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"A STUDY OF INDICATIONS OF PRIMARY CESAREAN SECTION AND FETO-MATERNAL OUTCOME IN MULTIPAROUS WOMEN ON A TERTIARY CARE CENTRE"

Obstetrics & Gynaecology

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KEYWORDS

INTRODUCTION :-

Laparotomy and hysterotomy incision through surgery to deliver the fetus is called Cesarean section. In modern days, higher complications in normal vaginal delivery is the major reason for choice of c section in India whereas this was already followed by US since decades. Healthy survival was possible for women in ancient days post normal delivery as they performed heavy physical work. However, modern women have less physical ability for normal vaginal delivery because of the low strength and fear of issues after a normal vaginal delivery. Today's women being literate and aware of the difficulties like Postpartum infections which includes uterine, bladder, or kidney infections, excessive bleeding after delivery, pain in the perineal area (between the vagina and the rectum), Vaginal discharge, swollen breasts, clogged ducts, Stretch marks and also the vital reasons are Hemorrhoids and constipation along with Urinary or fecal (stool) incontinence, Hair loss, Postpartum depression, Discomfort during sex and difficulty regaining the pre-pregnancy shape becomes crucial factor to decide for C section over normal vaginal delivery.

Above mentioned are the non-medicinal factors of doing Cesarean section and the study reveals that fetal distress is the major cause of primary cesarean section in multiparous woman. Less mortality rate of fetus and the mother is the significant reason of evolution in obstetrics and gynecology department. C section has a vast prospect for saving life of expectant mother and her child as well as their physical fitness when compared with other surgeries. The overall cesarean delivery rate in US increased 60% from 1996 through 2009, from 20.7% to 32.9%, slight declined by 2013 0.2%. Many vital ideas in surgical care has happened which includes aseptic technique, reliable anesthesia and the control of hemorrhage by proper suturing of tissue planes and ligation of severed blood vessels.

There is worldwide increase in caesarean section rates.[1,2] Chile and Brazil have the highest caesarean section rates in the world being 40% and 37% respectively.[3] Mean caesarean rate in Asia is estimated to be 15.9% and 17.8% in respectively.[2] Most of the studies on caesarean section on parous women with previous normal delivery dates back to 1960's and 1970's where cesarean rates were low as 2.5-11.3% annually.[4,5,6,7,8,9,10] A recent study has demonstrated that the primary cesarean rate in 2002 was 13.3% among parous women as compared to 18% among nuliparous women in United States.4 The relative ease with which some multiparous are delivered in the presence of faulty positions and presentations may account for the false sense of security.[11] The limited research in this area may be due to this false notion. It is for these reasons, we have examined trends in primary cesarean rates among parous women with previous normal vaginal delivery with respect to indications, maternal age and parity and the outcome. Conducted study with primary objective of knowing Primary caesarean rate among parous women with previous normal vaginal delivery and with a secondary objective to know the incidence according to age and gravidity and study the maternal and fetal outcome.

The danger of postoperative peritonitis which is a hurdle of puerperal endometritis was greatly reduced after the launch of the lower segmental incision which allows barring of the uterine wound from the peritoneal cavity.

DEFINITION

1. Primary cesarean section in Multipara: Primary Cesarean section in multipara is the cesarean section surgery performed for the first time on a pregnant woman who had vaginal delivery for the previous child or children.
2. Multipara: A woman who has had two or more pregnancies resulting in potentially viable offspring. The definition of multipara has been taken from William C. Shiel Jr., MD, FACP, FACR

AIMS AND OBJECTIVES –

To study the indications of primary cesarean in multiparous women
To study the maternal and fetal outcome

Indication For Primary Cesarean Section In Multipara

1. Fetal distress
2. Transverse lie in labor:
3. Breech presentation
4. Placenta previa
5. Abruption
6. Deep tranverse arrest
7. Shoulder dystocia
8. Failed induction
9. Failed progress of labour

MATERIAL AND METHODES :-

This is an analytical cross-sectional study May 2021 to October 2021. 100 cases of primary cesarean sections in multipara done in department of obstetrics and gynaecology , Umaid Hospital , Jodhpur attached to Dr.S.N.Medical College , Jodhpur , were studied and analyzed. This study includes the multiparous women who had their prior delivery through vaginal but undergoing cesarean section for the first time.

