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Study of Primary Caesarean Section in Multiparous Women

Madhupatil[1], Bhavya G[2]

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Authors Affiliation: [1]Associte Professor, Department of Obg. Melmaruvathur Adhiparaskthi institute of medical sciences, Melmaruvathur 603319, Tamilnadu. [2]Assistant Professor, Department of Obg, Dr Patnam Mahender Reddy Institute of medical sciences, Chevella 501503, Telangana, India.

Corresponding Author: Bhavya G, Assistant Professor, Department of Obg, Dr Patnam Mahender Reddy Institute of medical sciences, Chevella 501503, Telangana, India.

E-mail: drlohit16@gmail.com

Abstract

Background: Caesarean Section is the operation which is commonly performed worldwide. Caesarean section is a boon to medical field where it has become an safe procedure for the delivery of the baby where delivery is associated with complications. The evolution of caesarean delivery has definitely reduced maternal and fetal mortality in practice of modern obstetrics. A caesarean delivery is typically performed when complications from pregnancy make traditional vaginal birth difficult which makes the life of the mother or child at risk. But there is an alarming increase in conducting caesarean section worldwide as most doctors have started practising defensive medicine.

Methods: This prospective observational study was conducted by the Dept of OBG, Melmaruvathur Adhiparaskthi Institute of Medical sciences, Melmaruvathur, Tamil nadufrom November 2018 to April 2019.A total of 92 patients were included in the study on the basis of inclusion criteria.

Results: The maximum cases 48(52.2%) were in the age of 21-25 yrs followed by 32(34.8%) in the age group 26-30years. The mean age of the patients was 28.76 (SD16.86) years .Themost common indications for caesarean sections were fetal distress which were seen in 39 cases(42.4%) followed by cephalopelvic disproportion seen in 21 cases (22.8%).Obstructed labour was the least indication noticed which was seen in 4 cases (4.4%).

Keywords: Caesarean section; Multiparous; Fetal distress.

Introduction

Caesarean Section is the operation which is commonly performed worldwide. Caesarean section is a boon to medical field where it has become an safe procedure for the delivery of the baby where delivery is associated with complications. The evolution of caesarean delivery has definitely reduced maternal and fetal mortality in practice of modern obstetrics. A caesarean delivery is typically performed when complications from pregnancy make traditional vaginal birth difficult which makes the life of the mother or child at risk. But there is an alarming increase in conducting caesarean section worldwide as most doctors have started practising defensive medicine. Brazil had the highest caesarean section rates in the world being 55.9% in 2018.1India too is heading for increase in C section rates as the generation next considers caesarean section to be safest and procedure without pain. The rising trend in the rates of cesarean sections is not only in primigravida but also among parous women. Hence this study was conducted to determine the trends in primary caesarean rates among parous women with previous normal vaginal delivery with respect to indications, maternal age and parity and the outcome.

Aims and Objectives of the Study

1. To study the indications for the primary caesarean section in multiparous women.
2. To study the maternal outcome after primary caesarean section in multiparous women.

Materials and Methods

This prospective observational study was conducted by the Dept of OBG,Melmaruvathur Adhiparaskthi Institute of Medical sciences, Melmaruvathur, Tamilnadu from November 2018 to April 2019. All multiparous women with a singleton pregnancy and previous normal delivery who underwent caesarean section were included in the study.

Sample Size: 92

Formula

$$n = \frac{Z_1^2 \text{-}\alpha/2 \ast p(1-p)}{d^2}$$

Inclusion Criteria

1. Multiparous women with term and singleton pregnancy

Exclusion Criteria

1. Patients with gestational age<37 weeks
2. Multiple pregnancy
3. Patients with previous caesarean section

Procedure

The detailed history and proper clinical findings were entered in a proforma case sheet. The clinical examination was done and necessary investigations like obstetric scan were carried Labour was monitored throughout as per protocol and indication of caesarean section were taken based upon the progression of labour and maternal and fetal complications.

Statistical Analysis

The data was analyzed using SPSS software version 16. Descriptive statistics like mean and percentages were used to interpret the results.

Results

A total of 92 cases were included in this studyat our hospital during the period of November 2018 to April 2019.

Table 1: Age Wise Distribution of Study Subjects.

