IMPACT OF EPIDURAL ANALGESIA ON THE MODE OF DELIVERY

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Abstract (300 word limit)

INTRODUCTION:-

Epidural analgesia is the most effective labour pain relief but is associated with increased rates of instrumental vaginal delivery/cesarean delivery. Epidural analgesia is associated with longer second-stage labor, more frequent oxytocin augmentation, hypotension, and maternal fever but not with longer first-stage labor. It is associated with improved patient satisfaction and better neonatal outcome as compared to other analgesia techniques.

OBJECTIVE:-

To assess the changes in labor time and delivery outcome in all pregnant women requesting epidural analgesia, who are presenting with either spontaneous or induced labour.

DESIGN:-

Descriptive Retrospective study- All pregnant patients presenting in labor room (LDR) with either spontaneous or induced labor in the last 6 months, undergoing epidural analgesia were included in the study.

PLACE AND DURATION OF STUDY:-

Two hundered and fifty (250) pregnant women presented with spontaneous / induced labor in Sulaiman Al Habib Medical group, Olaya Branch in first 6 months of 2015 in LDR, who have received epidural analgesia were included in the study.

PATIENTS AND METHODS:-

Two hundred and fifty (250) pregnant women presented with spontaneous / induced labor in Sulaiman al Habib Medical group Olaya Branch in first 6 months of 2015, who have received epidural analgesia, were included in the study. The impact of epidural analgesia on stages of labor, mode of delivery and neonatal outcome was assessed. **Primary outcome measures** of our study included number of pregnant women with spontaneous labor, number of pregnant women with induced labor, duration of second stage of labor and mode of delivery (**NSVD, INSTRUMENTAL and LSCS)**. **Secondary outcome measures** included indication of operative delivery (INSTRUMENTAL, LSCS), previous medical or obstetric complications and presence of meconium and poor Apgar score.

RESULTS:-

The mean age of women was 26.50± 5.17 (Standard deviation). Of the 250 women, 238 (95.2%) were booked while only few 12 (4.8%) were unbooked. 102(40.8%) were primiparous, 95 (38%) were multiparous and 53(21.2%) were grand multiparous. Significantly more women presented in labor were primiparous. 174 (69.6%) women presented in spontaneous labor while 76(30.3%) were induced due to obstetric / medical reasons. Among obstetric / medical indications of induction of labor majority 23 (30.2%) were induced due to post dates while remaining were induced due to oligohydramnios 9(11.8%), polyhydramnios 4 (5.3%), Gestational diabetes 19 (25%) ,intrauterine growth restriction IUGR 2 (2.6%) , PROM 6 (7.9%) , IUFD 2 (2.6%) , decreased fetal movements 5 (6.6%) and Hypertension and pre eclampsia 6 (7.9%). Considering their medical or obstetric history 14 (5.6%) women had history of previous 1 LSCS, 30 (12%) had history of gestational diabetes, while 4 (1.6%) had history of pre – eclampsia.

Regarding **mode of delivery** 141**(56.4%)** women achieved **spontaneous vaginal delivery**, 40**(16%)** were delivered by **KIWI / ventouse** while **cesarean section LSCS** was performed in 69**(27.6%).**

Prolonged labour was seen in 51 (20.4%) women. Among 69 cesarean section (27.6%) LSCS, 45 (65.2%) lscs were due to failure to descent and fetal distress while 16 (23%) women had LSCS due to failure to progress and fetal distress alone was seen in 8 (11.6%) cases. Regarding **fetal outcome** meconium stained liquor and poor Apgar score of newborn was seen in 14 (5.6%) cases.

CONCLUSION:-

The use of Epidural analgesia is associated with prolonged second stage and increase rate of operative delivery. In our study, high percentage of women had operative delivery, either presented with spontaneous or induced labour, prolonged labour, better satisfaction and good neonatal outcome. In addition of epidural analgesia, many other factors (primiparity, medical/obstetric reasons, previous LSCS, induction of labor, patient wishes and requests, impatience of doctors) also contribute in increasing the rate of operative delivery. It also shows that epidural analgesia is not associated with poor fetal outcome.

Consideration of appropriate counseling, good midwife care, one to one intrapartum support and use of other analgesia techniques could play a role in decreasing the rate of operative delivery.

Image

INDICATIONS OF INDUCTION OF LABOUR (N=76)	
POST DATES	23
30.2%	
GESTATIONAL DIABETES	19
25%	
POLYHYDRAMNIOS	4
5.3%	
OLIGOHYDRAMNIOS	9
11.8%	
IUGR	2
2.6%	
IUFD	2
2.6%	
PROM	6
7.9%	
MEDICAL HISTORY (HTN)	6
7.9%	
DECREASED FETAL MOVEMENTS	5
6.6%	

INDICATIONS OF LSCS (N=69, 27.6%)	
FAILURE TO DESCEND + FETAL DISTRESS	45
65.2%	
FAILURE TO PROGRESS	16
23%	
FETAL DISTRESS	8
11.6%	

INDICATIONSOF INSTRUMENTAL DELIVERY (N=40, 16%)	
POOR MATERNAL EFFORT	30
75%	
FETAL DISTRESS	10
25%	

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4. Reason of Covid 19 Vaccine Hesitancy in the Kingdom of Saudi Arabia Presented as poster in 3rd International Ob Gyne conference , Dr Sulaiman Al Habib Hospital.

Photograph



Biography (150 word limit)

Dr Mehwish Ateeq a dedicated and ambitious young doctor with aim of utilizing her potential, zest, knowledge and clinical skills to achieve excellence. A young Obstetrician and gynecologist with growing experience in medical administration and healthcare quality. Dr Mehwish Ateeq did her MBBS from University of Health Sciences, Lahore, Pakistan. Having a deep passion in the field of Obstetrics and Gynecology, she completed her training. She is practicing as a physician in Dr Sulaiman Al Habib Hospital, Riyadh, KSA. Apart from that she has been given a chance to explore her leadership skills as being appointed as the hospital administrator. Dr Mehwish has not only been engaged in administrative and clinical tasks , but also participates in scientific studies and is one of the members of organizing committee of International Conferences .Several articles have also been published in international peer review journals.

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Notes/Comments: