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Research Article

**FREQUENCY OF INSTRUMENTAL VAGINAL DELIVERY IN
PATIENTS WITH AND WITHOUT RECEIVING EPIDURAL
ANALGESIA**¹Dr. Maryam Shafique, ²Dr. Arisha Javed Bajwa, ³Dr. Atika Jabeen¹Rawlapindi Medical College²DHQ Teaching Hospital Gujranwala³DHQ Teaching Hospital Gujranwala**Abstract:**

Aims of Objectives: The goal of this study was to determine the frequency of instrumental vaginal delivery. The frequency is determined in both women who are receiving epidural analgesia as well as those who are not receiving.

Study Design: This study was collaborative

Duration: The time period for this study was 6 months.

Results: Patients were divided into two groups A and B. the age of these patients was between 20-25 years. Mean deviation calculated for group A was 46.11% (n=83) and for group B was 52.22% (n=94). Whereas, standard deviation was 26.21+_3.56 in group A and 27.34+_3.78 in group B. A comparison was made between group A and B for instrumental vaginal delivery. The cases delivered with instruments were 10.55% (n=19) in group A Whereas, 2.78% (n=5) cases in group B was observed.

Conclusion: during labour, the most efficient procedure for the relief of discomfort is believed to be Epidural analgesia. However, the chances of instrumental delivery are elevated due to greater risk of longer duration of 2nd stage of labour.

Keywords: Labour pain, epidural analgesia, relief of pain, risk of instrumental delivery.

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INTRODUCTION:

The birth of baby and labour pain differ greatly among females [1,2]. This is due to enhanced positive and authorization for the parturient. Labour pain is related to the birth of child. It is a distinctive visceral pain and a purpose full and surprising incident of life. This pain is not similar to other type of pain inquisitively; maternal satisfaction is not associated with the extent of analgesia regulated in the child hood. [3]. Conscious brain eventually elucidates nociception [4] as a pain which is a neural traffic. Nociception which is connected with first age of labour pain is passed in spinal segment T10, T11, T12 and T1. On the other hand, nociception associated with the second stage of labour pain to travel in sacral segment S2, S3, S4. The pattern of normal and abnormal labour pain can be perceived by the skilled stop. However, parturient is not perceived by the physician directly Reductionist is the medical treatment that indicate the encounter of pain as a composite of neurophysiological indication. This thing should be kept in view that the discomfort encountered by the patients is a personal experience. This experience is transmitted and conveyed in performance. Cultural educational context of patients and individual's bio-psycho-social features shaped this performance culturally [5].

Patients' indication and clinical signals both should be used in considering the pain. Clinician must degenerate antiquity of pain [6] in order to use the pain as a signal. This antiquity of data must be related to partogram another intrapartum information. Parturient awareness, emotional and mental accumulation are disputed by the change of role of labour pain during parturition. A discomfort in labour can be lesson in different ways skilled midlife, a committed obstetrician and epidural analgesia with a skilled anaesthetist can reduce the pain of labour. It offers pain less labour, emotional outcomes and no complexities. These advantages overwhelm the disadvantages of increasing of second stage of labour and extent instrumental deliveries [7]. The functioning uterine is declined by the epidural analgesia. It also reduces the need to pass down by narrowing the nerves that are suppling pelvic floor. The desire for management oxytocin and instrumental delivery [8] is enhanced by these effects. However, rotation of head is retarded. The

female who encounter epidural analgesia in labour believe that the advantages of epidural analgesia are much more than that of each of potential complications [9]. Although it reduces pain of labour but cause problems like infection and perineal tears. The objective of this study was to create awareness of using epidural analgesia and to determine the frequency of instrumental vaginal delivery. The frequency is determined in both women who are receiving epidural analgesia as well as those who are not receiving.

