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FREQUENCY AND INDICATION OF CAESAREAN SECTIONS IN A TERTIARY CARE HOSPITAL IN KASHMIR

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ABSTRACT **INTRODUCTION:** Caesarean section is one of the most widely performed surgical procedures in obstetrics worldwide. There is progressive increase in caesarean deliveries across the world; in developed as well developing countries. Our aim of the study was to determine the frequency and pattern of caesarean section indications in a tertiary care hospital in Kashmir.

MATERIALS AND METHODS: This retrospective observational study was carried in patients who were admitted in Lalla Ded hospital, Department of Obstetrics and Gynaecology Government Medical College Srinagar during the study period from November 2020 to February 2021.All those pregnant females who delivered during this period either vaginally or through caesarean section were included in this study.

RESULTS: In our study the total number of deliveries was 6448.Of these caesarean sections were 4140(64.2%) and FTVD were 2308(35.8%). Among 4140 patients ,1150(27.8%) had primary caesarean section and 2990(72.2%) had repeat caesarean section.

CONCLUSION: The caesarean section rates in our study are very high as compared to the WHO standards and the most common indication being previous caesarean section. There is an urgent need for reduction in rates of primary caesarean sections, formulation of guidelines for the absolute indications of caesarean sections and strong commitment at higher level of government.

KEYWORDS : Caesarean section, Indications of caesarean section, FTVD

INTRODUCTION:

Caesarean section is one of the most frequently performed surgical interventions in obstetrics in the world. The number of caesarean sections is increasing worldwide; in both developed and developing countries.[1] This increase in caesarean section rates has become a major public health issue as it puts a strain on the health system and on families.[2] It has been observed that caesarean sections are associated with an increased risk of maternal and perinatal morbidity versus vaginal delivery even in low risk cases.[3] The indications for caesarean sections vary between institutions as there is no uniform classification system for the indications for caesarean sections.[4,5] One major challenge is that the definitions are not standardized and the indications can be multiple or interrelated.[6] Broadly, it can be divided into medical and non-medical indications.[7-8] The most common indications for a primary caesarean section are, in order of frequency, obstetric dystocia, abnormal or indeterminate foetal heart rate measurement, foetal malpresentation, multiple pregnancy and suspected foetal macrosomia.[9] However, maternal inquiries for an elective caesarean section are becoming more and more common, the main reason for this choice, which now accounts for between 0.3 and 14% of all caesarean section births worldwide.[10] Some possible reasons for the rising trend about caesarean section are fear of pain, long hospital stays, misconceptions about CS as safer than VD, lower tolerance for any complications.[11-16] The effective implementation of strategies to lower caesarean section rates can depend on the social and cultural milieu, the associated beliefs and practices of the society. [17] Our aim of the study was to determine the frequency and pattern of caesarean section indications in a tertiary care hospital in Kashmir.

MATERIALS AND METHODS:

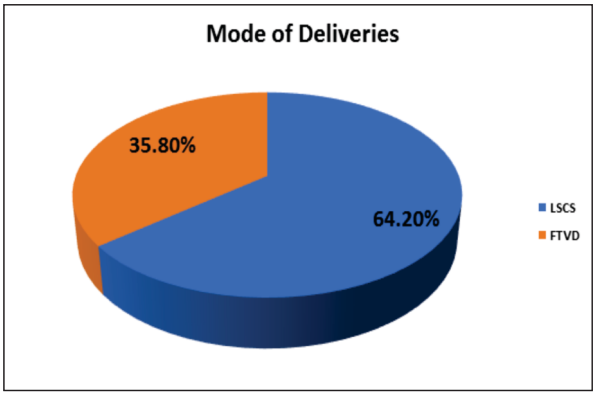
This retrospective observational study was conducted on patients admitted to Lalla Ded Hospital, Obstetrics and Gynaecology Department, Government Medical College Srinagar, during the study period from November 2020 to February 2021. All pregnant women who gave birth either vaginally or by caesarean section during this time were included in this study. Patient-specific data that included their full birth history, type of delivery and indications for a caesarean section, if this was noted, was recorded from the medical records. The data was compiled in Microsoft Excel Sheet and analysed by SPSS V 20.

