

IMMEDIATE POST-TERMINATION CONTRACEPTION INSERTION OF COPPER 'T' DEVICE FOLLOWING MENSTRUAL ASPIRATION

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Early protection must be instituted after induced abortion if another pregnancy is to be avoided. Many women seek abortion without ever having practised any form of contraception. Others report using it only sporadically, and there are large numbers who are poorly informed on the subject. Induced abortion does offer an unique opportunity to educate the woman regarding the need for a suitable method of contraception. These women are almost uniformly motivated by the sudden realisation that they can become pregnant and something must be done to prevent its happening again.

While all agree on the need for contraceptive counselling following induced abortions, controversy still exists among the physicians as to the proper time to initiate the therapy. Recent experience with increasing number of elective abortions has shown that after this procedure fertility is often promptly restored. According to Boyd and Holmstrom (1972), the mean post-abort day of ovulation was 22nd day and earliest was 10th day. These findings are in agreement with that of Sharman (1966) for his series of patients following spontaneous abortion. These data indicate that contraceptive

measures should be initiated at the time of termination, (Rovinsky, 1972).

Regarding the nature of post-abort contraception, intrauterine device (IUD) has got some definite advantages over the hormonal contraception. IUD requires only the initial motivation, promoted by the intentional pregnancy termination, and a few minutes of medical time, to provide months or years of a highly effective birth control. It allows the woman to be care free and does not interfere at all with the spontaniety of intercourse.

It has been our practice, from the time since Copper device was made available, to insert the device immediately following the menstrual aspiration procedure. Our results with this method of IUD insertion, obtained with the follow-up, form the basis of this report. The type, incidence and the severity of the complications are compared with those of menstrual aspiration without IUD insertion.

Material and Methods

Menstrual aspiration was done for 315 selected women during the period from June 1975 to June 1976. All of them had reported for termination of early or a doubtful pregnancy, with a period of amenorrhoea ranging from 33 to 63 days. Menstrual aspiration was performed as single procedure for 185 women and was combined with IUD insertion for 130

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women. The MR subjects without IUD served as control for the present study.

Detailed clinical history of the patient was recorded and it was made sure that the period of amenorrhoea did not exceed 63 days. A systemic and pelvic examination were done and the size of uterus was carefully assessed. A detailed contraceptive advice was given to all the patients. It was pointed out that IUD can be inserted concomitantly with the aspiration procedure, so much so both become a single procedure, and the inconvenience of an additional instrumentation and a subsequent visit can be avoided.

MR was done as an out-door procedure and no premedication or local anaesthesia was given. The uterine aspiration was performed with a Karman type syringe and a soft tipped flexible plastic cannula of 5 or 6 mm diameter. After completing the aspiration the copper "T" device (TCu200) was inserted into the uterine cavity with the help of the disposable applicator. The entire procedure was completed in two or three minutes and the IUD insertion did not produce any discomfort to the patients. After resting for 30 minutes, the patient was allowed to go home. She was advised to report for check-up after 7 days, and in the case of IUD acceptors, every 3 months subsequently.

Observations

Menstrual aspiration was performed for early or suspected early pregnancy in 315 women who had unprotected intercourse. It was effective in terminating pregnancy in 75% of the patients, as proved by the histological study of the uterine aspirate. The period of amenorrhoea ranged from 33 to 63 days with a mean of 49.8 days. Nine patients in this series had lactational amenorrhoea. The age group of the patients ranged from 18 to 48 years with a mean of 28.7 years. All except 5 were

parous women and 81% belonged to the low parity range with 1 to 3 children. Women who reported for MR had a better educational status. 23.3% were college educated and the rest (76.7%) had school education. There were no uneducated women in this group. The follow-up study was obtained from the 236 women (74.8%), who reported for check-up promptly after a week.

The total number of patients were divided into two groups. Group I consisted of 130 patients (MR with IUD) and group II, 185 patients (MR alone). One hundred women in group I and 136 women in group II, reported for follow-up after a week. The type, incidence and severity of the complications in group I patients were analysed with group II patients serving as control.

The common complaint that was anticipated when IUD was inserted following MR, was excessive bleeding. But according to the data presented, the IUD insertion did not significantly alter the bleeding pattern of MR. Clinically significant type of bleeding was absent in 94% of group I and 92.40% of group II patients. Five women in group I, developed prolonged bleeding, 4 were controlled by medical measures and careful observation and in 1 the IUD was removed to arrest the prolonged flow. Almost the same percentage of women in group II had similar bleeding which was controlled by conservative measures. Excessive bleeding was noticed in 1 woman in group I and in 3 women in group II and it was due to incomplete abortion. The IUD got expelled along with the clots and all were subjected to surgical emptying of the uterus.

IUD expulsion occurred in 3 cases, 1 was due to incomplete abortion and the other 2 were spontaneous expulsions. Three women got the IUD removed for

various indications as, bleeding, Pain and otherwise. These removals were done after 2 months of insertion.

