

# INDUCTION OF ABORTION BY INTRAUTERINE BOUGIE

by

THOMAS CHANDY,\* M.D., D.G.O.

and

V. RAJASEKHARAN NAIR, M.B.B.S., D.G.O.

## Introduction

Induction of midtrimester abortion has always been a vexing problem for the gynaecologist. This is more so after the introduction of the Medical Termination of Pregnancy Act of India, 1971, as many patients, especially unmarried women, come for M.T.P. in the second trimester. We have been trying to find out a safe and satisfactory method for induction of abortion for these patients. Initially, we were trying intrauterine instillation of hypertonic glucose or saline; but out of the first 61 patients who underwent this procedure there were 2 maternal mortalities (3.28%) from amniotic fluid embolism. Since then we were forced to select another method and we revived an old medieval method of abortion—intrauterine bougie with some modification. This preliminary report consists of our experience with the first 100 cases of intrauterine bougies.

## Material and Methods

One hundred patients who came for Medical Termination of pregnancy were selected. At the first attendance in the

Family Planning Clinic general and pelvic examinations were made and the findings recorded. Routine haemoglobin estimation and urine examinations were done and in doubtful cases only a vaginal smear to exclude trichomonas or monilia was done. The patients were given appointments. On the second visit laminaria tents were inserted and the patient was put on systemic broad spectrum antibiotics. Twenty-four hours after the introduction of laminaria tents, the patient was put in the lithotomy position and after removing the laminaria tents a sterilised rubber bougie was introduced extraovularly. The membranes were not ruptured. The patients were returned to the ward and the antibiotics continued. When the patient aborted a vaginal examination was done to make sure it was complete. In doubtful cases curettage was performed immediately. When there was an undue delay in abortion the patients were taken up for evacuation or abdominal hysterotomy. In a few cases after expulsion of the products abdominal sterilisation was done.

## Results

One hundred patients in the second trimester were included in the study. Their age groups, parity, marital status and duration of pregnancy are shown in Tables I-IV.

\*Associate Professor of Obstetrics and Gynaecology, Medical College, S.A.T. Hospital, Trivandrum-11.

\*\*Postgraduate Student, M.D. (Obst. and Gynaecology), Medical College, S.A.T. Hospital, Trivandrum-11.

Received for publication 24-7-74.

TABLE I  
Age Group

Age Group	No. of Patients
15-19	23
20-24	24
25-29	20
30-34	10
35-39	14
40-45	9

TABLE II  
Parity

No. of Pregnancy	No. of Patients
1	48
2	7
3	12
4	10
5	7
6	4
7	3
8	4
9	2
10	3

TABLE III  
Marital Status

Marital Status	No. of Patients
Married	58
Unmarried	42

TABLE IV  
Size of Uterus

Size of Uterus	No. of Patients
14 weeks	1
16 weeks	9
18 weeks	32
20 weeks	58

The following are the results of bougie application in this series:

Successful (Aborted)—86 patients (86%)

Abdominal hysterotomy—8 patients (8%)

Dilatation and evacuation—6 patients (6%)

In the failed group 13 were multiparous women and 1 was a primigravida.

#### Induction Abortion interval

The induction abortion interval varied from 5 hours 20 minutes to 174 hours with an average of 51 hours.

Less than 12 hours	2 patients
12 to 24 hours	13 "
24 to 48 "	35 "
48 to 72 "	20 "
72 to 96 "	8 "
96 to 120 "	5 "
120 to 144 "	2 "
Above 144 "	1 "

The induction abortion interval in primigravidae was found to be 57 hours.

#### Abdominal Hysterotomy

In 8 patients as the bougie failed to induce abortion, abdominal hysterotomy was done after varying time intervals.

2 patients	—	after 3 days
2 patients	—	after 4 days
3 patients	—	after 5 days
1 patient	—	after 6 days
1 patient	—	after 8 days

Out of these 8 patients, 7 were multiparous and hence sterilised along with hysterotomy. Three patients subjected to hysterotomy after bougie introduction developed pyrexia. In all other cases, the postoperative period was afebrile.

#### Dilatation and Evacuation

Six patients were taken up for dilatation and evacuation. At least in 3 of the cases, we did not wait sufficiently to call it as failed bougie. The time interval after bougie and before dilatation and evacuation is shown below.



1 patient	—	after 1 day
1 patient	—	after 2 days
1 patient	—	after 3 days
1 patient	—	after 4 days
1 patient	—	after 5 days
1 patient	—	after 6 days

In none of these patients were there any complications attributable to evacuation subsequent to bougie introduction.

#### *Incomplete Expulsion*

Out of the 86 patients aborted after intrauterine bougie 12 patients were subjected to curettage and bits of placenta were removed. No case of pyrexia or pelvic infection was encountered in this group.

#### *Complications*

The complications were minimal. Seven patients developed pyrexia. Out of this, 3 had abdominal hysterotomy after introduction of bougie. The rest of the patients had only bougie application. All responded to systemic antibiotics.

One patient expelled the products through a tear in the posterior lip of the cervix which had to be subsequently repaired. Apart from this, there were no other complications.

#### *Hospital Stay*

Average hospital stay in the bougie group was 5.6 days. Usually the patients

were observed for 24-48 hours before discharging.

#### *Discussion*

Introduction of foreign bodies into the uterus is known to produce uterine contractions and abortion. But because of the potential hazard of intrauterine sepsis this method has not been exploited clinically so far on a large scale. But because of our bitter experience with intrauterine glucose we changed over to intrauterine bougie with quite satisfactory results. The average induction delivery interval for intrauterine glucose was 10 hours and 45 minutes and the failure rate was 13 per cent including 2 maternal deaths. But with the intrauterine bougie the failure rate was 14 per cent and the complications were minimal and there was no maternal mortality. Even when the bougie fails the patients can be taken up for hysterotomy without much added risk of infection. Thus, the number of hysterotomies can be reduced to the minimum, and hence the late effects of the classical scar on the uterus and the hospital stay of the patients is also considerably less. On the whole our experience with intrauterine bougie is encouraging. Another advantage of this method is that when the Medical Termination of Pregnancy Act is extended to the Primary Health Centres, etc. this can be used as a safe procedure to procure mid-trimester therapeutic abortion.