Below particulars were enquired from patients whose data has been taken for research.

Whether they had any previous IUD (Intra Uterus Death) or still born babies in the prior delivery as the research is about cesarean section for multi parous woman.
Infants of previous deliveries of the multiparous women were full-term or pre-term.

Earlier complications experienced if any, in the prior pregnancies were collected.

Gathered data for infertility and treatment taken for getting pregnant as well as abortions in the previous gravidness.

INCLUSION CRITERIA:

Multipara
Term Pregnancy
Singleton Pregnancy
Previous one or more normal vaginal delivery
Previous Instrumental Delivery

Previous assisted breech, IUD, Still Birth
Gestational Age more than 37 weeks

EXCLUSION CRITERIA:
Primigravida
Previous LSCS
Known Medical Disorder
Gestational Age less than 37 weeks Twin

RESULTS :-

Table 1: Distribution of cases according to age in multigravida

AGE (YEARS)	FREQUENCY	PERCENTAGE
19-20	4	4
21-25	39	39
26-30	41	41
31-35	12	12
36-40	4	4
TOTAL	100	100

Among the 100 cases studied, we found that cesarean section for multiparous woman is performed highly for the age group of 26 – 30 years. Second highest ranks from age group 21 – 25 years and the youngest were of 19 years old respectively. This concludes that chances of cesarean section are likely to occur for the gravida after 26 years but below 30 years.

Table 2. Obstetric code -

Code	**Frequency**	**Percentage**
G2	48	48
G3	25	25
G4	19	19
G5	4	4
G6	3	3
G7	1	1
Total	100	100

From the above data we can see that woman conceived for the second time comes first in the list with large figure of 48 out of 100, gravidity for third time ranks the second with number of 25 out of 100. However, there is a woman who is prenatal for the seventh time.

Table 3. Previous Delivery Details :-

	FREQUENCY	**PERCENTAGE**
FTNVD	93	93
Pre Term NVD	7	7
TOTAL	**100**	**100**

Our research shows that 93% of the pregnant women had unplanned operation for the child birth. Women has to be educated about the gestational risks, leads them to a safe pregnancy.

Table 4 . Booked / Unbooked : -

	Frequency	Percentage
Booked	38	38
Unbooked	62	62
Total	100	100

Our research shows that 62 % of the patients was unbooked and 38 % was booked.

Table 5. Mode of delivery :-

	Frequency	Percentage
Emergency LSCS with sterilization	63	63
Emergency LSCS with IUCD	37	37
Total	100	100

This table indicates that Emergency LSCS with ST (ST – Sterilization) are majority in number with 63 % of total cases analyzed leaving 37% of them to be with Copper T post labor.

Table 6: Indication

	Frequency	**Percent**
BOH, Doppler changes	1	1
BOH, fetal alarm signal	1	1
Breech in labour	14	14
Breech, Severe Oligo	2	2
BROW presentation	1	1
Cord Presentation	1	1
Cord prolapse	2	2
CPD in labour	5	5
Deep transverse arrest	4	4
Face presentation	1	1
Failed induction	3	2
Failure to progress, Non- reactive CTG, BOH	4	4
Fetal alarm signal	4	4
Fetal distress , MSL	23	23
Fetal distress, Non-reactive CTG	2	2
Footling breech, PROM, Anhydramnios	1	1
IUGR, Oligo, Fetal bradycardia	1	1
BROW presentation	1	1
Non-reactive CTG	2	2
Non-reactive CTG, Elderly gravida, IVF conception	1	1
Non-reactive CTG, Fetal alarm signal, BOH	1	1
Oligo	4	4
Persistent deceleration, Non- reactive CTG	1	1
Precious Pregnancy ,Failed induction	1	1
Failure to progress	2	2
Previous CPT anal in competence, PROM	1	1
Secondary arrest of descent	1	1
Thick MSAF	2	2
Transverse lie in labour	13	12
Total	100	100

Foremost cause for the option of performing cesarean for a multiparous woman is fetal distress comprising 27 patients amongst the total cases analyzed making it as second to none. Breech in Labor has placed itself in the second position being the basis of cesarean section conducted for 14 cases. Last but not the least is the Transverse lie in labor paves the way for doing c-section.

