# ETHACRIDINE LACTATE 1% EXTRA AMNIOTIC V/S INTRA-AMNIOTIC FOR INDUCTION OF MID TRIMESTER ABORTION

RAMA SOFAT • PROMILA JINDAL • BHUPINDER KAUR GILL • SUNIL JUNEJA

### **SUMMARY**

Ethacridine lactate is a time tested and sure method for mid-trimester abortion. Its instillation by extra amniotic and intra-amniotic route was compared in 100 patients (50 in each group) 92% cases in EAE group and 94% in IAE group aborted safely in 48 hrs. of instillation with success rate 100% and 98% respectively. Ethacridine lactate is equally effective and safe irrespective of route of instillation.

## INTRODUCTION

Medical termination of pregnancy has been accepted as one of the methods of reducing the increasing population of developing countries like India. Simultaneously there has been an increase in the No. of patients seeking second trimester abortion. Out of all options available, Ethacridine lactate administered by extra amniotic route, has withstood the test of time, ever since Cohen first used it in 1946 and has been exten-

sively in use ever since. This study is carried out to evaluate the utilization of this drug by the intraamniotic route and to compare its efficacy, safety to extra-amniotic instillation of Ethacridine lactate.

# MATERIAL AND METHOD

This study was carried out on 100 patients who presented themselves in Gynae and Family Welfare O.P.D. of Dayanand Medical College and Hospital Ludhiana and sought Midtrimester abortion (12-20 weeks). A compete workup regarding history. Examination and rou-

Dept. of Obst. & Gyn. Dayand Medical College & Hospital, Ludhiana.

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tine tests were done. In 50 cases (IAE) 150 c.c. of Emcredil + 10 units of syntocinon was instilled by intra-amniotic route after aspirating 50 c.c. of amniotic fluid with the help of lumber puncture needle No. 20.

In the other 50 cases (EAE) same drug combination was instilled extra-amniotic with Foley catheter NO. 16.

In both the groups the natural uterine response was waited for 24 hrs., after which in the EAE cases, the Foley's catheter was deflated and pulled out (if already not expelled). In both groups induction or augmentation of uterine action was achieved with syntocinon drip started with 10 I.U. in 5% dextrose bottle and after every 100 c.c. having gone, 10 I.U. were added. Cases who did not abort within 72 hrs. or did not respond to 100 I.U. units of syntocinon were considered 'failures'. After expulsion of the foetus and placenta, check currettage was done in every case.

Completeness of abortion was judged by inspecting placenta itself or products which came out after currettage by naked eye only. Blood loss was graded as mild (50-150 c.c.), Moderate (150-300 c.c.) severe (300 cc) approximately.

# OBSERVATIONS AND RESULTS

Both the groups were comparable in age, parity and marital status. Maximum patients were in 20-30 yrs. of age in both groups.

Except 2 patients (one of each group) all the patients were parous having one or two living children.

# DISCUSSION

Induction of midtrimester abortion by

Table I
Induction-Abortion Interval Comparison

Induction-Abortion interval	EAE	IAE	
Within 12 hrs	1 (2%)	1 (2%)	
12-24 hrs.	9 (18%)	7 (14%)	
24-36 hrs.	26 (52%)	30 (60%)	
36-48 hrs.	11 (22%)	9 (18%)	
48-60 hrs.	3 (6%)	2 (4%)	
> 72 hrs.	0 (0%)	1 (2%)	
Mean Interval	31 Hr31" Mins	30 Hr50" Mins	

Table II
Success rate and complications: comparison

		EAE	IAE
Success rate		50 (100%)	49 (98%)
Complete Ab	ortion	21 (42%)	22 (44%)
Blood Loss:	Mild	30 (60%)	26 (52%)
	Moderate	18 (36%)	16 (32%)
	Severe	2 (4%)	8 (16%)
	Sepsis	Nil	Nil

Ethacridine lactate has been accepted, time tested and effective method (Gupta & Gupta 1989, Nayak and Dalal (1989) with rare fatal complication (Karthak et al 1993).

Intraamniotic use of Emcredil was first published in Indian literature by Raut and Aggarwal in 1989 and found that 90% cases aborted within 72 hrs. of emcredil instillation intra amnioticand extra amniotic respectively with mean I - A interval of 40 hr.- 51 min in extra amniotic gp. and 35 hr.-42 mn in intra amniotic group. While our patients fared well, 92% cases in EAE gp. and 94% of

cases in IAE gp. aborted safely within 48 hrs. with mean I - A interval of 31 hr-31 mn and 30 hr-50 mn respectively. Only one patient in the IAE group did not abort in 72 hrs.

Success rate was 100% in EAE group and 98% in IAE group. However some technical difficulty in reaching the intraamniotic space was faced in IAE group in 4 cases, which were later excluded from the study. Difficulties encountered were inability to reach the amniotic cavity, breaking of L.P. needle from its joint after puncture and 'Dry tap' inspite of repeated pricks.

In both groups approximately same No. of cases (42% in EAE and 44% in IAE) aborted completely.

Majority cases (60% in EAE and 52% in IAE) had mild blood loss. Only 4% cases bled severely in EAE group as compared to 16% in IAE group. However, none of our patients required blood transfusion or encountered sepsis.

To conclude, Ethacridine lactate is a cheap, safe and sure method for the induction of middle trimester abortion. Though the induction abortion interval is slightly more in comparison to that with other methods. The intra-amniotic route is as good as the extra-amniotic one. Intra-amniotic Emcredil is safe even in missed abortion and twins and has the advantage of safety in low lying, or central placenta where extra-amniotic route in contraindicated.

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