MIDTRIMESTER VAGINAL TERMINATION AND CONCURRENT CONTRACEPTION†

by

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Inspite of the recent scientific developments, and the vast experience gained in the field of fertility control, the admitted fact is that we have yet to develop the safest and surest method for elective induction of abortion, especially for the midtrimester pregnancies (Cates *et al*, 1977). Nonetheless, we have made spectacular progress in this subject, and what has been originally the purely surgical method of termination (hysterotomy) of midtrimester pregnancies has become almost obsolete and has been greatly replaced by the more advantageous medical methods employing various pharmacological agents such as hypertonic saline, hyperosmolar urea, mannitol, rivanol, Prostaglandin F_2 alpha, and 15 methyl Prostaglandin F_2 alpha and Steroids.

Today, 15 methyl Prostaglandin F_2 alpha, administered by various routes, intra-amniotic, Extra-amniotic, intra-muscular, and vaginal (Ramanan *et al*, 1980), tops the list of abortifacient agents employed for midtrimester terminations. Eventhough more effective and relatively quicker in inducing abortion, the prostaglandin analogue is also not free from the complications which may include uterine and cervical injuries, and so also side effects which are mainly gastro-intestinal. It is a quicker method of induction, only when compared to other agents such as urea, saline, rivanol or mannitol, and the patients will have to be in labour for alreast 8 hours or more before the expulsion of the products of conception. Similarly, whereas the drug is effective, it is still associated with a high incidence of incomplete abortion.

Considering all these disadvantages of medical induction of midtrimester abortion, one wonders if reverting back to surgical method by a technic other than hysterotomy, namely dilatation and evacuation (D & E), will be more safe, effective and quick. Performed carefully and with skill, by experienced surgeons, midtrimester vaginal termination by D & E has got certain definite advantages (Grimes *et al*, 1977, Hodari *et al*, 1977 and Rajan *et al*, 1980):

1. It is the quickest method of termination of midtrimester pregnancies, completed within 5 to 15 minutes.
2. Patients need not be in labour and

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†Paper read at the Third International Seminar on Maternal and Perinatal Mortality, Pregnancy Termination and Sterilisation, New Delhi (India) 3rd to 5th Oct. 1980.
Accepted for publication on 24-10-80.

suffer painful uterine contractions for hours together.

3. No systemic complications such as hypernatraemia or coagulopathy, conditions which may be beyond the control of the physician.

4. Any complication of D & E is purely surgical, namely uterine or cervical injuries, which is detected promptly at the time of evacuation and effectively managed without compromising the life of the patient.

5. Medical method of induction is also not free from uterine or cervical injuries, and there is considerable delay in detecting these injuries to the effect that there is increased morbidity and even mortality.

6. Blood loss in D & E is never more than that is anticipated for that duration of pregnancy terminated by any other method.

7. Incidence of incomplete abortion could be minimised by perfecting the technic of D & E.

8. Psychologically, the patients stand this procedure better than the medical method because the patients are not in labour for hours, and being a quick procedure (unlike spontaneous expulsion of the foetus) the surgical evacuation does not give an opportunity for the patient to see the foetuses.

9. Duration of hospital stay is minimised, and unless the patient is being concurrently sterilised, she need not be admitted.

10. Concurrent contraception is more practicable with D & E because willing patients do not get time to change their mind. Any method of contraception can be effectively combined with D & E, and completed as a single operative procedure.

11. D & E is the most ideal method for terminating pregnancies in the 'gray zone' (13 to 15 weeks), where intra-amniotic procedure are more difficult.

12. Incidently, D & E happens to be the most economical method available for midtrimester abortion.

13. In effect, the success and wider acceptance of D & E for midtrimester abortion depends greatly on the skill and experience of the surgeon.

Our Experience

From October 1978 to June 1980, we have performed midtrimester vaginal evacuation (D & E) for 250 subjects for pregnancy duration ranging from 13 to 20 weeks. Among them there were 45 nulliparous unmarried women (18.00%), and 205 (82.00%) parous women with 76 (30.40%) in the low parity group. Age group of the patients ranged from 16 to 40 years with a mean of 29.44 years. Details of the pregnancy duration are given in Table I. Almost one half of the patients were between 16 to 20 weeks and the rest between 13 to 15 weeks.

Prior laminaria dilatation was obtained, and dismembered foetal parts were removed by ring forceps and the placenta

TABLE I
Duration of Pregnancy

13 weeks	14 weeks	15 weeks	16 weeks	18 weeks	20 weeks
21 (8.40%)	80 (32.00%)	33 (13.20%)	65 (26.00%)	32 (12.80%)	19 (7.60%)
	134 (53.60%)			116 (46.40%)	

was removed in pieces. Complete empying of the uterus was ensured by inspecting the removed products. The operative procedure is detailed in our previous communication (Rajan *et al*, 1980).

Concurrent Contraception (Table II)

ing and curettage revealed placental bits. Two patients in whom the foetal parts were removed incompletely expelled the same spontaneousl. Another patient in whom the foetal head was not identified in the aborted specimen could not be followed.

TABLE II
Concurrent Contraception

Vaginal tubectomy	Mini-lap	Copper T	Lippes loop	R.M. device	Vasectomy
62 (44.28%)	40 (28.57%)	19 (13.57%)	12 (8.57%)	2 (1.42%)	5 (3.57%)

Total parous women: 205 Contraceptive acceptors: 140 (68.29%)

Effective contraceptive promotion could be practised along with the vaginal termination. Tubectomy was preferably performed by the vaginal route in 62 subjects. Contrary to the general belief identification of the tubes is not impaired by the enlarged uterus, hyperaemia and oedema. The tubes were delivered by the palpatory method. We did not have any problems with this approach and there were no increased complications. In fact, vaginal route reduced the duration of hospitalisation because the patients were feeling well and were prepared to be discharged on the next day (Rajan and Ambika Devi, 1979). However, in the earlier series of 40 subjects, tubectomy was performed by the abdominal route. In a small series of 33 patients, intrauterine devices were inserted concomitantly with the evacuation procedure. Of the 205 parous women in our series, 140 had accepted some form of contraception (68.29%).

Complications

i. *Incomplete Abortion*: Five women had this problem of incomplete abortion. Two were readmitted with vaginal bleed-

ii. *Cervical Injury*: Two patients sustained cervical trauma, 1 at the time of evacuation, and the other by laminaria tent perforation. Both were sutured properly after completion of evacuation. Both were parous women accepting sterilisation.

iii. *Uterine Perforation*: None of the patients in this group sustained uterine injuries. In 1 case of suspected perforation (18 weeks gestation), laparotomy revealed an intact uterus. Abortion was completed in this patient by hysterotomy and she was concomitantly sterilised.

Other complications like haemorrhage necessitating blood transfusion, and fulminant sepsis were not encountered in this series.

Conclusion

Midtrimester abortion by vaginal evacuation appears to be more acceptable to the patients because of the short period of hospital stay and minimal discomfort. When the surgeon is experienced this technic which is highly economical combines efficacy with safety. Any method of

contraception could be confidently practised along with D & E. We have favoured vaginal tubal ligation following D & E, performed as a single operative procedure, which offers for minimal post-operative discomfort for the patients and reduced the hospital stay.

Acknowledgement

We are grateful to Dr. P. George Cherian, Professor of Obstetrics & Gynaecology, and to Dr. M. V. John, Superintendent, Medical College Hospital, for their kind permission to analyse the hospital records.

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