MANAGEMENT OF FAILURES FOLLOWING EXTRA-AMNIOTIC TERMINATIONS

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Introduction

Effective and safe termination of midtrimester pregnancy remains still a dilemma. Numerous methods have been discussed in the abortion literature. The problems mount when a termination procedure ends up in failure. Failed primary procedures are greater in early midtrimester pregnancies. Failure rates, moreover, vary with the methods employed for termination. The authors were interested in the study of failures associated with extra-amniotic procedures employed in early midtrimester termination. In this presentation are described the problems of such failures and their subsequent management.

Material and Methods

The study was conducted at the Nowrosjee Wadia Maternity Hospital. A total of 162 women between 11-15 weeks of gestation and requesting termination of pregnancy were included in the study. The extra-amniotic route was selected for all patients, but different solutions such as ethacridine lactate, acriflavine, 20% hypertonic saline and prostaglandins had been used for instillation into the uterine cavity. In 35 of these 162 women (21.6%), the primary procedure failed to bring about foetal expulsion at the end of 72 hours. This report submits the management of these 35 cases, in which the primary procedure failed.

The failed cases had a variety of second procedures for termination as shown in Table I.

TABLE I
Different Methods Used

Procedure used	No. of cases
Laminaria tents followed by curettage	15
Dilatation and curettage	6
Extra-amniotic instillation of $PGF_{2}\alpha$	9
Extra-amniotic instillation of 20% saline	3
Intravenous oxytocin	2

Selection of the second procedure for each case, was individualised depending on the criteria listed in Table II.

Uteri of 11-13 weeks size were evacuated by a dilatation and curettage, whilst the larger uteri were managed by other methods.

If the cervix was soft and reasonably effaced, dilatation and curettage was done. But, if the cervix was firm, and tubular, laminaria tents were introduced followed by a curettage under intravenous sedation. Extra-amniotic instillations of $PGF_{2}\alpha$ and saline were possible with any type of cervix. Presence of infection con-

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TABLE II
Criteria for Selection of Cases

Criteria	Procedure used				
	D. & C.	L.T. + D. & C.	Ex.am. $PGF_{2\alpha}$	Ex.am. 20% saline	oxytocin I.V.
Size of uterus in weeks	11-13	14-15	14-15	14-15	14-15
State of cervix	Effaced Soft	Tubular Firm	Any state	Any state	Any state
Infections	Yes/no	Nil	Nil	Nil	Yes/no

traindicated the use of slow procedures like laminaria tents and extra-amniotic instillations. In such cases, high doses of oxytocin infusion or dilatation and curettage was preferred. In some cases, at 14-15 weeks, of pregnancy a favourable state of cervix permitted a straight D and C procedure.

Each of the procedures enlisted above have now been discussed individually.

1. *Laminaria tents and curettage* (Table III): Under antibiotic cover,

TABLE III
Laminaria Tents and Curettage

Method	Remarks
Laminaria tents and Curettage (15 cases)	1. Slow dilatation with 2-4 tents 2. Blunt curettage afer 16-18 hours under sedation with morphine 3. Prophylactic antibiotics given 4. Minimal blood loss—20 to 50 ml. 5. Infection—2 cases

two to four laminaria tents were introduced into the cervical canal, so that they just protruded beyond the internal os. These tents were maintained in situ for a period of 16-18 hours, which was sufficient to dilate the cervix, and allow an easy curettage under intravenous sedation with morphine.

In the 15 cases so treated, the cervix responded well with good dilatation and curettage was easy. The blood loss varied from 20 to 50 ml except in 2 cases in whom it amounted to 100 ml each. Two patients developed post-abortal infection, which responded to antibiotics (Tetracyclines).

