

ABORTION AND CONCURRENT CONTRACEPTION

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With the increased use of elective abortion for unplanned and unwanted pregnancies, we realise a tremendous popularity and acceptance for many of the current methods of contraception which can be practised concomitantly with the termination of pregnancies. Between December 1978 and May 1979, over a period of 6 months, through intensive campaigning, we could ensure contraceptive acceptance in 90.07% of parous women undergoing abortion in our institution. This amounted for the 92.40% of the total contraceptive acceptors for this period, with only 7.60% having accepted contraception as an interval procedure. The significant difference in the interval and post-abort contraceptive acceptance clearly demonstrates the pioneering role of M.T.P. in the wider promotion of contraceptive technology. Unquestionably, induced abortion does offer a unique opportunity to educate the couple in current methods of contraception, and is the most expedient time to practice the same effectively.

Propagation of Contraception

In our Family Welfare Planning Clinic,

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the women reporting for abortion are briefed about the method of abortion, detailed regarding the different methods of contraception and advised to accept one form of contraception simultaneously with induction of abortion. They are also cautioned about the possibility of a quick pregnancy in the absence of immediate contraceptive protection, and regarding the greater risk involved in repeated terminations. In general, the low parity group is counselled for temporary methods of birth control such as intra-uterine devices, and the high parity group for sterilisation. However, for social reasons, we do not advocate contraceptives for unmarried nulliparous women. The task of propagation of contraception is shared as a collective responsibility by the Medical Officers, Lecturer in Health Education, Extension Educators and Family welfare planning social workers.

Induction of Abortion

Minisuction, laminaria dilatation and suction curettage and late dilatation and evacuation are the different methods of abortion practised in our Clinic. Early first trimester pregnancies, between 5th to 9th menstrual weeks and if possible upto 11th menstrual weeks, are terminated by minisuction employing modified Karman syringe and 5 or 6 mm plastic cannulae, and as far as possible cervical dilatation is avoided. Thus, there will be only a small

group of first trimester pregnancies left behind who require cervical dilatation and suction curettage with bigger metal cannulae.

Vaginal evacuation abortion after obtaining adequate cervical dilatation with laminaria tents is our method of choice for midtrimester pregnancies between 13 and 20 menstrual weeks. Depending on the duration of gestation one or two big-sized sterilised laminaria tents are inserted into the cervical canal. Evacuation is performed on the following day after sedating the patients with either intravenous diazepam (10 mgms) or a combination of intravenous diazepam (10 mgms) and pethidine (100 mgms). After administering oxytocics, uterus is emptied slowly and carefully with a ring forceps. When evacuation is completed, the pieces of tissue removed are thoroughly inspected so that all major fetal parts and the bulk of placental tissue can be identified. After observing for few hours, the patients are allowed to go home, and they are not admitted unless they are for concurrent sterilisation.

Contraceptive Therapy

For those needing sterilisation, our method of choice is vaginal tubal ligation. In certain occasions, the husbands are motivated to undergo vasectomy prior to subjecting the woman for M.T.P. Intrauterine contraceptives, especially the copper IUDs, is the preferred mode of contraception offered for the low parity group requesting for temporary methods.

Vaginal tubal ligation is essentially done under local paracervical anaesthesia after premedicating the patient with 100 mgms of pethidine and 10 mgms of diazepam given intravenously. In cases of first trimester pregnancies, the tubectomy

is performed first and after closing the colpotomy incision the uterine contents are evacuated. However, since the uterus is big in midtrimester pregnancies, the evacuation is completed first which is followed by the vaginal ligation. When the pregnancy duration is more than 18 weeks, where vaginal approach will be difficult, the D & E is followed by minilap tubectomy under local anaesthesia. In a few cases minilaptubectomy is performed following first trimester abortions as well. Following vaginal tubectomy the patients are discharged on the next day, whereas, since the discomfort is more, the patients undergoing minilap procedure are discharged on the 3rd day.

As regards concomitant application of intrauterine devices, irrespective of the duration of gestation at which the pregnancy is terminated, after completion of abortion the device is inserted into the uterine cavity. Being an outdoor procedure, the patients are observed for sometime and are then allowed to go home.

Analysis

During the period of 6 months, 935 women underwent medical termination of pregnancy, of whom 153 were induced in the mid-trimester (16.40%). There were 876 parous women (93.70%) and 59 unmarried nulliparous women (6.30%) in this group. Of the total parous women undergoing abortion, 789 had accepted some form of contraception, giving an incidence of 90.07% concurrent post-abortal contraception (Table I). The different technics of abortion practised are detailed in Table II. Sixty two per cent of women undergoing abortion were between 21 to 30 years of age and 73.9 per cent were in the low parity group between para I and III.

