



INDICATIONS OF CAESAREAN SECTION IN WOMEN ATTENDING IN BMIMS, PAWAPURI

Obstetrics & Gynaecology

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ABSTRACT

Introduction- Caesarean section is the delivery of an infant, alive or dead, through an abdominal uterine incision after the period of viability. Now the operation is much safer today because of antibiotics, improved anesthesia, and the availability of blood transfusion. The indications of caesarean section continue to be the subject of review, since the complication rates are nevertheless far in excess of those with vaginal delivery. **Aims And Objectives-** This study is aimed to find the various indications of the procedure and their relative contribution to the total CSR. This is a step to find out indications of LSCS which may help us to reduce the incidence rate in the institute in future. **Materials And Methods-** A retrospective cross-sectional study was carried out among 1846 patients who underwent caesarean section during 2 years (Oct. 2021 to Sep. 2023) duration in Department of Obstetrics and Gynaecology of BMIMS, Pawapuri. Data was collected from hospital records. **Results-** Among all women who underwent caesarean section, majority were age group between 20 and 30 years (66%) and multiparous. Repeat caesarean section (40%), followed by fetal distress (20%), Malpresentation (7.2%) and cephalopelvic disproportion (6.6%) were most common among all major indication of caesarean section. **Conclusion-** Reduction of number of primary caesarean section, successful VBAC, individualization of the indication and careful evaluation, following standardized guidelines can help to keep rate of caesarean section to the possible minimum level.

KEYWORDS

Previous Caesarean Section, Fetal Distress, Malpresentation

INTRODUCTIONS

Caesarean section is the delivery of an infant, alive or dead, through an abdominal uterine incision after the period of viability. The word caesarean is derived from the Latin word caedere, which means 'to cut'. Now the operation is much safer today because of antibiotics, improved anesthesia, and the availability of blood transfusion. The indications of caesarean section continue to be the subject of review, since the complication rates are nevertheless far in excess of those with vaginal delivery. The commonest indications for caesarean section are fetal distress, failure to progress in labor, repeat caesarean section and breech presentation. A new indication is also added to this list is maternal request. This study is aimed to find the various indications of the CS and their relative contribution as well associated maternal morbidity and mortality. This is a step to find out indications of LSCS which may help us to reduce the caesarean section rate in the institute in future.

MATERIALS AND METHODS:

A retrospective cross-sectional study was carried out among 1846 patients who underwent caesarean section during 2 years (Oct. 2021 to Sep. 2023) duration, in Department of Obstetrics and Gynaecology of BMIMS, Pawapuri. Data was collected from hospital records.

All patients who delivered their babies by CS during the study period were included in this study. In cases of caesarean sections their indications were recorded along with other demographic profile such as age, parity, and gestational age. Most patients under went urgent caesarean section to save the life of mother or child. Some patients were going for elective caesarean section.

RESULTS

In present study of 1846 cases that underwent caesarean section, previous caesarean section was the leading indication to CS [731 (40%)] followed by fetal distress [378(20%)], cephalopelvic disproportion [121(6.6%)], failure to progress [87(4.7%)], malpresentation [132(7.2%)], Postdated pregnancy [115(3.0%)], obstructed labour [66(3.5%)], Hypertensive disorder of pregnancy [36(2.0%)], Antepartum haemorrhage [117(6.3%)] (Table 1).

Table 1: Indication Of Caesarean Section

Indication	Frequency (n)	Percentage
Previous LSCS	731	40
Fetal distress	378	20
Malpresentation	132	7.2
Cephalopelvic disproportion	121	6.6

Postdated pregnancy	115	6.3
Failure to progress in labor	87	4.7
Obstructed labor	66	3.5
Hypertensive disorder of pregnancy	36	2.0
Antepartum haemorrhage	117	6.3
Other	63	3.4
Total	1846	100

Maximum number of CS was in age group of 20-30 years [1218(66%)] followed by >30 years [591(32%)] followed by <20 years [37(2%)] (Table 2).

