# COMPARATIVE STUDY OF SIDE-EFFECTS OF Cu.T. AS INTRAUTERINE CONTRACEPTIVE DEVICE IN POSTABORTAL CASES AND INTERVAL CASES

by

(Mrs.) SHANTA JHA,\* M.S. (Pat.)

and

(Miss) Manjubala Srivastava,\*\* M.S. (Pat.)

#### Introduction

After legalisation of abortion women came to the hospital for Medical Termination of Pregnancy in large numbers. At the time when they come for M.T.P., they can be easily motivated to accept contraceptive measures. It is seen that they accept contraceptive measures eagerly under such circumstances. Since introduction of Cu.T in the field of contraception, obstetricians started inserting Cu.T immediately after M.T.P. In the beginning its use just after M.T.P. was condemned because people used to think that its use just after M.T.P. was associated with more incidence of side-effects than its use in interval cases. But later on it was found that fear was baseless and its use after M.T.P. became a routine procedure.

The aim of our present study is to compare the side-effects of Cu.T as IU CD in post M.T.P. cases and interval cases.

#### Material and Methods

Cases for study were selected from Post-partum Family Welfare Programme ward and outdoor clinic of Hospital for Women, Patna Medical College Hospital from April, 1978 to March, 1980. During this period 402 women had undergone M.T.P. operation and Cu.T insertion at the same time. During the same period, 360 women had been inserted Cu.T as interval cases. Termination of pregnancy in the above cases was carried out by suction aspiration using Berkley's electric Suction machine and metal cannula under general anaesthesia. After aspiration, check curettage was done and then Cu.T was inserted. In interval cases Cu.T was inserted in outdoor clinic without any anaesthesia.

#### Observations

Forty-two cases were lost for follow-up in group I (M.T.P. and Cu.T). Three hundred and sixty cases turned up for follow-up in this series. Thirty cases were lost for follow-up in group II cases (interval cases). Three hundred and thirty cases had turned up for follow-up in this series.

### Follow-up

The cases had been followed up to one year. They were called for check up after first menstrual cycle, third menstrual cycle, sixth menstrual cycle and at

<sup>\*</sup>Tutor, Dept. of Preventive and Social Medicine, Patna Medical College, Patna.

<sup>\*\*</sup>Medical Officer, Post-partum Programme, Dept. of Obstet. & Gynaecology, Patna Medical College Hospital, Patna.

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	Groups
	the
SEE I	Both
TAB	in
	Side-effects

	Post M.	Post M.T.P. cases		Inter	Interval cases	
Side-effects	Total No. of users	No. having side-effects	Percentage	Total No. of users	No. having side effects	Percen- tage
Menstrual disorders	360	13	3.6	330	6	2.7
Pelvic inflammation	360	18	5.0	330	10	1.5
Pain in lower abdomen	360	9	1.6	330	3	0.9
Excessive vaginal discharge	360	9	1.6	330	က	0.0
Perforation of uterus	360	Nil	1	330	Nil	1
Displacement of device	360	Nil	J	330	Nil	1

TABLE II Incidence of Expulsion

Group	Total No. of users	No. expelled	%age	
Post			6.9	
M.T.P.	360	25	5.1	
Interval	330	17		

TABLE III
Incidence of Expulsion at Different Time
Interval Following Insertion

Time of expulsion	Post M.T.P.	Interval
Within 2 weeks	13	10
During first	10	6
Menstrual period During 2nd and 3rd menstrual period	2	1
During 4th to 6th menstrual period	Nil	Nil
Within 7 months to 12 months	Nil	Nil

TABLE IV
Incidence of Re-insertion and Retention After
Reinsertion in Different Groups

Group	No. of expul- sion	No. of re-inser- tion	No. of retention after insertion
Post M.T.P.	25	22	20
Interval	17	14	11

TABLE V
Removal Rate in Different Groups

Groups	Removal rate
Post M.T.P.	10.5%
Interval	9.0%

TABLE VI Reasons for Removal in Different Groups

Groups	Mens-	Pelvic	Exces-
	trual	inflam-	sive
	disorders	mation	vaginal
			dis-
	-		charge
Post			
M.T.P.	3.6%	-	1.6%
Interval	2.7%	-	0.9%

In our series, Cu.T. device was inserted in 402 women as post M.T.P. cases and lebelled as Group I, and in 360 women as interval cases and labelled as Group II. Three hundred sixty cases in Group I and three hundred thirty cases in group II were followed up for one year and side-effects occurring in each group are compared. In our series, expulsion rate is 6.9% in post M.T.P. cases and 5.1% in

TABLE VII

Groups	Total No. of users	No. of expulsion	No. of removal	No. of continuance	Percen- tage
Post M.T.P.	360	25	38	297	82.5
Interval	330	17	30	283	85.7

the end of one year following insertion of Cu.T. They were told to come for check up at any time if they got any complaint in between. During check up they were asked whether the device was in its place or not, were they having any complain like menstrual disorders, pain in lower abdomen, and excessive vaginal discharge. Pelvic examination was done to assess whether the thread of the device was in vagina or not and whether there was pelvic inflammation or not.

### Discussion

In the beginning Viel and Lucero (1970), Goldsmith et al (1972), Nygren and Mohanson (1973) and Timonen and Luakkainen (1974) have reported the beneficial aspects of application of intrauterine devices at the time of abortion. Tatum (1974) has reported that Cu.T may be used after medical termination of pregnancy with comparable degree of effectiveness. Purandare and Kulkarni (1975) have also advocated the use of Cu.T after medical termination of pregnancy.

interval cases. Bhargawa et al (1978) have reported expulsion rate of Cu.T 6.4% in post M.T.P. cases and 1.6% in interval cases. Bhargawa et al (1978) have reported menstrual disorders 6.4% in post M.T.P. cases and 1.6% in interval cases, whereas we have found menstrual disorder 3.6% in post M.T.P. cases and 2.7% in interval cases. Bhargawa et al (1978) have reported the incidence of pain in abdomen 2% in post M.T.P. cases and 0.4% in interval cases, and incidence of vaginal discharge 6.4% in post M.T.P. cases and 1.6% initerval cases. In our series, incidence of pain in abdomen and excessive vaginal discharge was 1.6% in post M.T.P. cases and 0.9% in interval cases. In our series, major cause for removal of Cu.T was menstrual disorder. Lewit (1973), Liedholm (1974), Tietze (1970), Desmukh et al (1977) and Bhargawa et al (1978) have also reported menstrual disorder as major cause for removal of Cu.T. Taneja et al (1980) have reported 1.3% expulsion rate of Cu.T in post M.R. cases. They have also observed that combination of M.R. and Cu.T

insertion does not increase the incidence of side-effects of either procedure. In our series, incidence of pelvic inflammation was 5% in post M.T.P. cases and 1.5% in interval cases. Cases having pelvic inflammation were treated with antibiotics. In our series, there was no case of perforation of uterus and displacement of device in either group. In this series only 1 case became pregnant with device in group II (Interval cases).

## Summary

By seeing above data it becomes quite clear that the incidence of side-effects with post M.T.P. Cu.T insertion is only a little higher than those in interval insertions. The difference in incidence in both groups is so minimal that one can conclude Post M.T.P. Cu.T insertions quite safe and effective. It is beneficial to insert Cu.T just after M.T.P. for clinicians and patients both. For clinicians it matters only a few seconds to insert Cu.T after M.T.P.; women who have come for M.T.P. need not visit the hospital separately for contraceptive device. Thus this procedure saves the time of clinician and patients as well.

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