MANAGEMENT OF FAILURES IN MIDTRIMESTER PREGNANCY TERMINATIONS

(A Review of 77 Cases)

by

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Ever since the enactment of the M.T.P. act, termination of pregnancy during midtrimester has been a physicians' dilemma. None of the available methods which employ different solutions and different routes are safe and certain.

The problem of management of cases where primary procedure does not result in the abortion within a certain time is a cause of concern to obstetricians all over.

It is our attempt below to compile our experience of midtrimester termination of pregnancy with special reference to cases who failed to respond to first attempt at termination.

Material and Methods

During the 6 year period from April 1972 to April 1978 there were 808 cases of midtrimester abortions and 77 cases of primary failures.

Only those cases who fail to abort within a specified time are included in the study. If the foetus is expelled and placenta is retained it is considered as incomplete abortion and not as the failure of the primary procedure.

Primary failure is defined as a failure of abortion to occur within 96 hours following instillation (Pakter *et al*, 1973).

Analysis

As shown in Table I hypertonic saline in varying concentrations, either intra-amniotically or extraamniotically was the commonest method used for midtrimester termination of pregnancy. Other methods included extraamniotic injection of Ethacridine Lactate (Unacredyl), or 0.1% aqueous acriflavin solution.

TABLE I
Methods of Midtrimester Abortion and Failure Rate

Drug	Route	No. of cases	No. of failure	(%)
20% Saline	I.A.	600	38	(6.3%)
10% Saline	I.A.	108	14	(12.9%)
5% Saline	I.A.	10	3	(30%)
0.1% Acriflavin	E.A.	30	9	(30%)
Ethacridine lactate	E.A.	30	6	(20%)
10% Saline	E.A.	30	7	(23.3%)
Total		808	77	(9.52%)

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Intraamniotic injection of 20% saline had the minimum failure rate (6.3%). The maximum failure rate was noticed with intraamniotic injection of 5% saline, and extraamniotic injection of 0.1% acriflavin (30%).

Analysis of the cases in relation to age, parity, marital status and duration of gestation at the time of procedure showed that none of these parameters played any role in the failure of the procedure.

Table II summarises the management of cases who had failed to respond to first attempt at termination.

TABLE II
Management of Failed Cases

Method	No. of cases	%
Spontaneous Abortion	4	(5.19%)
Pitocin drip	24	(31.16%)
Suction/D & E	21	(27.27%)
Saline reinstillation	12	(15.58%)
Ethacridine lactate	4	(5.19%)
Pregnancy continued	2	(2.59%)
Combination of methods	10	(12.98%)

Four patients aborted spontaneously without any interference. Pitocin drip in varying concentrations had to be started in 24 cases. Maximum concentration of pitocin was never more than 20 units in 500 cc of 5% glucose. In 21 cases slow dilatation of cervix using laminaria tents was attempted followed by either suction evacuation or digital evacuation. In 12 cases hypertonic saline (20%) was reinstilled. In most of these cases saline in lower concentration (5% or 10%) was used as a primary method. In 4 patients extraovular ethacradine lactate was used as attempts of saline reinstillation revealed bloody taps. combination of methods such as laminaria tents and pitocin drip, pitocin drip followed by suction evacuation or saline reinstillation and pitocin drip were tried in 10 cases.

Two patients unfortunately absconded from the hospital and were lost to follow up.

Table III shows relationship between primary method employed and the secondary method of management. It is clear that pitocin drip was used mainly in cases of failure of 20% I.A. saline

TABLE III
Relationship of Secondary Method of Management to Primary Method which Failed

Primary method	No. of cases	Secondary method				
		Pitocin	D & E	Saline (20%) Reinstill	Un-acredyl	Com-bination
20% I.A. Saline	38*	20	8	—	—	4
10% I.A. Saline	14	—	—	10	3	1
5% I.A. Saline	3	—	—	2	1	—
0.1% E.A. Acriflavin	9	2	4	—	—	3
E.A. Ethacridine (unacredyl)	6	—	5	—	—	1
E.A. 10% Saline	7	2	4	—	—	1
Total:	77	24	21	12	4	10

(N.B.:—*4 Cases abortetd Spontaneously and 2 cases were lost to follow up from 20% I.A.S. group).

while D & E was used mainly in cases of failure of extraovular solutions such as acriflavin or ethacridine lactate. Reinstillation of saline was used in cases who had failed to abort following I.A. 10% or 5% saline. The choice of the secondary method of management depended upon (1) Size of the uterus (2) Condition of membranes, (3) cervical dilatation and uterine activity, (4) presence of bleeding or local infection, and (5) the primary method that failed.

In majority of the cases abortion time after failure of the primary method was 24-48 hours. Only 5 patients aborted within 2-14 days later (Table IV).

TABLE IV
Abortion Time After Failure of Primary Method

Time (Hours)	No. of cases (%)
0-12	10 (13.3%)
13-24	21 (28%)
25-36	15 (20%)
37-48	24 (32%)
48 and more	5 (6.6%)
Total	75* (100%)

(* two cases were lost to follow up and probably continued Pregnancy).

Discussion

The failure rate is not related to age, parity, marital status or duration of gestation but is definitely related to the primary method of termination. In our study, failure rate was least with 20% saline (6.3%) and maximum with extraovular injection of 0.1% acriflavin (30%).

Burman *et al* (1977) report 58 failures among 2045 midtrimester abortions. All 58 failed cases were terminated by vaginal uterine evacuation. Neubardt and Schulman (1972) in their study of 674 cases of saline abortion had 7% failures and state that they should be left alone and will abort sooner or later.

Mehta *et al* (1977) report 7.4% failure in second trimester abortions using prostaglandins, urea and saline and had managed most of their failures with increasing dose of pitocin. Gogte *et al* (1972) report 225 cases of extraovular ethacridine with 23 failures, and management of failures by pitocin drip, D & E, hysterotomy and combination of the methods.

In our series, most of the failures were managed by pitocin drip, suction evacuation, slow dilatation and evacuation, saline reinstillation, ethacridine lactate, and combination of various methods.

If membranes are not ruptured, second instillation should be tried. Patients with ruptured membranes should have pitocin drip in increasing concentration which is usually successful. Lamineria tents may be used for slow dilatation of cervix followed by pitocin drip and evacuation. It is necessary to choose the method or combination of methods depending upon merits and demerits of the individual case.

In our series, hysterectomy or hysterotomy was not required in any of the failed cases. However, it may be necessary in cases of severe infection or excessive haemorrhage.

Thus it is clear from the presented data that management of failure after the first attempt at midtrimester termination taxes the clinical sense and ingenuity of the physician. Failure of the method may be managed with a variety of techniques, the choice of the method depending upon merits and demerits of the individual case.

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