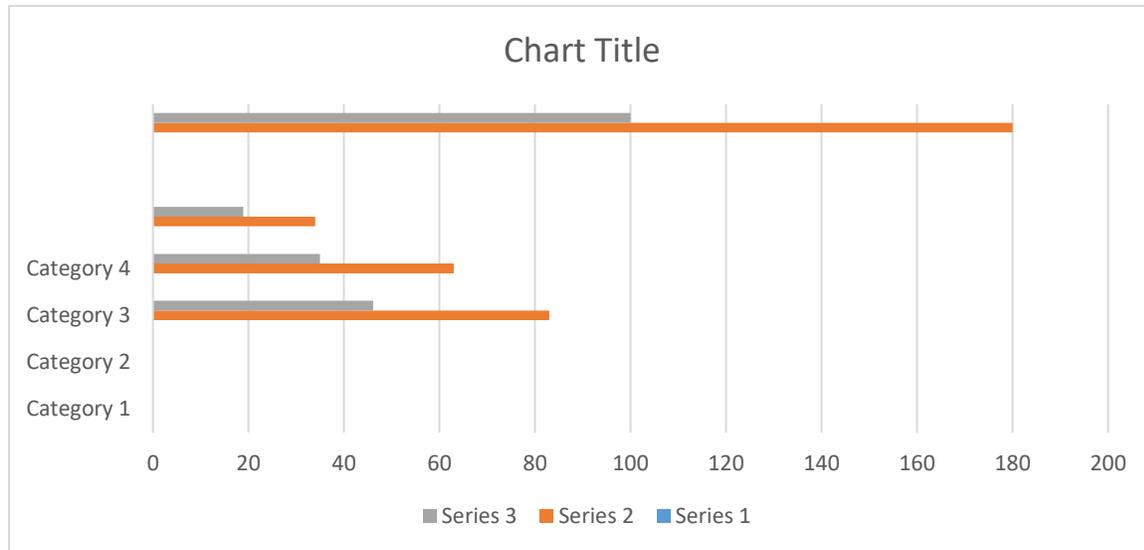
MATERIALS AND METHODS:

In this study, 360 females were selected. These females belong to the labour ward and achieved the inclusion criteria. These patients were made aware of the advantages and disadvantages of epidural analgesia. After this explanation, a written was signed by these patients. This study was organized in Obstetrics and Gynecology. Department of Fatima Memorial Hospital, Lahore. A detailed information of patients which include age, address etc. was taken. Patients were divided into two groups A and B. Anaesthetist provide epidural analgesia to patients of group A. 0.25 of bupivacaine diluted with sterile water was given after preload with Hartman's solution. At the same time patients was given with top up doses. Epidural Catheter was inserted. The record was made of instrumental vaginal delivery. By using partogram, the proceeding of labour was checked. While in the 2nd stage, descent of head caput and molding of fetal skull bones were used for estimation of progress of labour.

Patients included in group B were not provided with analgesia. The record was made of the instrumental vaginal delivery. By means of stratification, effect modifier was inscribed. For the estimation of Spontaneous proceeding of labour, partogram was used. For data estimation SPSS was used. Mean and standard deviation presented the quantitative variable which also include age. Frequency proportion and percentage indicates the quantitative variable like instrumental vaginal delivery and parity etc. to check the connection between the use of epidural analgesia and instrumental vaginal delivery, calculation was made regarding relative risk. There is remarkable value of $R.R > 2$.

Table 1: Age Distribution of the Subjects.

AGE IN YEARS	Group-A9(n=30)		Group-B(N=30)	
	No. of cases	%	No. of cases	%
20-25	83	46.11	94	52.22
26-30	63	35	56	31.11
31-35	34	18.89	30	16.67s
Mean+ _S.D	26.21+ _3.56		27.34+ _3.78	
Total	180	100	180	100

**Table 2:** Distribution of Parity of the Subjects

Parity (gravida)	Group-A(n=30)		Group-B(n=30)	
	No. of cases	%	No. of cases	%
2	89	49.44	96	53.33
3	64	35.56	51	28.33
4	27	15	33	18.34
Total	180	100	180	100

Table 3: Gestational Age of the Subjects.