TABLE I
Concurrent Post-abortion Contraception

Total number of women undergoing M.T.P.—935
(December 1978 to May, 1979).

| Parous women—876 (93.70%) | | | | Nulliparous (unmarried)—59 (6.30%) | | | |
|--------------------------------|-------|--------------------------------|------|---------------------------------------|--|--|--|
| No. accepting contraception | | Not accepting contraception | | NO CONTRACEPTIVE ADVICE | | | |
| No. | % | No. | % | | | | |
| 789 | 90.07 | 87 | 9.93 | | | | |

TABLE II
Different Methods of Induction of Abortion

| Method | No. of patients | Percentage |
|--|--------------------|------------|
| Minisuction | 637 | 68.11 |
| Suction curettage | 145 | 14.50 |
| Late dilatation and evacuation (mid-trimester) | 152 | 16.30 |
| Hysterotomy | 1 | 0.10 |
| Total: | 935 | 100.00 |

Among the 854 couple accepting contraception during this period, only 65 (7.60%) were interval procedures, with the remaining 789 (92.40%) accepting contraception at the time of abortion (Table III). Of the women accepting

concurrent contraception, 66.90% were between the age group of 21 to 30 years, and 80 per cent belonged to the low parity group. IUD users were of the younger age group with 78.20% below the age of 30 years, and para I (34.60%) and para

TABLE III
Contraceptive Acceptance During 6 Months Period
Total No. of couples accepting contraception—854
(December, 1978 to May, 1979).

| Contraceptive therapy | Concur- rent No. | Contra- ception % | Interval No. | Contra- ception % |
|-------------------------------|---------------------|-------------------------|-----------------|-------------------------|
| Intra-uterine devices | 615 | 72.10 | 47 | 5.50 |
| Vaginal tubal ligation | 128 | 15.00 | 3 | 0.40 |
| Minilap tubectomy | 38 | 4.40 | nil | — |
| Vasectomy | 7 | 0.80 | 15 | 1.70 |
| Hysterotomy and Sterilisation | 1 | 0.10 | nil | — |
| Total: | 789 | 92.40 | 65 | 7.60 |

II (36.40%) constituting 71 per cent of the acceptors. By contrast, only 43.60% of the women undergoing sterilisation were below the age of 30 years, and more than 50 per cent were of the high parity group with 4 or more children.

The different types of intrauterine devices used in this study were copper T 200, Lippes loop, R.M. device and ML copper 250 (Table IV). Majority of the

TABLE IV
Different Types of I.U.D.s Used

| Copper T 200 | Lippes loop | R.M. device | M.L. Cop- per 250 | Total |
|--------------|-------------|-------------|-------------------|-------|
| 508 | 94 | 12 | 1 | 615 |

IUD insertions were done with first trimester abortions, with 5.20% following midtrimester vaginal evacuation (Table V). Among the 128 vaginal tubectomies,

tubal sterilisation, should not be performed at the same time, because of the technical difficulties inherent in the sterilisation procedure in the presence of pelvic changes of early pregnancy. Boysen and McRae (1949) emphasised that the tubes were more difficult to identify in the presence of an enlarged uterus and the associated hyperemia and oedema. Similarly Allen (1953) discouraged sterilisation as a part of the therapeutic abortion procedure. Contrary to these traditional views, the subsequent reports have emphasised the safety, efficacy and convenience of combining the two procedures. Sogolow (1971), reporting on vaginal tubal ligation at the time of vacuum curettage for abortion, has established that identification of the tubes were not impaired by the pregnancy changes, and hence felt that the two procedures can

TABLE V
Abortion and Contraception

| Method of abortion | Intrauterine devices | | Vaginal tubectomy | | Minilap tubectomy | |
|---|----------------------|--------|-------------------|--------|-------------------|--------|
| | No. | % | No. | % | No. | % |
| Minisuction | 501 | 81.50 | 60 | 46.90 | 2 | 5.30 |
| Suction curettage | 82 | 13.30 | 25 | 19.50 | 7 | 18.40 |
| Dilatation & Evaluation (mid-trimester) | 32 | 5.20 | 43 | 33.60 | 29 | 76.30 |
| Total: | 615 | 100.00 | 128 | 100.00 | 38 | 100.00 |

33.60% were following midtrimester abortions. There were only 38 minilap sterilisations, majority following midtrimester abortions. One multiparous woman who was 16 weeks pregnant underwent hysterotomy sterilisation since enough cervical dilatation could not be obtained for vaginal evacuation.

