Role of Epidosin in Paracervical Block in Medical Termination of pregnancy

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Summary : **The present study was undertaken in two groups of 30 cases each to study the effect of Epidosin alongwith lignocaine as paracervical block on ease of dilatation of cervix and blood loss. It was found that the local injection of epidosin along with xylocaine intracervically for M.T.P. enables smooth and very easy cervical dilatation and reduces blood loss to a considerable extent and at the same time the operative procedure becomes less painful, more complete and safe as compared to conventional paracervical block.**

Introduction :

Pain during dilatation of the cervix and uterine cramping during the procedure makes it desirable to carry out the procedure under L.A. It not only saves time, money and energy but also the patient can go home on the same day. The efficacy of paracervical block anaesthetic technique for minor gynaecological procedures, particularly D & C in situations where facilities for G.A. are either not available or contraindicated, is widely recognised. The present study was conducted to evaluate the effect of epidosin and lignocaine as PCB on ease of dilatation of cervix and blood loss in M.T.P.

Material and Methods :

In the present study 60 cases of M.T.P. upto 10 wks. of pregnancy were selected at random from OPD/Indoor of SGTB hospital and Family Planning OPD attached to Govt. Medical College, Amritsar. These cases were divided into two groups of 30 each.

Group - 1:

Injection Fortwin 1 Amp., Injection Calmpose 10 mg. and injection atropine 0.6 mg. intramuscularly was given. This was the control group.

Group - 11:

Injection Fortwin 1 Amp., injectin Atropine 0.6 mg I/M and PCB with xylocaine 2% - 10 cc with 1 ml. epidosin on both sides of the cervix in the divided doses.

In both cases detailed history was recorded with special reference to age group, parity, educational status, menstrual and obstetrical history & sensitivity to L/A. General Physical examination, Blood pressure, Pulse rate, Respiratory rate, Temperature were recorded and PV examination was done. Preliminary laboratory investigations like Hb and urine examination were done.

The following things were observed :

Pain During Opertion :

The criteria for pain evaluation was graded as follow :
Grade 0 - No pain.
Grade I - Pain sensation but no movement of the patient on the table.
Grade II - Pain enough to cause movement of the patient on the table.
Grade III - Pain severe enough to protest or not allow the procedure to continue.

Ease of Dilatation :

Easy : No resistance encountered.
Moderately difficult : The same number of dilators had to be inserted twice.

Difficult : One number of dilator needed to be introduced again.

Blood Loss :

Any Reaction :

Observations and Results :

The age of the patients ranged between 24-39 years. The maximum number of patients were between 21-30 years. 20% of patients were para one and 80% were multipara in trial group where as 27% patients were para one and 73% patients were multipara in control group. Mean Hb was 9.6 gm% in trial group and 9.62 gm% in control group. 67% of the patients belonged to rural area and 33% were of the urban area.

Quality of Anaesthesia as Regarding Pain Relief.

Table - I
Showing Gradation of Pain Relief

Grade of Pain	Trial Group No. of cases	%	Control Group No. of cases	%
0	20	67	02	07
1	09	30	18	60
2	01	03	09	30
3	-	-	01	03

In the trial group pain of grade O was felt in 67%, grade I was felt in 30% and grade II was felt in 3%. In control group pain of grade O was felt in 7%, grade I in 60%, grade II in 30% and grade III in 3% of cases.

Table - II
Showing Ease of Dilatation

Grade of ease	Trial Group No. of cases	%	Control Group No. of cases	%
Easy	25	83	18	60
Moderately Difficult	05	17	08	27
Difficult	-	-	04	13

In the trial group, the dilatation was easy in 83% of patients, moderately difficult in 17% of the patients, difficult in none. In the control group the dilatation was easy in 60% of patients, moderately difficult in 27% and difficult in 13%.

Table - III
Showing Average Blood Loss According to Period of Amenorrhea

Gestation Age in weeks.	Trial Group in ml.	Control Group in ml.
6-8	17	34
8-10	31	48

The average blood loss in the trial group was 17 ml for uterine size of 6-8 weeks of amenorrhoea whereas for control group averge blood loss was 34ml for the same uterine size. The average blood loss for 8-10 weeks uterus was 32 ml for the trial group and 48 ml for the control group.

Table - IV
Showing Complications During Operation

Complications	Trial Group No. of cases	%	Control Group No. of cases	%
Transient Hypotension	01	3.3	01	3.3
Excessive Blood Loss	01	3.3	06	20.0
No Complication	28	93.4	23	76.7

Transient hypotension was seen in 3.3%, excessive bleeding in 3.3% and no complication in 93.4% of patients of trial group. In control group 3.3% of patients had transient hypotension, excessive bleeding in 20% and no complication in 76.7%.

Table - V
Post Operative Pain Relief

No. of Hours	Trial Group	Control Group
0-1	10	15
1-2	20	15

Post Operative Pain Relief :

In 33% cases, pain relief was noted for 1 hour and in 67% cases for 1-2 hours in trial group and in control group pain relief was for 1 hour in 50% of cases and for 1-2 hour in 50% of cases.

More and more M.T.P. in first trimester are being carried out under L/A. PCB is a technique of transcervical injection of local anaesthetic agents into each of the fornix.

This blocks the sensory pathway from the upper portion of the cervix. Epidosin used in cervical block is a potent, rapidly acting cervical dilator. Use of epidosin alongwith lignocaine as a paracervical block on ease of dilatation of cervix and decreased blood loss during MTP was supported by Nandanwar et al (1993), Patel et al (1989).

In Nandanwar's study (Nandanwar et al 1993) in the trial group pain of grade 0 was felt by 67% of patients, of grade I by 32% and of grade II was in 1% of cases whereas figures for control group were 6%, 60%, 32% and 2% respectively. In the same study in trial group dilatation was easy in 81% of cases as compared to the control group. The moderate difficulty was encountered in 19% as against 25% in the control group.

In Patel's series (Patel et al 1989)average blood loss was 25 ml for uterine size of 6-8 weeks of amenorrhea whereas for control group average blood loss was 75 ml. In the study conducted by Nandanwar 22% of the patients of trial group had blood loss between 18-33 ml. whereas in the control group 58% of the patients had blood loss between 18-33 ml. 16% of the patients of trial group had blood loss of 33 ml. whereas 40% of control group patients had blood loss above 33 ml. Blood loss below 17 ml. was noted in 62% of the trial group whereas only 2% of the control group had blood loss below 17 ml.

Kamat et al (1979) studied PCB using lignocaine with epidosin and syntocin 10-20 ml. and found that the mixture made the dilatation of the cervix easy and made the procedure painless with minimum amount of blood loss and other complications.

This small study proves that local injection of epidosin with xylocaine intracervically for M.T.P. enables smooth & very easy dilatation of cervix and reduces the blood loss to a considerable extent.

References :

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