There was no case of frank sepsis in this series studied. However, 4 patients had complained of fever, but there was no foul smelling discharge or excessive bleeding. All were treated with antibiotics. Three of them belonged to group I. and they could be managed with anti-microbials and IUD removal was not necessary. (Table No: III). Other complications like cervical lacerations and perforations were not seen in the 315 cases studied. About 10% of the women had complained of uterine cramps and 3% had developed syncopal attack. These complaints were due to the aspiration procedure and had no relevance to IUD insertion.

Discussion

Endometrial aspiration provides a dramatic, efficient and simple method of intentional pregnancy termination and represents one of the most effective means of fertility control. Short period of amenorrhoea ranging upto 45 or 49 days is delineated as the criterion for performing the aspiration (Mullick *et al*, 1973; Mullick and Dawn, 1975). However, the procedure can be safely undertaken upto 63 days with the added advantage of increased percentage of pregnancy termination (Rajan and Kaimal, 1977). Since the return of ovulation occurs more quickly and promptly after early abortions (Boyd and Holmstrom, 1972) there have been many instances of repeated unwanted pregnancies a short time after the induction of abortion (Rowinsky, 1972). Hence there is a growing need and demand for a contraceptive method that can be recommended and initiated coincident with the termination of an early pregnancy.

Insertion of Lippes Loop immediately after completion of abortion was shown by Tatum (1972) to be an acceptable and safe procedure. Phatak and Chandrakar (1969) have clearly established the practicality of inserting an IUD immediately following termination of pregnancy. Two recent reports of insertion of copper T device (T Cu 200) immediately after first trimester abortion have shown the efficacy of the procedure (Nygren and Johanson, 1973; Timonen and Luukkainen, 1974).

In our series, Copper T device was inserted for 130 women immediately following the menstrual aspiration. All complications which occurred during the immediate post-termination period were tabulated. The duration of the post-abort bleeding was recorded. The type, incidence and severity of complications occurring in these patients were compared with those of the 185 women, who were not fitted with the device after the M.R. procedure. Those who had the IUD inserted followed almost the same pattern of post-abort bleeding as the non-IUD users. There were no problems of uterine perforation, cervical laceration or frank sepsis in the entire series. These data suggest that post-termination insertion of copper T is reasonably safe and it did not change the incidence or the type of somatic complications of abortion.

Expulsion rate for IUD is not very high when compared with the non-pregnant insertions. Out of the 100 women who reported for follow-up, 3 had expelled the device. The expulsion rate for non-pregnant women are given as 3.4 (Zipper, 1973) and 1.4 (Luukkainen, 1973). However, Tatum (1973) reports a high expulsion rate (14.2 for 100 users) when the device was inserted within 2 to 4 weeks after delivery and Timonen and Luuk-

kainen (1974) find that there is no problem of expulsion for immediate post-abortion insertion of copper T. We have removed the device in 3 women after the second month of use for various complaints like bleeding and pain. These type of complaints are equally seen in the non-pregnant insertions and hence have no relation to the post-abortion insertion. These findings indicate that one can be reasonably safe in assuming that the copper T device may be used in comparable degrees of clinical effectiveness when inserted immediately after completion of abortion.

This method of contraceptive therapy is more convenient to the patient. Menstrual aspiration by itself is a simple procedure and when combined with IUD insertion becomes more acceptable to the patients. She gets the dual benefit of pregnancy termination and early contraceptive protection by a single visit and that too by a single surgical procedure. In view of the incidence of post-insertion bleeding in the non-pregnant woman, the post-abortion insertion is more encouraging because the former type of bleeding is masked by the post-abortion discharge. It may be postulated that when IUD is inserted, if there is the least doubt of pregnancy it may be better to do an endometrial aspiration before the insertion of the device. This will avoid the possibility of insertion of IUD in the presence of an undetected pregnancy.

T Cu 200, a comparatively newer introduction to the contraceptive field, was selected for the study because of its advantages over the other intrauterine devices. Addition of metallic copper has reduced the pregnancy rate considerably and may cause a reduction in the rate of expulsion and the incidence and magnitude of uterine bleeding and pain (Tatum, 1974).

Summary

Menstrual aspiration was done as a fertility control procedure for 315 women, who reported with short period of amenorrhoea ranging from 33 to 63 days. 75% of them were proved to be pregnant by histological examination of the aspirate. Immediate post-termination contraception was planned in 130 women, and the copper T device was inserted following the aspiration. The type severity and incidence of complications occurring in these patients were compared with the 185 non-IUD users. The following conclusions were arrived at:

1. IUD insertion did not alter the post-abortion bleeding pattern.
2. There were no problems of uterine perforation or cervical lacerations.
3. There was no frank sepsis in this group.
4. The expulsion rate was comparable to that of non-pregnant insertions.
5. In a more convenient and acceptable way the method provides early contraceptive protection to the patient.
6. The problem of post-insertion bleeding in the non-pregnant woman is masked by the post-abortion discharge when the insertion was done concomitantly.

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