

Cervical Priming Prior to M.T.P.

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Summary

Medical termination of pregnancy (MTP) has been perceived as one of the methods of reducing increasing population in developing countries like India and can reduce the incidence of illegal abortion and its complications.

Hundred patients undergoing first trimester (8-14 wks) M.T.P. were given 1 cc (250mg) carboprost one hour prior to suction evacuation. The results were compared with 100 control patients in whom no such injection was given. Time required for procedure & blood loss was significantly less in study group. Complications like cervical lacerations, perforation, and incomplete abortion were significantly less in study group.

Introduction

Medical termination of pregnancy (M.T.P.) is one of the most commonly performed operations in obstetrics. It assumes greater importance especially in developing countries like India, where it is perceived as a method of family planning. It is for the same reason that we must aim to reduce the complications associated with it.

Suction evacuation and dilatation & evacuation are most common methods used for first trimester medical termination of pregnancy. Both these methods require rapid cervical dilatation. There is now evidence that rapid mechanical dilatation is associated with both immediate and late complications including the outcome of subsequent pregnancy (Fusey and Sonone, 1991)

We have made an attempt to increase proficiency with decrease in complication rate by

combining advantages of prostaglandins with these procedures.

Material and Methods

The study was conducted at L.T.M.G. Hospital, Sion over a period of 2 years. 200 patients admitted for medical termination of pregnancy were included in this study. All patients were between 8-14 weeks period of gestation. Patients with contraindications for use of injectable prostaglandins like grand multiparity, history of asthma, previous LSCS were excluded from the study.

Thorough preoperative evaluation was done which included detailed history, examination and postoperative investigations as required.

These patients were divided into two group of 100 patients each. In study group, Group A, (n = 100),

patients were given inj. Prostodin (250 mg) intramuscularly with antiemetic drug one hour prior to procedure. In control group, Group B (n=100) inj. Prostodin was not given. All M.T.Ps. were done under general anesthesia. Time required and difficulties encountered during the procedure were compared in two groups. Blood loss was assessed by measuring the blood collected in suction bottle & bucket. All patients were given postoperative antibiotics. Patients were followed up in Family Planning OPD for next two weeks.

Observation and Results

Most of these patients were between 20-30 years of age. There were 38 primigravidas in study group and 34 in control group (Table I).

Table 1: Parity

	Group A	Group B
Primigravida	38	34
Gr. II	40	46
Gr. III	18	18
> Gr. III	4	2

Failure of contraception was commonest indication for termination (Table II). Period of gestation at time of M.T.P. is shown in Table III.

Table II: Indications for MTP

	Group A	Group B
Medical	-	2
Eugenic	4	6
Social	14	12
Failure of contraception	82	80

Table III: Period of Gestation

Weeks	Group A	Group B
8 - 10	18	26
11 - 12	54	44
13 - 14	28	30

Suction evacuation was done in 70 patients in-group A & 68 in-group B. In remaining patients, dilation and evacuation with ovum forceps was done.

Table IV: Dilatation in study group

POG (wks)	Primi		Multi	
	No. dilatation req.	Min. dilatation req.	No. dilatation req.	Min. dilatation req.
8 - 10	4	6	12	4
11 - 12	6	12	14	12
13 - 14	4	6	6	14

In control group, adequate dilation (i.e. upto dilator number equivalent or more than period of gestation in weeks) could not be done in 26 patients. Inadequate dilation was more commonly seen in primigravidas (20) than multigravidas (6). In 22 other patients adequate dilation though possible, was extremely difficult.

In contrast, 46% patients of study group did not require any dilation prior to evacuation. In remaining 54% who did require dilation the procedure was found to be very easy (Table IV)

Time required for procedure in group-A was 5-15 min. as compared to 20-35 mins. in group B ($p < 0.01$). The difference in the time required was more in primigravidas. In large number of patients in study group, the expulsion of the products of conception had already started and evacuation of uterus was extremely quick and easy.

Minimal blood loss is an important consideration in our country where most of the patients are anemic. Average blood loss in study group was 67 ± 28 cc as compared to 140 ± 65 cc in control group ($p < 0.01$).

Table V Complications

	A	B
Cervical trauma	—	14
Perforation	—	6
Incomplete abortion	1	8
Sepsis	—	4
Vomiting	20	—
Diarrhoea	8	—
Flushing	6	—

Table V clearly shows that complications like cervical trauma, perforation and incomplete abortion were mainly seen in control group. One patient in control group required exploratory laparotomy for perforation during suction evacuation. In study group, no major complication was noted. Side effects of prostaglandins like vomiting (20%), diarrhoea (8%) & flushing (6%) were

seen in few patients.

Discussion

Suction evacuation & dilatation evacuation are the most common methods of first trimester termination of pregnancy. Dilatation of cervix during these procedures can sometimes be difficult and cause cervical tear, laceration, false passage or even a perforation. Various methods have been tried to ripen or soften the cervix to facilitate dilatation. Use of laminaria tents and isapgol tents have been reported (Cates et. al.; Khanna et. al., 1979) But their use requires extra time & causes inconvenience of going to operation theatre twice. Inadequate dilatation, internal migration, hourglass contracture make its removal difficult and infections are common complications.

Prostaglandins have been used in the form of oral tablets or endocervical gel without much success (Embrey 1975)

Injectable prostaglandins given prior to procedure give better & faster effects of cervical ripening, helping in easy dilatation without cervical trauma. In our study 46% patients did not require any dilatation prior to evacuation

This is particularly useful in primigravidas and patients with cervical stenosis. In a similar study by Mishra (1988), good cervical dilatation was achieved in 60% cases.

Uterotonic action on uterus help in rapid evacuation with minimal blood loss. In our study, time required and blood loss were significantly less in study group than in control group. Tonic contractions of uterus greatly reduces the chance of perforation during procedure. Similar beneficial effect was also observed by other authors (Fusey and Sonone 1991; Rebello 1995). Good dilatation will obviously make complete evacuation easier. We encountered four patients of incomplete abortion requiring repeat curettage in control group, where dilatation was inadequate.

Rebello (1995) used injection carboprost prior to evacuation for missed abortion or Vesicular mole with good results (Rebello1995)

PG carboprost used as medical method of termination requires repeated and higher dose, which leads to more gastrointestinal disturbances like nausea, vomiting and diarrhea requiring medication. It also causes excessive uterine cramps and bleeding which can last for 10 to 12 days. Abortion is mostly incomplete and requires check curettage.

Conclusion

Thus, we can conclude that use of carboprost prior to evacuation is economical, quick and effective and also a safe method of termination of pregnancy. It greatly reduces chances of cervical trauma, bleeding, perforation and incomplete abortion. Its use prior to M.T.P. is specially recommended in primigravidas and when period of gestation is equal to or more than 10 weeks.

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References

1. Cates W.J. Schultze K.E., Gold J., In Zatuchni G. I., Seiarra J. J., Special J. pregnancy termination 426 – PARFR series.
2. Embrey N. P. Br. Med. Jr., 2 : 497, 1975.
3. Fusey S. S., Sonone P. B., J. Obst. & Gyn. India., 41: 447; 1991.
4. Khanna N. M., Sarim J. P., Singh N. N. IPPF Med. Bull, 13 (3) : 4; 1979.
5. Mishra J. Sharan K. Mishra R. J. Obst & Gyn. India., 38 : 418; 1988.
6. Rebello M. J., J. Obst & Gyn. India., 45: 177; 1995.