2. *Dilatation and curettage* (Table IV): Six of the 35 patients were managed

TABLE IV
Dilatation and Curettage

Method	Remarks
Dilatation and curettage under general anaesthesia (6 cases)	1. Pre-operative preparation required 2. Risk of general anaesthesia present 3. Moderate blood loss—50 to 200 ml. 4. Complications: Perforation of uterus 1 Infection 1

by dilatation and curettage, under general anaesthesia. The blood loss was 50-100 ml in 4 cases and in the remaining 2 it was 150-200 ml. Inspite of perforation of the uterus occurring during the procedure in 1 case, a deliberate and careful curettage helped to complete the evacuation be completed. One of the patients

developed post-abortal infection requiring antibiotics.

3. *Extra-amniotic instillation of* $PGF_{2\alpha}$ (Table V): In 9 cases, $PGF_{2\alpha}$ was instilled extra-amniotically in a dose of 500 micrograms repeated every two hours for a maximum of 9 doses. The instillations were carried out via an inflated Foley's catheter placed through the cervical canal. Whereas foetal expulsions were successfully brought about in all cases, spontaneous placental evacuation occurred in none. The placentae were then curetted out. The blood loss in these cases was from 50 to 75 ml. Two of the patients had vomiting during the procedure and one developed postabortal infection.

TABLE V
Extra-amniotic $PGF_{2\alpha}$

Method	Remarks
Extra-amniotic instillation of $PGF_{2\alpha}$ (9 cases)	1. Multiple doses required—500 µgms 2 hourly x 12 doses 2. Minimal blood loss—50 to 75 ml. 3. Average number of doses required—7.6 4. Complications: —Incomplete abortions — All cases —Vomiting — 2 cases

4. *Extra-amniotic 20% saline* (Table VI): In 3 cases 20 ml of 20% saline was instilled every two hours in the extra-amniotic space for a total dose of 200 ml. Two patients needed 4 doses each and 1 required 8 doses. All the abortions were complete. Blood loss varied from 20 to 50 ml and there was no side effect.

TABLE VI
Extra-amniotic 20% saline

Method	Remarks
Extra-amniotic instillation of 20% saline (3 cases)	1. Multiple doses required—20 ml x 2 hourly x 10 doses 2. Minimal blood loss—20 to 50 ml. 3. Average number of doses required—5.3 4. All complete abortions

Routine antibiotics were given to the patients in both the extra-amniotic groups, prior to the insertion of the catheter.

5. *Intravenous oxytocin* (Table VII): Two of our cases had medical disorders which contra-indicated the use of hypertonic saline or prolonged procedures like extra-amniotic instillation. Hence in these cases, we administered oxytocin intravenously at a rate of 200 m.u. per minute. One of the patients required a total dose of 123 units and the other required 93 units to abort. The former patient had an incomplete abortion, so a curettage was required to evacuate the uterus. This patient developed post-abortal infection which settled with chloramphenicol given orally.

TABLE VIII
Intravenous Oxytocin

Method	Remarks
Intravenous infusion of oxytocin (2 cases)	1. Infusion given at a rate of 200 m.u. per minute 2. Total dose required 93-123 units 3. Minimal blood loss 4. Complications— —Infection — 1 —Incomplete abortion — 1

Conclusions

Management of failed extra-amniotic termination poses a problem to the obstetrician. One cannot terminate them by an intra-amniotic method, nor can one carry out a vacuum aspiration, for obvious reasons. Hence, the obstetrician has to

resort to methods as are experimented in this study.

Based on this study, the following observations may be made:

(1) Laminaria tents followed by curettage is an efficient method. But the infrequent availability and the cost of the tent restricts its use more often.

(2) Dilatation and curettage under anaesthesia is a quick method, but it involves the use of formal anaesthesia and the procedure leads to greater blood loss.

(3) Extra-amniotic prostaglandin $F_{2\alpha}$ results in many incomplete abortions. Prostaglandins itself has innumerable side effects. Moreover the drug is not available easily in India.

(4) Extra-amniotic saline and intravenous oxytocin are two methods which have given promising results and require further trial.

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