Gestational Age (in weeks)	Group-A(N=30)		Group-B (n=30)	
	No. of cases	%	No. of cases	%
37-39	123	68.33	113	62.78
40-41	57	31.67	67	37.22
Total	180	100	180	100

Table 4: Instrumental Vaginal Delivery of the Subjects.

Instrumental Vaginal delivery	Group-A(n=180)		Group-B (n=180)	
	No. of cases	%age	No. of cases	%age
yes	26	14.44	7	3.89
no	154	85.56	169	76.11
Total	180	100	180	100

RESULTS:

The age limit observed in the patients included in this study was 20-25 years. In group A and B, 46.11% (n=83) and 52.2% (n=94) patients were of 20-25 years respectively. 35% (n=63) in group A and 31.11% (n=56) patients were between 26-30 years of age. In group A and B, the patients with 31-35 years of age were 18.89% and 6.67% (n=30) respectively. 26.21±3.556 and 27.34±3.78 were the value of mean and standard deviation for group A and B respectively. The condition of parity is illustrated in the table 2. Patients with gravida 2 were found 49.44% (n=89) and 50.33% (n=96) in group A and group B respectively. 35.56% (n=64) patients in group A while 28.33% (n=51) patients in group B were found with gravida 3. On the other hand, the patients with gravida 4 was observed as 15% (n=27) in group A and 18.34% in group B. both groups were compared for gestational age. On basis of this, the value observed in group A were 68.33% (n=123) and in group B (n=113). In this study, variable of interest were also compared. Table 4 shows difference of instrumental vaginal delivery. 10.55% (n=19) cases in group A were found with instrumental delivery were just 2.78% (n=5). All the patients left experienced normal vaginal delivery. These include 89.45% (n=161) patients in group A and 97.22% (n=175) patients in group B.

DISCUSSION:

For good medical practice is necessary to control and manage the labour pain during labour. The pain of labour can be reduced in various ways. For this, there is a need to to apply correct procedure, select the drug with appropriate close and selection of patients under treatment. Various pharm logical and pharmacological and non-pharmacological procedures could also be used to reduce labour pain. The most efficient way to relief pain is epidural analgesia. However, systemic opioids are also used in large scale. It is because it is easily accessible and inexpensive. In this study, 26.21±3.56 years in a group A and 27.34±3.78 years in group B were mean age in patient's epidural analgesia. Whereas, 3739 weeks of gestation were observed in most of the patients. So, there was no valuable difference in age of patients and gestation age of patients.

Another study was organized at Department of Obstetrics and Gynecology, Pt JN Medical College Raipur [10]. 23.15±3.94 years and 22.94±3.37 years was the mean age of the patients in this study. However, 39 weeks usually were noticed as the mean gestational age. The results of our study is close to this study. In our study, the patients delivered with the instrumental were more in number. This was

because the 2nd stage of labour was prolonged. Another study was organized in India by Jain S, Arya [11]. This study indicates 11.4% patients with epidural analgesia were delivered. The results of our study are also comparable with this study. This study illustrates that parental opioids is more effective than epidural analgesia. The effects of epidural analgesia. The effects of epidural analgesia may be compared with this study. In spite of the fact that parenteral opioids are not comparable with our study. If the pushing is retarded in second stage [12], the chances of unforced deliveries can be elevated. For enhancing the number of unforced deliveries, fetal heart is inefficient [13]. Kakulu K, Demirok H [14] organized a study. This study indicate that chance of Interventional delivery and Cesarean is not elevated by epidural analgesia. However, it increases the labour time and enhance the need of oxygen and oxytocin. In order to get rid of operative deliveries, dystocia should be indicated earlier. To reduce the labour pain, epidural analgesia is proved effective. Although, relief of pain during the labour is not compared. [15] over all, is concluded that maximum relief from discomfort and satisfaction is provided by epidural analgesia although it leads to greater possibility of operative deliveries

CONCLUSION:

during labour, the most efficient procedure for the relief of discomfort is believed to be Epidural analgesia. However, the chances of instrumental delivery are elevated due to greater risk of longer duration of 2nd stage of labour.

But it does not elevate the possibility of cesarean section deliveries

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