

## ROLE OF LOCAL INJECTION OF EPIDOSIN AND PITOCIN IN MEDICAL TERMINATION OF PREGNANCY

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### SUMMARY

Difficulty in dilatation of cervix and excessive blood loss during the procedure of M. T. P. is usual problem. Epidosin and Pitocin along with Lignocain as paracervical block overcomes the problems. The drug is very safe and there were no side effects with the dose of 8 mg. of Epidosin which contains 8 mg. Valethamate bromide. 100 cases were studied and equal number of cases were selected with almost same protocol as a control group for last two years in K. E. M. Hospital. During dilatation, 67% patients did not feel any pain as compared to 6% in control group. 92% felt grade I & II pain and only 33% felt the same in control group. The cervical dilatation was easy to moderately difficulty in 100%, while in control group it was 90%. The blood loss was very less as compared to control group, may be due to spasmolytic action of Epidosin even in uneffaced cervix as dilatation was very easy and duration of the procedure is shorter. It adds to the comfort of patients and obstetricians.

### INTRODUCTION

Difficulty in dilatation of cervix to the desired number and blood loss during the procedure of M. T. P. often worries the obstetrician. Most of the M. T. P. are being done under local anaesthesia. Epidosin and Pitocin injection along with the Xylocaine overcomes the problems without causing any side effect.

### MATERIAL AND METHODS

One hundred patients who attended Family Planning O. P. D. for Medical Termination of Pregnancy were selected over last three years. Only patients upto 14 weeks of ammenorrhoea and clinically 14 weeks size of uterus were taken in this study. One hundred patients of almost equal criteria were also studied as a control group. Written consent was obtained. Detailed history was taken and the general and systemic examination done. Hemoglobin, blood grouping and Rh typing was done. Urine

examination was done as a routine. Patients were taken in the operation theatre after giving injection Tetanus toxoide and Atropin intramuscularly. Lithotomy position was given and parts prepared with antiseptic solution. Local injection 1% Xylocaine and Epidosin 1 Ampoule and Pitocin one ampoule were taken in a sterile syringe and mixed well. Local cervical block was given at 12 O'clock and 4 O'clock positions and 3 minutes were allowed for the drug to act. Dilatation of the cervix was carried out serially and response of the patients was noted for each dilator. Suction curettage was carried out in all the cases and blood loss measured with measuring jar. Check curettage done in all cases. In most of the cases M. T. P. was done by trainees and residents undersupervision. To evaluate the specific efficacy of the drug, one hundred cases with the same protocol were done as control group.

### OBSERVATIONS

Table I shows majority of the cases were between 21 & 30 years of age group.

Table II shows the parity distribution is almost equal in both groups of study. Most of the cases are para 1 & 3.

Table III showing social and educational status of trial and study group.

Table IV shows the number of cases according to size of uterus and weeks of ammenorrhoea, selected in the same manner in both the groups. By selecting similar type of cases it is easy to evaluate the drug efficacy.

Table I

Table showing age distribution

Sr. No.	Age in years	Trial Group No. of cases	Control Group No. of cases
1	Upto 20	15	13
2	21 - 30	80	83
3	31 & above	5	4

Table II

Table showing parity of patients

Parity	Trial Group No. of cases	Control Group No. of cases
Nullipara	3	3
Primipara	38	39
Second	46	46
Third	10	10
Fourth	2	1
Fifth	1	1

Table III

Table showing Social & Education Status

Status	No. of cases in Trial group	No. of cases in Control group
Poor	55	55
Middle	45	45
Higher class	00	00
Not educated	7	8
Primary School	79	78
Higher Secondary	2	12
Graduate	2	2

The experience of pain and appreciation of pain by an observer both are widely variable. An attempt is made to minimise this variability and to achieve objectivity and gradation of pain during the M. T. P. procedure was established.

The criteria for pain evaluation taken are ...

Grade 0 - No pain

Grade 1 - Pain or sensation but no move-

**Table IV**

**Table showing Weeks of Amenorrhoea**

Sr. No.	Weeks of Amenorrhoea	No. of cases	No. of cases
1	6 - 8	36	36%
2	8 - 10	47	47%
3	10 - 12	13	13%
4	12 - 14	4	4%

**Table V**

**Table showing gradation of pain during the dilatation of cervix**

Grade of pain	No. of cases Trial Group	No. of cases Control Group
0	67	6
1	32	60
2	1	32
3	0	2

ments of the patients on the table.

Grade 2 - Pain enough to cause movements of the patients on the table.

Grade 3 - Pain severe enough to protest or not allow the procedure to continue.

During dilatation of the cervix, 67% patients did not feel any pain as compared to control group, where as only 6% felt it. Pain grade 2 and 3 was felt by 92% in control group, while only 33% patients had pain in the study group. These findings clearly show that the pain and the degree of pain is much less when Inj. Epidosin a spasmolytic drug is used intracervically during M. T. P.

The gradation of ease of dilatation used was as follows :

EASY - No resistance encountered.

MODERATELY DIFFICULT - The same number of dilator has to be inserted twice.

DIFFICULT - One number dilator needed to be introduced again.

In trial group, 81% cases, obstetrician found dilatation was easy as compared to 65% in control cases. The moderate difficulty was encountered in 19% as against 25% in the control group. There was no difficulty in dilatation at all in the study group.

The blood loss was expected to be less than the control group as Pitocin was used, time for the procedure is less as the cervical dilatation was very much easy. After dividing 100 cases in equal groups of size 25 each, mean and

**Table VI**

**Table showing Ease of dilatation**

Grade of Ease	Trial Group	Control Group
Easy	81	65
Moderately difficult	19	25
Difficult	0	10

**Table VII**

**Table showing Blood loss in ml.**

Blood loss ml.	No. of cases Trial Group	No. of cases Control Group
2 to 9	34	0
10 to 17	28	2
18 to 25	14	20
26 to 33	8	38
33 & above	16	40

Table VIII

Table showing average blood loss according to Gestational age

Gestational age	Trial cases	Control cases
6 to 8 weeks	Less than 10 ml.	75 ml.
8 to 10 weeks	20 ml.	115 ml.
10 to 12 weeks	30 ml.	175 ml.
12 to 14 weeks	More than 35 ml.	250 ml.

Table IX

Table showing mean &amp; standard deviation of blood loss

Group	Size	Mean ml.	Standard deviation ml.
I	25	18.6	17.6
II	25	11.6	9.5
III	25	14.6	15.9
IV	25	34.2	26.2

standard deviation of blood loss are given in the table IX.

#### DISCUSSION

This small study proves the fact that Injection Epidosin and Pitocin injected locally with Xylocaine 1% intracervically for medial termination of pregnancy enable smooth and very easy cervical dilatation and reduces blood loss to a considerable extent.

Epidosin is Valethamate bromide, having Papaverine like musculotrophic action. It is anticholinergic in its action on smooth muscles of internal organs. It reduces spasm of cervix due to parasympathatic overexcitement and has musculotrophic action on the uterine muscles and therapy helps in dilatation of cervix (Beric 71).

Kamat et al (1978) found that the drug has

property to reduce spasm of smooth muscle fibres of cervix specially at the internal os.

Patel J. R. et al (1989) were of the opinion that the drug really reduces the difficulty in dilatation of cervix, ease & comfort to the patients & obstetricians. Moreover the blood loss is really very much less than the conventional methods. In our study there were no side effects of the drug.

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