

## A Clinical Study of Primary Caesarean Sections in Multipara

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### Abstract

*Aims and Objectives:* The aim of this study was to evaluate the incidence, indications, maternal and foetal outcome in parous women who underwent caesarean section for the first time and who had delivered vaginally previously. *Material and Methods:* This is a prospective study of 129 cases of primary caesarean section done between October 2015 to September 2016 in multiparous women at ESICMC & PGIMSR hospital, Bangalore. Both elective and emergency caesarean sections in multipara were included in the study. Incidence according to age, gestational age, spacing between births, parity, antenatal complications, indication for LSCS, whether labour was spontaneous or induced, intraoperative and post operative complications were recorded. Foetal outcome was also evaluated. *Results:* The primary caesarean section rate in multipara was 8.48%. Most were in the 26 – 30 age group and majority were primipara. Foetal distress (34.88%) was the commonest indication for caesarean section followed by abnormal presentations (22.48%) and prolonged labour (9.3%). In our study severe oligoamnios with fetoplacental insufficiency contributed to 8.53% of caesarean sections in multipara. 6.20% of women had caesareans for antepartum haemorrhage. *Conclusion:* Though previous vaginal delivery is a factor in favour

of vaginal delivery in the next pregnancy in a parous woman, caesarean section is not uncommon and is showing an increasing trend. The causes are complications like foetal distress, malpresentations and the increasing incidence of hypertension, diabetes and oligoamnios. Physician factors like increased intra partum surveillance and use of electronic foetal monitoring due to medicolegal concerns could be a factor for foetal distress being the commonest indication for Caesarean section in multipara.

**Keywords:** Caesarean Section; Multipara; Primary; Foetal Distress

### Introduction

Caesarean section is the commonest surgery now done in modern obstetrics. According to the WHO; at the population level, caesarean section rates higher than 10% are not associated with reductions in maternal and newborn mortality rates. Also Caesarean section can cause significant disability particularly in settings that lack the facilities and/or capacity to properly conduct safe surgery and treat surgical complications [1].

Nevertheless, worldwide the rates of caesareans have been rising – from about 10% of births 30 years ago to nearly 25% of births today [1].

Factors contributing to increase in caesarean section rates are medical, social, economic and medicolegal. Multipara who have had one or more vaginal deliveries previously may have unforeseen complications needing a caesarean delivery.

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### Aims and Objectives

The aim of this study was to evaluate the incidence, indications, maternal and foetal outcome in multiparous women who underwent caesarean section for the first time and who had delivered vaginally previously.

### Material and Methods

This is a prospective study of 129 cases of primary caesarean section done between October 2015 to September 2016 in multiparous women at ESICMC & PGIMSR hospital, Bangalore.

#### *Inclusion Criteria were:*

Multipara who had delivered vaginally previously

Gestational Age >34 weeks

Both elective and emergency caesareans were included in the study.

#### *Exclusion Criteria were*

Primigravida

Gestational age <34 weeks

Women who had previously delivered by LSCS

A detailed history was taken at admission with reference to present pregnancy and also previous obstetric history. Basic investigations like CBC, Blood grouping and typing, urine examination were done. Special investigations like LFT, RFT, Coagulation profile were done if required. Obstetric scan was done.

Incidence according to age, gestational age, spacing between births, parity, antenatal complications, indication for LSCS, whether labour was spontaneous or induced were also noted.

Labour was monitored using partogram and intraoperative CTG was done when required. Intraoperative complications were recorded. Foetal outcome was noted including birth weight, Apgar score, NICU admissions and perinatal mortality. Post operative period was monitored and complications if any were recognized and managed as per protocol.

### Results

There were 3505 deliveries during the period of the study. The number of LSCS performed were

1522 (43.42%). Among these 784 LSCS were done in primigravida and 129 in multipara, ie; who had delivered vaginally before. The incidence of primary caesarean sections in multiparous women was 3.68% of all deliveries and accounted for 8.48% of all caesareans done. The percentage of primary LSCS was 26.04% (both primi and multi)(Table 1).

The age incidence, parity and gestational age of the study group is shown in Tables 2 to 4.

**Table 1:**

	Number	Percentage
<b>Total Deliveries</b>	<b>3505</b>	<b>100</b>
LSCS	1522	43.42
Previous LSCS	609	40.01
Primigravida	784	51.51
Multipara	129	8.48

**Table 2:**

Age	Number	Percentage
21-25	38	29.46
26-30	61	47.29
31-35	27	20.93
36-40	3	2.32
Total	129	

**Table 3:**

Parity	Number	Percentage
G2	115	89.14
G3	12	9.31
G4	2	1.55
Total	129	

**Table 4:**

Gestational Age	Number	Percentage
34-37 wks	24	18.60
37-40 wks	92	71.32
40-42 wks	13	10.08
Total	129	

