall expulsion rate of 10.5%. There was no significant difference between expulsion rate of primi (9.1%) and Para II (8.6%) but the expulsion rate was 18.7% in the multi para. There was no incidence of removal of I.U.D. in the multi para giving a more or less uniform retention rate for primi (83.6) para II (84.4 and multi para 82.3). The overall retention rate was 83.5%.

Removal for bleeding, pain, sepsis or for personal reasons were not very high, 7.3% for primi and 7% for para II the overall rate for removal being 6%.

There have been no incidence of perforation in our series.

Discussion

After more than two decades of use, the IUD remains a generally safe and effective method of birth control. Proper insertion of IUD is critical to the success of the device as it can effect all

Expulsion

Burnhansupawat and Rosenfield (1971) showed an unacceptably high expulsion rate (28%) in the early post-partum insertions. Similarly Tatum (1973) reported a high rate of expulsion after post partum insertion of IUD within 5-7 days of delivery. Emens (1978) reported a very high expulsion rate of 28% for insertions carried out between 2 and 5 days post partum and concluded that no IUD should be inserted within one week of delivery but report from Newton J. R. (1982) were encouraging with an expulsion rate of around 7% after immediate post placental insertion. Mishell *et al* in (1982) carried out IUD insertion between 4-8 weeks post-partum and his results were comparable with in-

sertion carried out in the later period.

In our series the overall expulsion rate is 10.5% and this figure is comparable with the insertion carried out in the post menstrual and interval period.

Perforations

Gentile G. J. and Seigler (1977) mentioned that the incidence of perforation after post partum insertion of IUD within 4-8 weeks is four times greater than the non postpartum insertions. In India the rate of perforation reported for CUT is 0.04/1000 insertions. But Ratnam and Vin (1968) reported a perforation rate of 1.2/1000 in immediate postpartum period and 13/1000 for insertions between 4-8 weeks. Newton J. R. (1982) in a series of 274 post placental insertions have not encountered a single case of perforation. The Population Reports, (May 1979) mentioned a very low incidence (0.2% for IUD inserted 48 hours or less following delivery compared to insertion between 4-8 weeks and after 8 weeks with perforation rates of 1.8% and 0.4% respectively. Mishell *et al* (1982) in a series of more than 1500 patients, did not report any cases of perforation.

The time of insertion has no relevance to the rate of perforations, and we firmly opine that post placental insertion is as safe as any other period.

Complications

Comprehensive review of international experience by Rosenfield and Castadot (1974) showed that complication were not significantly higher for the early postpartum than for those performed 6 weeks later. With respect to bleeding there was no significant difference in removal rate noted between women receiving IUD immediately post-partum and those with later insertions. As for as pain and infection are concerned the incidence was slightly lower among women with early rather than late postpartum insertions. The removal rate reported by Newton *et al* (1977) for post menstrual insertions is 10%.

In our series no IUD was removed due to complications recognised by us. Twelve women had their IUD removed by practitioners outside and the reasons are as per Table III.

TABLE III
IUD Removals—Reasons

Sepsis	3
Bleeding and pain	4
Personal reasons	5
	12

The removal rate of 6% in our series is comparable to the figures quoted by the Population Reports (May 1979).

Comments

Post placental insertions if applied in the family planning programme has distinct advantages.

1. Highly fecund women are contacted promptly at the time delivery for spacing method.
2. Women recently pregnant are more easily motivated than women not recently pregnant.
3. The expulsion rate in the post placental insertion is not high and most of the expulsions take place within 6 weeks. So most IUD expelled can be reinserted without much loss of contraceptive protection.
4. In our country many of the patients do not return for the post-partum check up. 95% of the post partum women requesting IUD receive it in the post

placental insertion programme, whereas only 45% of prospective IUD acceptors report for insertions subsequently.

Conclusions

There are obvious advantages in providing an IUD immediately after delivery for the women who need rather than insisting that they return at a later date which may be difficult for them.

The expulsion rate and perforation rates following post-partum insertions in our series is very much low and compares favourably with encouraging reports of other series. Hence there is no justification for a blanket policy of inserting IUD only post menstrually. We strongly recommend that post placental insertion of copper IUD can be safely and successfully carried out for effective implementation of post-partum family planning programme.

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