Furthermore there are several other reasons forms the aspect to make a doctor to opt for the operation instead of normal vaginal delivery such as sever oligo, failed induction, failure to progress, Non-reactive CTG, footling breech, Deep transverse arrest, CPD in labour, BROW presentation, Cord presentation or prolapse, Face presentation, BOH, Fetal alarm signal, Previous NVD with third degree perineal tear with sphincteroplasty and Previous CPT anal in competence.

Table 7 : Baby Weight (Kgs)

Baby Weight (kg)	Frequency	Percent
<= 2.0	3	3
2.1-2.5	18	18
2.6-3.0	35	35
3.1-3.5	28	28
3.6-4.0	13	13
> 4.0	3	3
Total	100	100

Baby weight is the vital aspect examined after the childbirth happened. 35% of infants are healthy as it lies between the spectrum of 2.6 to 3.0 kgs. Further, 28% infants are born slight heavier than the general which falls under the category of 3.1 to 3.5 kgs.

Moreover, there are 16% children, being obese when born as they weigh between 3.6 to 4.0 kgs and above. Apart from the above, 21% children are lesser in weight which makes them prone for diseases easily, as well as the underweight infants are almost 80% when compared to the babies born in normal weight.

Table 8: Term

	Frequency	**Percent**
Term	94	94
Post term	6	6
Total	100	100

This table indicates that 94% of babies are born as per the term, and post-term was 6% respectively

Table 9 : Post Op Complication

Post Op Complications		
	Frequency	Percent
Anemia treated	7	7
Paralytic Ileus	2	2
Post Op Fever treated	2	1
PPH	1	1
URI	2	2
UTI	1	1
Wound Infection	3	3
No Complications	82	82
Total	100	100

It is really fascinating to learn from the above table that 82% of the total 100 does not experience any post- operative complications. A least number of 7% are treated for anemia with 1 unit and 2 units given. Finally, only 3% are left with wound infection to be cared with medication.

Table 10: NICU Admission

NICU Admission		
	Frequency	Percent
Yes	26	26
No	60	60
Observation	14	14
Total	100	100

Utmost children admitted to the NICU are preterm (born earlier than 37 weeks of pregnancy), have less natal weight (not more than 5.5 pounds), or have a health ailment that requires special attention. In the U.S., approximately half a million children are born preterm. Several of these offspring as well as have less natal weights. Twins, triplets, and other multiples frequently are admitted to the NICU. As these infants are born earlier and smaller than single birth babies. Offspring with fitness state like breathing trouble, heart problems, infections, or birth defects are also taken care in NICU. It is astonishing that 60% of babies are fit and are not in want of intensive care after birth. On the other hand, 26% are put in NICU admission for continuous monitoring and care, leaving rest 14% to be kept in mere observation. This is evident that most of the children are healthy when they are born however, few are influenced due to several factors catching problems requesting high care to be taken to survive after the delivery by mother.

CONCLUSION

Multiparity is a trouble linked with scarcity, ignorance, unawareness and deficiency of understanding of the antenatal care and family planning methods accessible for them. Even though a multipara woman who had her prior labor vaginally might demand a cesarean section for secured childbirth. However very meager number of primary cesarean section in multiparous woman (4.71%) constitute amongst the total number of deliveries nonetheless they are linked with higher importance for maternal and fetal morbidity.

As of the research conducted it is very evident that several unpredicted hitches ensue in females although they had a normal vaginal delivery previously. 97% of parous woman had been under antenatal care but 74% patients were admitted to hospital when they are not in labor. Fetal distress, Transverse lie in labor and Breech in labor were the most common indication for the cesarean section. Less neonatal morbidity and Perinatal morbidity found.

It is normal in today's world to perform a cesarean section among the other obstetric operations done and the availability of higher antibiotics, readiness of blood transfusion services, anesthetists' expertise, improved surgical measures has made cesarean section much harmless than earlier, as hitches can be diagnosed beforehand, appropriate interference would reduce loss of life for newborn as well as the gestation.

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