Summary and Conclusion
SUMMARY AND CONCLUSIONS

The induction of early second trimester abortion by the extra-amniotic instillation of a single dose of prostaglandin PGF$_{2\alpha}$ with a solution of 0.1% ethacridine, an acridine derivative with antiseptic properties, seems to be a simple, efficacious and harmless procedure. This modification of the extra-amniotic abortion method combines these immediate uterotonic effect of prostaglandin with the delayed oxytocic response to Ethacridine.

Ethacridine lactate administered extra-amniotically in combination with PGF$_{2\alpha}$ acts in following ways to produce abortion:

(a) Causes mechanical stripping of the entire sac from the uterine wall.

(b) Ethacridine causes a stimulation of increased PGF$_{2\alpha}$ release from the decidua.

(c) The catheter left in situ aids in mechanical stimulation of the uterus.

(d) Prostaglandins acts indirectly through the release of oxytocin and appear to induce abortion primarily through uterine contractions.
(e) The combination of PGF₂α with Ethacridine effects an immediate increase in uterine contractility.

The present study was conducted with a view to shorten the instillation abortion interval and to assess the success rate and completeness of abortion.

Our observations have been discussed under the light of modern literature.

This study included 120 cases aged between 14 to 45 years and from primi-gravida to ninth gravida. Most of the patients were primi-gravida and usually with illegitimate pregnancy. All the patients were divided into two groups.

Group A: 60 patients where the method used for mid-trimester abortion was a combination of ethacridine and carboprost (PGF₂α).

Group B: 60 cases where the method used was ethacridine plus I/V syntocinon augmentations which served as control.

Instillation abortion interval was (18 hrs 20 min.) less in group A than in group B (32 hrs 10 min.). Most of the patients in group A aborted within 48 hours.
By addition of Inj. carboprost to emcredil; 100% patients aborted within 72 hours while the success rate was 96.6% with emcredil-syntocinon.

No major complication was observed in group A except for some minor complications like gastro-intestinal symptoms which was experienced in 4 patients. No case of uterine hypertonus and inordinate action was reported in group A as compared to 2 cases in group B. Silent uterine rupture with broad-ligament haematoma was noticed in 1 case in group A during tubectomy.

The following conclusions were drawn:

(1) The technique is simple, cheap, safe and physiologically effective. No cervical dilatation was required even in unmarried patients, there was no difficulty in passing the catheters.

(2) There is no danger of bladder or intestinal injury.

(3) 0.1% solution has wide range of safety. Its potent and widespread bactericidal properties minimise the danger of pervaginal infection after extra-ovular injection. Infection was not seen in any of the case.

(4) The extra-amniotic route of prostaglandins has special advantage over intra-muscular route in reducing the systemic
side-effects e.g. vomiting, diarrhoea and also avoiding serious complications of cervico-vaginal injuries. The freedom from cervical injuries is due to cervical ripening by ethacridine.

The single extra-amniotic dose of carboprost reduces its systemic side effects, the cost and inconvenience to the patients.

From this study we can therefore conclude that combination of extra-amniotic instillation of 150 cc of ethacridine lactate followed six hours later by single extra-amniotic instillation of 250 μg of 15(S), 15-methyl PGF₂α dilution to 10 ml with distilled water, can be considered as a method of choice for second trimester abortion.

This modification of the extra-amniotic method has other advantages for clinical application - the procedure is simple; economical, side effects are acceptable inadvertent intravascular injection is harmless and the possibility of infection is reduced. On the basis of our experience we conclude that this method is sufficiently promising for early second trimester abortions.