

A Study On Outcome of Epidural Analgesia for Painless Labour

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Abstract- OBJECTIVE:- To assess the quality of pain relief , obstetrical outcome, effect on rate of cesarean section & instrumental delivery.

MATERIAL & METHOD:- 100 patient in labour were selected based on inclusion criteria, informed consent taken prior to study . Epidural analgesia given and we retrieved the course of labour & delivery and management of epidural analgesia done.

RESULT:- A total 100 patients, 94 patients was having adequate pain relief, 38 normal vaginal delivery, 47 instrumental delivery, 15 cesarean section.

CONCLUSION:-Epidural analgesia for painless labour is safe & effective method with very less side effect, no increase in rate of CD &IVD or prolongation of labour.

I. INTRODUCTION

Labour pain is probably the most painful event in womens life¹. It has been well established & stated best by ACOG and ASA, that in absence of medical contraindication maternal request is a sufficient medical indication for pain relief during labour. By the present consensus neuraxial analgesia technique including Epidural, spinal, and combined spinal epidural approaches are the most effective & least depressant treatment for labour pain. Previous studies disclosed the increase incidence of cesarean deliveries rate in parturient who received epidural in early stage of labour. However recent randomized control trial showed no difference in the incidence of cesarean delivery.The ACOG committee opinion in 2006, recommended that" The fear of unnecessary cesaerean delivery should not influence the method of pain relief that women wish to choose during labor. Study is carried out in NALANDA MEDICAL COLLEGE &HOSPITAL, Patna, Bihar. In this study effect of epidural analgesia on mode of delivery,course of labour,& outcome of pregnancy done in detail.

II. MATERIAL AND METHOD

This study was approved by ethical committee of our hospital.It was prospective study on patient attending the emergency in Department of obstetric & gynaecology at nalanda medical college & hospital, patna from dec 18 to dec19.

Patients were educated & counseled about labour analgesia. Epidural analgesia was initiated at parturient request. Informed consent taken prior to study, total 100 patients in labour were selected based on inclusion criteria.

Prior to procedure, vitals(BP,Pulse), fetal heart rate, CTG(admission CTG), cervical dilatation is noted as baseline data.

Skin is infiltrated with 1% xylocaine, an epidural catheter was inserted via L3- L4 or L4- L5 intervertebral space through a 16 or 18 Gauge touhy needle in place. The LOR(Loss of resistance) technique was used to identify the epidural space.The catheter was threaded 4-7 cm cephalad through the needle. Then test dose of 3ml 1% xylocaine was given to rule out intravascular or intrathecal catherization before the catheter was secured. Then bolus dose of 10 ml of 0.0625% of Bupivacaine with 20mcg of fentanyl, intermittent dose is given when patient complain of pain. The visual analog scale is used to assess the degree of pain & When to give intermittent dose. During study all parameter &Obstetrical outcome are documented in detail.

III. RESULT

There was total 100 patients, to whom epidural was given, out of 100 patients 38 delivered by assisted vaginal delivery, 47 had instrumental delivery, cesarean section in 15 patients. From this study we found there is no incidence of rate of cesarean section but rate of instrumental delivery markedly increased. We also found that, result are not affected by timing of epidural.

TABLE-I Distribution of cases according to age group

AGE IN YRS	NO. OF CASES	PERCENTAGE
<20Yr	12	12%
20- 25 Yr	70	70%

26- 30 Yr	14	14%
>30 Yr	4	4%

TABLE-2 Distribution of cases according to Gravida

GRAVIDA	NO. OF CASES	PERCENTAGE
G1	74	74%
G2	22	22%
G3-G4	04	04%

TABLE-3 Distribution of cases according to Mode of delivery

MODE OF DELIVERY	NO. OF CASES	PERCENTAGE
ASSISTED VAGINAL DELIVERY	38	38%
INSTRUMENTAL DELIVERY	47	47%
CESAREAN SECTION	15	15%

TABLE-4 DISTRIBUTION OF CASES ACCORDING TO SUCCESS OF EPIDURAL FOR PAIN RELIEF

SUCCESS	NO. OF CASES	PERCENTAGE
SUCCESSFUL	94	94%
UNSUCCESSFUL	6	6%

TABLE-5 DISTRIBUTION OF CASES ACCORDING TO MATERNAL SIDE EFFECT

SIDE EFFECT	NO OF CASES	PERCENTAGE
NAUSEA, VOMITING	60	60%
HEADACHE	20	20%
MOTOR BLOCK	12	12%
PRURITUS	08	08%

IV. DISCUSSION

There was three major finding in this study, first about rate of cesarean section which doesn't increases, secondly there was mild prolongation of 2nd stage of labor which is not significant, thirdly increase in rate of instrumental delivery.

Severity of labor pain is graded highest on pain scale, early labor pain is visceral(T10-L1), and late is somatic(S2-S4).There is multiple way available for relief of labor pain. But epidural is best. However, women who uses this form of pain relief are at increased risk of instrumental delivery, our this result matches with study which was done by Somvah.et.al

The worry about increasing CD rate due to epidural, but we found no significant increase in rate, same view was by shared by Elizabeth MC Grandy . et. al study.

Epidural analgesia can be given at any time at request of patient, it doesn't matter what is the cervical dilatation. Timing of epidural does not effect the mode of delivery & no adverse effect on neonatal outcome, same result was obtained by Wong.et.al .

V. CONCLUSION

Epidural analgesia for painless labour is simple, safe & effective technique. Controversies regarding like rate of CD are irrelevant.

There is no increase in rate of instrumental delivery
Epidural analgesia is better choice rather than to bear labor pain.

VI. ABBREVIATION

CD- cesarean delivery, RCT- Randomized controlled trial,IVD- Instrumental vaginal delivery.

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