Original Research Paper

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CAESAREAN DELIVERY DURING SECOND STAGE OF LABOR IN A TERTIARY CARE HOSPITAL

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KEYWORDS :

INTRODUCTION

There is an alarming rise in Caesarean section (CS) leading to increased adverse outcomes for both the mother and fetus when compared with vaginal delivery despite the efforts to limit operative abdominal deliveries.

Within this increasing CS rate, there is a concerning increase in the rate of second stage cesarean section.

This disturbing trend may be due to :

- Recent decline in the use of instrumental delivery,
- Concerns relating to maternal and neonatal morbidity with associated litigious issues .

Second stage caesarean section is associated with increased maternal as well as fetal complications as it is technically difficult to perform because of the deeply impacted fetal head in the pelvis and the presence of thinned out edematous lower segment.

AIMS AND OBJECTIVES:

The objective of the study is to :
Delineate the indications,

Assess feto-maternal outcomes associated with caesarian section in second stage of labor.

METHODOLOGY:

This retrospective study assessed all caesarean sections performed at full cervical dilatation between december 2021 and december 2022 at King George hospital, Visakhapatnam, Andhra Pradesh.

Caesarean section cases were identified through the operating theatre data log.

The medical record, specifically the record of labor and operation reports , was reviewed for all cesarean section cases over the study period.

INCLUSION CRITERIA:

Women with a singleton fetus in cephalic presentation at term (≥37 weeks) who underwent CS at full dilatation were included.

EXCLUSION CRITERIA:

Multigravida with comorbid conditions like diabetes and preeclampsia were excluded.

- These second stage Caesarean sections were analysed in terms of indications,
- instrumentation before caesarean section,
- intra operative complications like haematuria, uterine incision extension, atonic post-partum haemorrhage (PPH),
- postoperative complications like febrile illness, wound infection and neonatal morbidity and mortality.
- All the data collected were pooled together and recorded and entered in master chart
- Data analysis was done using SPSS version 17. Permission for the study and ethical approval was obtained from the institutional review committee.

RESULTS:

During the index period, a total of 3800 women delivered by caesarean section, (2900 emergency and 900 elective cases) 360 were at full cervical dilatation, >37 weeks gestation with a singleton fetus in cephalic presentation.
20 cases were excluded.
340 cases were studied

INDICATIONS:

Indication	Numbers	%
SECONDARY ARREST OF DESCENT	183	53.8%
FETAL DISTRESS	119	34.9%
FAILED INSTRUMENTAL DELIVERY	10	3%
DECLINED TRIAL OF OPERATIVE VAGINAL DELIVERY	12	3.4%

Mean duration of surgery was 57.68 min and mean hospital stay was 7.59 days PPH was the most common complication among which 60% required blood transfusion.

There were complications like:
extension of uterine incision(22.5%),
broad ligament hematomas(0to1%),
bladder injuries (2.3%),
postop wound sepsis(15%).

MATERNAL COMPLICATION	NUMBER	%
ATONIC PPH	16	4.8%
UTERINE INCISION EXTENSION	42	12.5%
BROAD LIGAMENT HEMATOMA	3	1%
BLADDER INJURY	7	2.3%
POSTOP WOUND SEPSIS	16	4.8%

Table 2. Fetal and newborn complications.

Perinatal complications	Number	Percentage
Meconium stained liquor	116	34.2%
Admission to nursery	52	15.3%
NICU admission	12	3.4%
Neonatal jaundice	33	9.7%
Cephalhematoma	42	1.3%
Apgar score <7 at 5mins	31	9.0%
Fresh still birth	2	0.6%

DISCUSSION:

There is an increasing trend to perform CS at full cervical dilatation. The strong medico-legal mindset in current obstetrics, and concerns over neonatal and maternal morbidity associated with difficult or failed instrumental delivery may contribute to this trend.

This higher rate of CS might be because KGH hospital is a referral centre where high-risk patients from surrounding districts are referred, mostly for operative deliveries.

Caesarean section in the second stage of labor is a technically difficult operation with distortion of pelvic anatomy and the fetal head that is often deeply impacted in the maternal pelvis.1,2,3

Women delivered by CS at full dilation have a higher risk of obstetric hemorrhage, bladder injury, extended uterine tear leading to broad ligament hematoma, infection and longer hospital stay. This was similar to study conducted by Asad rahim et al1,2,3

The limitation of this study is its retrospective nature. Therefore, any suggestions made should be taken with caution.

CONCLUSION :

Caesarean section in the second stage of labor is a technically difficult operation with distortion of pelvic anatomy and the fetal head that is

often deeply impacted in the maternal pelvis.

Women delivered by CS at full dilation have a higher risk of obstetric hemorrhage, bladder injury, extended uterine tear leading to broad ligament hematoma, infection and longer hospital stay.

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