Comments

In the past, the consensus was that the two procedures, induction of abortion and

and should be combined.

Analysing the morbidity of vaginal tubal ligation concomitant with induction of abortion, Yuzpe *et al* (1972) reported 1% complication rate and from their study it did not appear that the morbidity was necessarily higher if the patient was pregnant. Similarly Sheth *et al* (1973) documented 5% morbidity rate with no serious complications.

The general opinion is that the morbidity and complication rate appeared to be

substantially lower for the combined procedure in the developing countries. This view is substantiated by the extensive work in our country by Soonawala (1974) with a small complication rate in a large series of 2269 sterilisations. It may be due to the greater patient resistance to infection. Another significant factor contributing to low complication rate is the skill of the operating team, as proved by the minimal complication rate in the larger series. This is well demonstrated by the combined series of Collins *et al* (1972) and Yuzpe *et al* (1972) in which the severe morbidity rate was only 0.80% in 1890 patients.

Septic morbidity was found to be more in colpotomy tubal ligation as compared to abdominal tubal ligation when performed concomitant with abortion (Achari *et al.*, 1977). Lack of adequate haemostasis, reduced visibility of the operative field and manipulation of the pelvic structures contribute to this high morbidity. Bhaskar Rao and Ghose (1975) have advocated completion of colpotomy sterilisation prior to evacuation of the pregnant uterus which provides for a cleaner operative field and carries less post-operative complications. With proper selection of cases and skill of the surgeon, the two key factors in vaginal tubal ligation, Gogoi and Kar (1978) have recorded a substantial reduction in complication rate. With greater experience in the technic, proper visualisation, better exposure, perfect haemostasis and minimal manipulation of pelvic structures are possible, as indicated by the reported morbidity rate of 0.70% in the recent series of Tamaskar (1978).

Intra-uterine Contraception

Fear of increased complications associated with postabortal insertion, including perforation of the uterus and a

much higher expulsion rate and sepsis, had prevented the more frequent use of the immediate post-abortal period for insertion of intra-uterine devices. However, with the increased number of elective abortions and the growing need for coincident contraception, the traditional concept was gradually changed, and many reports have since then documented the beneficial aspects of application of intra-uterine devices at the time of abortion. (Viel and Lucero, 1970; Tatum, 1971, Goldsmith *et al.*, 1972; Nygren and Hohanson, 1973 and Timonen and Luukkainen 1974).

Tatum (1972) has reviewed the results of 5 clinical centres reporting on 2,388 patients who had induced abortion and potentially infected uterus. In a group of such patients, IUD was inserted after completion of abortion, and they were compared with the non-IUD users. The data suggested that the patient treated for an incomplete abortion can in most instances safely receive an IUD at the time of completion of abortion. Again in 1974 Tatum proved that Copper T may be used with comparable degree of clinical effectiveness when inserted immediately after medical termination of pregnancy.

Purandare and Kulkarni (1975) have emphasised that induced abortion should not be considered as a family planning measure but as a maternal welfare and health measure. In order to avoid another pregnancy, insertion of an IUD should be advised than attempting repeated terminations. Reporting on 2150 post-abortal insertions, the authors feel that the fear of subinvolution of uterus and sepsis is ill-founded. Similarly, Phatak and Chandrakar (1969) have clearly established the practicality of inserting IUDs simultaneously with abortion procedure.

Comparing the IUD (copper T) accep-

tors and non-acceptors in a group of women undergoing early abortion, Rajan and Rosamma John (1978) could observe that the immediate post-abort insertion did not increase the incidence and nature of somatic complications of abortion. Effectiveness of copper device was not affected by the concurrent post-abort application, but the expulsion rate was slightly more than in the interval insertion. This disadvantage is easily compensated by the greater number of women reached and protected in the immediate post-abort period (Rajan *et al.*, 1978).

Summary

Since women are highly motivated to accept some form of contraception at the time of undergoing abortion, this opportune period should be properly utilised to promote the different methods of contraception. Our experience more than reiterates that at least 90 per cent women undergoing abortion can be persuaded to accept some form of contraception. The spectacular difference in the contraceptive acceptors in the interval period (7.60%) as compared to the post-abort period (92.40%) signifies the pioneering role played by our MTP act in promoting contraceptive acceptance.

The different methods of induction of abortion in the 935 women are described, with 16.40% abortions in the mid-trimester, and 6.30% being unmarried, nulliparous women. Intra-uterine devices (mainly copper T) in 78% and vaginal tubal ligation in 16.2% of women were the two main contraceptive procedures employed in this study.

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