Material and Methods
MATERIAL AND METHODS

The present study comprised of a comparative evaluation of efficacy of ethacridine-carboprost (PGF\(_2\alpha\)) combination to that of traditional ethacridine syntocinon combination. The study was conducted on 120 cases admitted to the Department of Obst. & Gynaec., M.L.B. Medical College & Hospital, Jhansi during the year 1993-1994.

The cases were divided into two groups as follows:

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

(B) A similar number of cases where the method used was ethacridine plus syntocinon combination. These served as control.

The cases were further subdivided into three subgroups depending on the duration of gestation in weeks as shown in the table below:

**TABLE 1: SHOWING GROUPS AND DISTRIBUTION OF CASES ACCORDING TO GESTATIONAL AGE.**

<table>
<thead>
<tr>
<th>Group A</th>
<th>Emcredil + Carboprost</th>
<th>Total number of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>A(_1) (13-14 weeks)</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>A(_2) (15-17 weeks)</td>
<td></td>
<td>21</td>
</tr>
<tr>
<td>A(_3) (18-20 weeks)</td>
<td></td>
<td>35</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>60</strong></td>
</tr>
<tr>
<td>Group B</td>
<td>Emcredel + Syntocinon</td>
<td>Total number of Cases</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>$B_1$ (13-14 weeks)</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>$B_2$ (15-17 weeks)</td>
<td></td>
<td>22</td>
</tr>
<tr>
<td>$B_3$ (18-20 weeks)</td>
<td></td>
<td>31</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>60</td>
</tr>
</tbody>
</table>

**SELECTION OF CASES**

Women seeking medical termination of pregnancy between 13 and 20 weeks of gestation as calculated from the first day of last menstrual period were included in the study.

**SELECTION CRITERIA**

1. Weeks of pregnancy confirmed by estimation of the size of uterus and fundal height by bimanual pelvic abdominal examination.
2. All patients in the study gave informed consent prior to entering the trial.
3. Patients with known cardiac, pulmonary, renal or hepatic disease, epilepsy, suspected or known history of asthma were excluded from the study.
4. Patients with pelvic disproportion, a history of caesarian section or other major uterine surgery were not included.
5. Patients with active pelvic gynaecological infections were excluded.

6. Patients with uterine anomalies were not included.

   The diagnosis of duration of pregnancy was made by:

   a. Per-abdominal or per-vaginal examination under aseptic condition.

   b. Ultrasonographic examination, if required.

   All the patients of Group A (A₁, A₂ and A₃) and Group B (B₁, B₂ and B₃) of this study were subjected to the following laboratory investigations at the time of admission.

1. BLOOD for haemoglobin percentage, ABO-Rh; bleeding and clotting time if intra-uterine death is diagnosed.

2. URINE examination included the examination for albumin, sugar, microscopic examination and test for diagnosis of pregnancy; if needed.

3. Ultrasonographic examination in certain specific cases.

**TREATMENT REGIMEN**

1. All the patients were admitted to the hospital prior to treatment. Baseline clinical data and laboratory data, as well as administrative procedures were completed before treatment was started.
2. 150 ml of ethacridine lactate was instilled extra-aminotically through Foley's catheter no. 14 in all 120 patients. The catheter balloon was inflated with 10 cc of distilled water and hitched against the internal os of cervix.

3. In group A, 1 ml of (250 mg) inj. carboprost diluted in 10 cc of distilled water was instilled 6 hours after through the same catheter after clamping its distal end. While in rest 60 patients, I/V syntocinon-augmentation was done (Group B Control).

4. Two tablets of Lomotil (Diphenoxylate hydrochloride 2.5 mg and atropine sulphate 0.025 mg, Searle) and 1 tablet of Stemetil (prochlorperazine 5 mg, May and Becker) was given; if vomiting occurred with extra-aminotic carboprost.

METHODS

GROUP A

Ethacridine lactate is supplied in the form of 100 ml 0.1 % solution (2 x 100 ml) with brand name Icocredil made available by IVES Drugs (India) Pvt. Ltd. while CARBOPROST TROMETHAMINE (PGF₂α) is supplied in the form of Inj. PROSTODIN made available by ASTRA-IDL LTD., Banglore. Each ml. contains carboprost tromethamine equivalent to 250 meg of carboprost. Prostodin is
presented in a package of 2 x 1 ml ampoules costing Rs. 107.18. The solution is sterile and is refrigerated at 2-4 °C.

GROUP B

INTRAVENTOUS OXYTOCIN

In the control group (Group B); Intravenous oxytocin was used 6 hours after ethacridine instillation in the form of oxytocin-drip starting with 0.5 unit syntocinon in 500 ml of 5% Dextrose at drip rate of 10 drops per minute to be increased to 30 units according to uterine contractions.

PARAMETERS TO BE ASSESSED

Monitoring of patient was done for pulse, blood pressure, temperature, any evidence of nausea, vomiting, diarrhoea, flushing, onset of contractions, induction-abortion interval, post-abortal blood loss. Completion of abortion was noted during the process of expulsion.

CRITERIA FOR SUCCESSFUL ABORTION

1. Induction-abortion interval not more than 72 hours.

2. Abortion without use of any additional method.

3. Not jeopardizing the reproductive capability of uterus.