Table 2: Age Group

Age	Frequency(n)	Percentage
<20	37	2
20-30	1218	66
>30	591	32
Total	1846	100

Maximum number of CS was in multiparous women [1017 (58.85%)] (Table 3).

Table 3: Parity.

Parity	Frequency (n)	Percentage
Primiparous	775	42
Multiparous	1071	58
Total	1846	100

DISCUSSIONS:

Growing rate of CS is a matter of concern everywhere in the world. In table-1 maximum number of patients having indications of caesarean section are previous LSCS. Beginning in 1989 as the number of women attempting vaginal delivery after caesarean section increased, there was increasing number of reports that described increased rates of uterine rupture and perinatal mortality. So some suggested that VBAC (vaginal birth after caesarean section) might be riskier than anticipated. In 1998 and 1999, the American college of obstetricians & Gynecologists issued updated practice bulletins. Supporting VBAC, but also urging a more cautions. Subsequently fewer women attempted VBAC and there was a corresponding increase in the overall caesarean delivery rate. In 2007, VBAC rate in the U.S. described to a rate of 8.5%. According to Ian Donals Practical obstetrics problems commonest indication for caesarean section are presumed fetal compromise (22%), failure to progress in labor (20%), repeat caesarean (14%) and breech presentation (11%) and maternal request

(7%). In our study maximum number of patients belongs to repeat caesarean section (40%). The second commonest indication was fetal compromise (20%), third commonest indication was malpresentation (7.2%). Almost Similar results were obtained in study conducted by Pandya JM et al (46.2%-Repeat LSCS) and (13.4%-Fetal distress) respectively. Previous caesarean section was the commonest indication in a study conducted in developed countries as well [1,2]. Repeat caesarean section include absolute and relative indication. In our setup we are not trying too much for VBAC because of previous caesarean was done by some unauthorized person. During caesarean section we found thinned out uterine scar or impending rupture of uterus. In many cases previous uterine scar was found on upper segment. Many patients cannot talk about the indication of previous caesarean section. So we go for elective or emergency caesarean section with indication of previous caesarean section. Second commonest indication was fetal distress. Majority of the patient was referred from other hospital (PHC, CHC or other private hospital), where trial for vaginal delivery was already taken. Many time we found there is injudicious use of oxytocin so we are not giving too much trial of labor. Third one is malpresentation includes breech presentation (most common), transverse lie, hand prolapse, face presentation etc. Cephalopelvic disproportion includes large baby, short stature of patient and inadequate pelvis. Post dated pregnancy includes caesarian delivery on maternal request, unfavorable cervix, large baby, oligohydramnios. Failure to progress of labor includes failed induction or augmentation of labor, arrest in 2nd stage of labor etc. Hypertensive Disorder Pregnancy includes uncontrolled hypertension, eclampsia with unfavorable cervix or fetal distress, IUGR, oligohydramnios etc. Antepartum haemorrhage includes placental abruption and placenta praevia and unknown cause. In other causes include Intra uterine growth restriction, severe oligohydramnios, history of myomectomy, Bad obstetric history in previous pregnancy & Caesarian delivery on maternal request. In present study maximum number of caesarean sections were in age group of 21 to 30 years 67.1% which is comparable to studies done by Jawa A, et al and Sarma P, et al [3,4]. Maximum numbers of caesarean section were observed in multiparous women 58.0% as compared to primiparous 42%. Similar results were seen in study done by Dhakal KB et al 53.5% and 46.5% respectively [5]. The caesarean sections were associated with increased risk of maternal and perinatal morbidity as compared to vaginal deliveries even in low-risk cases [1,6].

CONCLUSIONS

The main indications of CS were previous CS, fetal distress, cephalopelvic disproportion, Malpresentation, APH etc. Maternal complications of CS were low. Reduction of number of primary caesarean section, successful VBAC, individualization of the indication and careful evaluation, following standardized guidelines, practice of evidenced-based obstetrics and audits in the institution can help to keep rate of caesarean section to the possible minimum level.

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