Age (Yrs)	Cases	Percentage
<20 yrs	8	8.7
21-25yrs	48	52.2
26-30yrs	32	34.8
31-35yrs	4	4.3
Total	92	100.0

Out of 92 subjects enrolled into the study, maximum cases 48(52.2%) were in the age of 21-25 yrs followed by 32(34.8%) in the age group 26-30years. The mean age of the patients was 28.76 (SD16.86) years .

Table 2: Distribution of Cases based on Parity.

Parity	Cases	Percentage
2	52	56.5
3	29	31.5
4	9	9.8
5	2	2.2
Total	92	100.0

In our study,Parity varied from 2 to 5 and the majority of the cases were secondparous 52(56.5%) followed by third para 29 cases(31.5%).

Table 3: Distribution of Cases according to Indications for Caesarian Section.

Indications	Cases	Percentage
Fetal distress	39	42.4
CPD	21	22.8
APH	12	13
Preeclampsia	10	10.9
Severe oligohydramnios	6	6.5
Obstructed labour	4	4.4
Total	92	100.0

In our study, the most common indications for caesarean sections were fetal distress which were seen in 39 cases(42.4%) followed by cephalopelvic disproportion seen in 21 cases (22.8%).Obstructed labour was the least indication noticed which was seen in 4 cases (4.4%).

Table 4: Distribution of Cases according to Obstetric Presentation.

Obstetric Presentation	Cases	Percentage
Cephalic	48	52.2
Breech	34	37
Transverse	7	7.6
Brow	2	2.1
Face	1	1.1
Total	92	100.0

The majority of the cases in our study presented with cephalic presentation 48 cases (52.2%) followed by breech presentation seen in 34 cases (37%).Face presentation was seen in 1 case (1.1%).

Table 5: Distribution of Cases according to Causes of Maternal Morbidity.

Maternal Morbidity	Cases	Percentage
Pyrexia	32	34.8
Wound infection	19	20.7
Abdominal distension	14	15.2
UTI	3	3.3
Uneventful	24	26
Total	92	100.0

Pyrexia was the most cause of maternal morbidity which were seen in 32 cases (34.8%) followed by wound infection seen in19 cases(20.7%).24 cases (26%) had no morbidity or complications following caesarean section.

Discussion

The World Health Organization recommends that the Caesarean section rate should not be higher than 10% to 15% but the trends suggest that that ceasarian section has been performed at an increased alarming rate. The maximum cases (52.2%) were in the age of 21-25 yrs followed (34.8%) in the age group 26-30years. The mean age of the patients was 28.76 (SD16.86) years.The results are in accordance with Bajaj P et al[2] who noted that 50.92% of cases in the same age group where as our study was in contrast to the study done by Sailaja PS et al[3] who noted that the maximum cases were in the age group 25-29yrs(43.16%).

Early marriages are very common in India and lack of education also can be a contributing factor for the increased occurrence in this age group. Majority of the cases were second parous (56.5%)followed by third para(31.5%) which were consistent with the study done by Naniwal A et al[4] who noted 46.05% of the cases to be second parous. The most common indications for caesarean sections were fetal distress (42.4%)which was diagnosed based on an abnormal heart rate pattern in the fetus followed by cephalopelvic disproportion (22.8%) which were consistent with the study done by Bajaj P et al[2] and Samal R et al[5] who noted foetal distress as the most common presentation in 25% and 42.6% of cases where as our study was in contrast to the study done by Roa JH[5] who recorded malpresentation (33.5%) and antepartum haemorrhage (19.5%) as the most common causes for caesarean sction.

The majority of the cases presented with cephalic presentation (52.2%)followed by breech presentation (37%)which were in accordance with the study done by Samal R et al[5] and Ghattam L et al6. Pyrexia (34.8%) and wound infection (20.7%)were the most common cause of maternal morbidity which were consistent with the study done by Roa JH et al[7].

Conclusion

From this study, we can conclude that educating pregnant female and thorough check up during antenatal visits are very important. There is always a false perception created that the previous vaginal delivery tend to produce vaginal delivery in the future pregnancies too which is not true. There are many unknown reasons or complications associated with pregnancy which may lead to maternal morbidity and mortality. Hence attention should be given to the care of multiparous women. The ultimate goal should be to have a safe pregnancy with healthy mother and healthy baby.

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Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee.

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