OUTPATIENT TERMINATION OF PREGNANCY BY VACUUM ASPIRATION

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SYNOPSIS

Outpatient Termination of Pregnancy by Vacuum Aspiration was performed in 100 patients whose gestational period did not exceed 12 weeks. In the majority (84) no anaesthesia was given. 16 cases had paracervical block. 74% of the patients were completely satisfied with the procedure. 26% had misgivings and these consisted mainly of anxiety and pain experienced during the procedure. The complication rate was 11% (incomplete abortions and sepsis). None of these had serious consequences and all the patients recovered fully after a short stay in hospital.

INTRODUCTION

Termination of pregnancy as an inpatient procedure taxes the hospital for beds and, if general anaesthesia is used, an extra work load is placed on the anaesthetists.

In an attempt to reduce the burden on the hospital, outpatient termination of pregnancy by Vacuum Aspiration was performed in 100 patients. The aim of study was to determine acceptibility, safety, and complication rate of the procedure.

MATERIALS AND METHOD

One hundred patients, whose applications for termination of pregnancy had been approved by the Pregnancy Termination Board of the Ministry of Health, Singapore, were referred to the University Unit of the Kandang Kerbau Hospital for Women between 1.12.70 and 30.9.71 for termination of their pregnancies as an outpatient procedure. The period of gestation in all these cases was less than 12 weeks. Those with uteri of more than 12 weeks size were not accepted for outpatient termination.

A detailed history and physical examination was undertaken. Prior to the termination, all patients were made to empty their bladders. No premedication was given. The patient was then placed in the lithotomy position and the perineum and vagina were cleaned with an antiseptic solution e.g. Hibitane. A vaginal examination was then performed.

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The operator (no mask worn), wearing a pair of sterile gloves then introduced the self-retaining speculum. The cervix was then grasped with a volsellum and the os dilated with Hegar Dilators to size 8. Those with uteri of 10 weeks gestation or more were dilated to Hegar size 10.

If the patient complained of pain, paracervical block was performed by injecting a total of 20 c.c. 1% lignocaine into positions 3 and 9 o'clock of the vaginal fornices. Dilatation of the cervix was then carried out several minutes after the paracervical block was given.

Vacuum aspiration was then performed with a size 8 or 10 sterile Barclay's aspirator attached to a Berkeley Vacuum Aspiration machine Model V.C. II. The larger aspirator tube (size 10) was used in those with uteri of 10 weeks gestation or more. A suction pressure of 60 to 70 mmHg. was used. Blood loss was measured and any ill effects of the procedure were noted. Ergometrine was not given unless the bleeding was heavy.

The patient was then allowed to get up and to sit on a couch where she was observed for 4 hours. If her general condition was satisfactory i.e. little bleeding per vaginam and systolic blood pressure was more than 100 mmHg., then she was allowed to go home with a supply of oral Penicillin 500 mg. q.d.s. orally for 7 days and Ergometrine 0·5 mg. t.d.s. for 5 days. Prior to discharge the patient was asked whether she experienced any pain during the procedure and if so, whether it were more or less intense than labour pains.

All the patients were told to return immediately should there be excessive bleeding or if they felt unwell. Otherwise they were instructed to attend the follow-up clinic 2 weeks, 6 weeks, and then 6 months later. At the followup clinic the patient was asked whether she was satisfied with the procedure.

RESULTS

Pain Experienced During Abortion

97 of the 100 patients were multiparous and the majority of patients (84) did not receive any anaesthesia at all. In many of these, the cervix dilated easily with minimal discomfort and therefore no paracervical block was given. However, in some of these patients, the procedure was painful.

PAIN EXPERIENCED DURING ABORTION

	No Pain A	Pain less than labour Pains B	Pain more than Labour Pains C
No. of Patients	3	82	15
Paracervical Block	3	8	5

Pain was experienced during cervical dilatation and to a lesser extent during vacuum aspiration.

3 patients (Group A) who received paracervical block did not experience any pain during the procedure. Of the 82 patients in Group B, 74 received no anaesthesia but all experienced mild pain (less than labour pains) during the procedure. 8 of these patients in Group B received paracervical block but despite this all 8 experienced very mild discomfort.