RESULTS:

In our study, the total number of deliveries was 6448. Of these caesarean sections, 4140 (64.2%) and FTVD were 2308 (35.8%). Of 4140 patients, 1,150 (27.8%) had a primary caesarean section and 2,990 (72.2%) had a repeated caesarean section. The number of patients who received an emergency caesarean section was 3125 (75.5%) and an elective caesarean section was performed in 1015 (24.5%) patients as shown in table and Graph 01.

Table 01: Mode of delivery

Mode of Delivery	Number of patients	Percentage
LSCS	4140	64.2
Primary/Repeat		
Primary	1150	27.8
Repeat	2990	72.2
Emergency/Elective		
Emergency	3125	75.5
Elective	1015	24.5
FTVD	2308	35.8
TOTAL	**6448**	**100**



Graph 01: Showing mode of deliveries

In our study most common indication for caesarean section was previous caesarean section (1808; 43.67%), followed by AFD (792; 19.13%), CPD (400; 9.66%). The other common causes were APH (380; 9.18%), malpresentation (240; 5.8%), PIH (200; 4.83%), and multiple pregnancies (118;2.85%) as shown in table 02.

Table 02: Indication for LSCS

Indication	Number	Percentage
Previous LSCS	1808	43.67
AFD	792	19.13
CPD	400	9.66
APH	380	9.18
Malpresentation	240	5.8
PIH	200	4.83
Multiple Pregnancies	118	2.85
CD Change	22	0.53
BOH	24	0.58
NPOL	40	0.96
FOI	30	0.72
Obstructed Labor	12	0.29
Refusal for NVD	15	0.36
Oligohydramnios	27	0.65
Cord Prolapse	4	0.096
Others	28	0.68
Total	**4140**	**100**

DISCUSSION:

During our study period, the total number of deliveries was 6,448, of which 4,140 were caesarean and 2308 were vaginal deliveries. Therefore, the caesarean section rate was 64.2%, which is almost three times the accepted upper limit of WHO. CS rates have risen steadily in both industrialized and developing countries. There are many reasons for the increased caesarean section. Frequently mentioned causes are:[18,19,20]

- Increased institutional births.
- Patient's fear of labour.
- Avoiding difficult manipulative or instrumental vaginal births.
- In particular, foetal distress is detected through the use of continuous electronic foetal monitoring.
- Generous use of caesarean section in high-risk cases such as breeches, previous caesarean section, growth-retarded foetus, multiple pregnancy, premature babies

The present study was conducted at tertiary care hospital of Kashmir where most of the patients attending OPD and getting admitted are being referred from all the district and subdistrict hospitals. This may be the reason for high caesarean section rates in our study. Many other studies done in Kashmir to date have shown similar rates of caesarean sections.[21]

In our study, the maximum number of caesarean sections performed for those with a history of caesarean sections was 43.67% of cases. In our study, the next common indication was acute foetal distress (19.13%). The next common indication was cephalo-pelvic disproportion, followed by APH, malpresentations, multiple pregnancies, Color Doppler changes, and other less common indications, as shown in the table 02. The indications in the present study were comparable to the study by Nikhil et al. in 2015 [22] and Osman Balchi et al. in 2007.[23] WHO global survey, conducted in nine countries in Asia, found that the most common indication for CS was previous CS (24.2%) and CPD (22.6%), foetal distress (20.5%), breech and other abnormalities (12.5%).[24]

CONCLUSION:

The rates of caesarean sections in our study are very high compared to WHO standards and are the most common indication is a previous caesarean section. There is an urgent need to lower primary caesarean section rates, to formulate guidelines for the absolute indication of caesarean sections, and a strong commitment at higher levels of government and the private sector to create a framework for educating women, improve socio-economic status, improve prenatal monitoring and an effective referral chain to reduce the current high rate of caesarean sections. Careful patient assessment, evidence-based obstetrics, and hospital audits can help limit caesarean sections.

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