15 patients (Group C) experienced moderate to severe pain (more than labour pains) during the procedure. Of these, 3 refused anaesthesia, and 5 (of which 3 were primigravid patients) were given paracervical block which was unfortunately ineffective. 7 patients were not given any anaesthesia. Pain, however, was experienced mainly during vacuum aspiration and not during cervical dilatation. All the patients in Group C were very anxious and tense.

There were 4 cases of incomplete termination of pregnancy and all were evacuated on an inpatient basis within 1 month of the procedure without mishap. None required blood transfusion.

Complications	No. of Patients
Incomplete Abortions	4
Pregnancy continued	1
Pelvic Sepsis	6
Uterine perforation	0
Excessive Blood Loss (>300 ml.)	0
Cervical Lacerations	0
Vaginal tears	0

In 1 case the pregnancy continued despite the attempt at termination of pregnancy. This occurred early in the trial and was probably due to faulty vacuum suction initially and partly lack of experience of the operators in using the instrument. This case required hypertonic saline for termination of pregnancy 3 weeks later.

Six patients developed pelvic sepsis (pyrexia and pelvic tenderness) shortly after the procedure. All were hospitalised and treated successfully with antibiotics and bed rest.

There were no other serious complications i.e. no cases of uterine perforation or of excessive blood loss (>300 ml.) at termination. The average blood loss was 80 ml.

Acceptability

Of the 100 patients, only 74 patients expressed complete satisfaction with the procedure.

26 patients had misgivings regarding procedure. 15 of these gave the main reason as the pain and anxiety experienced during the procedure. Of these 3 were primigravid patients. 11 expressed partial disatisfaction i.e. that though they were satisfied with the operative procedure itself, they were disatisfied with the complications which arose i.e. incomplete terminations and sepsis.

Age, Parity and Race

The average age was 32, the youngest being 20 and the oldest 48.

The average parity was 3·8, the least being 0 and the most being 14. Only 3 patients in the trial were primigravidae; the rest were multiparous.

The racial distribution was as follows:

Chinese	69
Malay	12
Indian	12
European	3
Eurasian	4

DISCUSSION

Outpatient curettage has been advocated as early as 1924 by H. A. Kelly, and 305 such procedures were performed by Isreal and Mazer in 1938.

More recently, outpatient termination of pregnancy has been advocated by some e.g. I. K. Strausz *et al* (1971) and Beric *et al* (1971). The advantages of outpatient termination of pregnancy are the reduction in the demand for hospital beds

and anaesthetists (if local anaesthesia is used), and the short stay (a few hours) in the outpatient department. The disadvantages are the early discharge of patients who may not have recovered fully from the operation and the possible lack of sufficient time for post operative monitoring of patients should complications arise. Because of these disadvantages, general anaesthesia and systemic analygesics were not given to patients in the trial and only local anaesthesia (paracervical block) used. Local Anaesthesia, however, has the disadvantage of not relieving the anxiety and fears of nervous patients.

Vacuum Aspiration was used instead of conventional curettage because blood loss with the instrument appeared to be less (Vladov *et al*, 1965 and Kerslake *et al*, 1967).

In this trial, outpatient termination of pregnancy was found to be completely acceptable to the majority (74%) of the patients; 26% had misgivings about the procedure.

The sizeable number of patients who experienced moderate to severe pain was disconcerting and was partly due to the fact that all of them were very anxious. Careful psychological preparation, more frequent use of paracervical block and systemic analgesics e.g. pethidine would probably have reduced the number in this group. However, the use of systemic analgesics would require that these patients spend a longer time in the clinic postoperatively to ensure that they recovered fully from the analgesic and also someone to take them home safely.

All 3 primigravid patients were very anxious and tense and experienced moderate to severe pain despite the use of paracervical block. It appears that primigravid patients are not suited for outpatient termination of pregnancy.

The sepsis rate at 6% was high and this could have been reduced by the use of masks, sterile gowns, and towels, and autoclaved rather than boiled instruments.

Although the total complication rate at 11% was somewhat high (11·4% in the series by I. K. Strausz (1971), none of these had serious consequences and all the patients recovered. Most of the complications occurred early in the trial and were due partly to a faulty vacuum aspirator and partly lack of experience in usage of the instrument. As the trial proceeded the complication rate fell significantly.

In summary, we find that outpaitent termination of pregnancy is both a safe and acceptable procedure provided adequate analgesia is given and strict aseptic precautions undertaken.

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