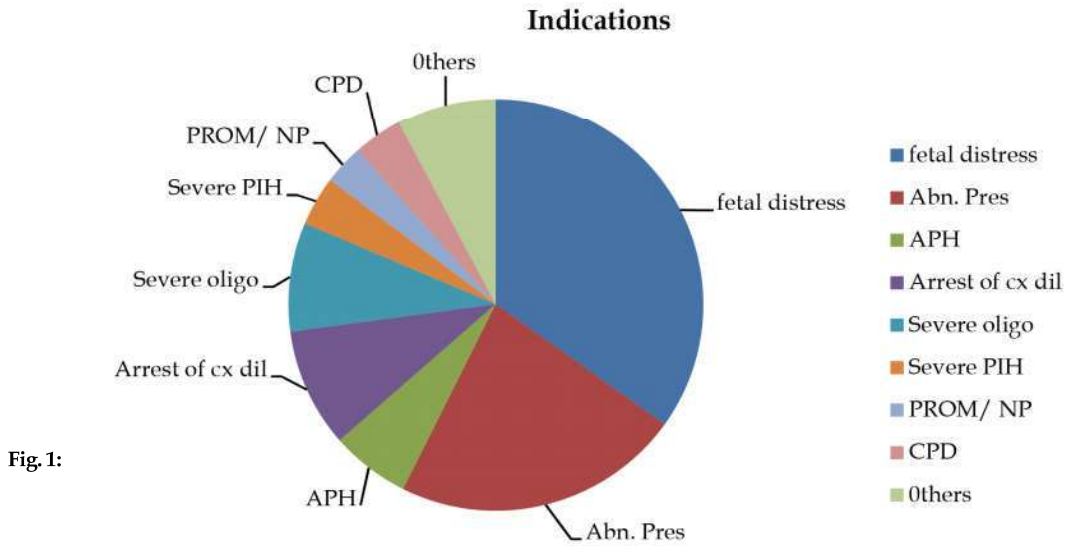
The various indications for primary caesarean sections in multipara were (Table 5 ) (Fig. 1):

Twenty five (25) women came in spontaneous labour (66.22%) whereas labour was induced in 49 (33.78%) multis who underwent LSCS. The rest were taken directly for LSCS.

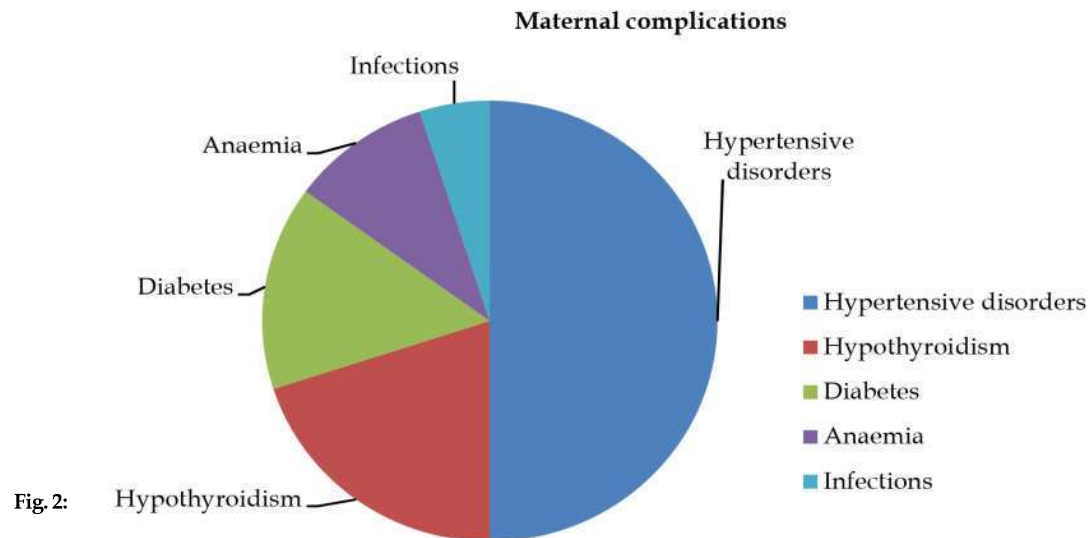
Forty (40) women (31%) among the 129 had associated medical complications (Fig. 2). Among these hypertensive disorders accounted for 50% of the complications.

**Table 5:**

Indications	Number	Percentage
Foetal distress	45	34.88
Abnormal Presentation	29	22.48
▪ Breech	21	
▪ Transverse lie	6	
▪ Brow	2	
Severe PIH with imminent eclampsia/ unfavourable Cx	8	6.20
Antepartum Haemorrhage	5	3.88
Prolonged labour/ Arrest of Cx dilatation	12	9.30
PROM with non progress	4	3.10
CPD	5	3.88
Cord presentation/ prolapse	4	3.10
Severe oligoamnios with doppler changes	11	8.53
Single foetal demise/ transverse lie	1	0.78
Failed induction	4	3.10
Chronic hypertension with LVH	1	0.78
Total	129	



**Fig. 1:**



**Fig. 2:**

Postoperative complications included postpartum haemorrhage (7 patients), wound infection (3), LRTI (6), postpartum eclampsia (2) and fever (2) in the postoperative period (Fig. 3).

Regarding foetal outcome, 21 babies required NICU admission (16.27%), 9 for foetal distress, 3 for RDS, and 9 for LBW. There was perinatal mortality in 3 cases. In one case, there was abruption with acute uterine torsion, one case had severe PIH with severe IUGR and one with severe oligoamnios with abnormal Doppler.

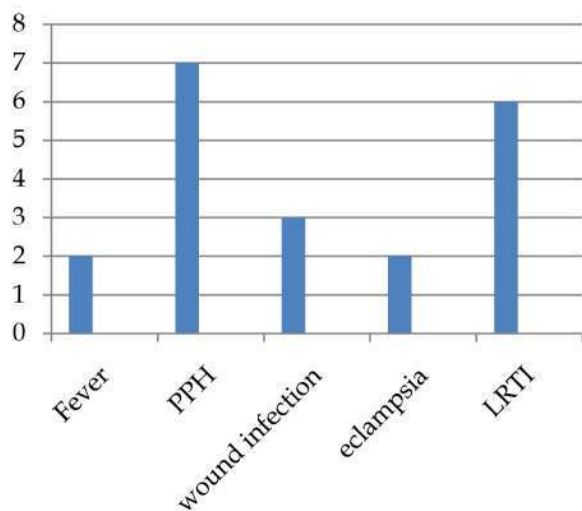


Fig. 3: Postoperative Complications

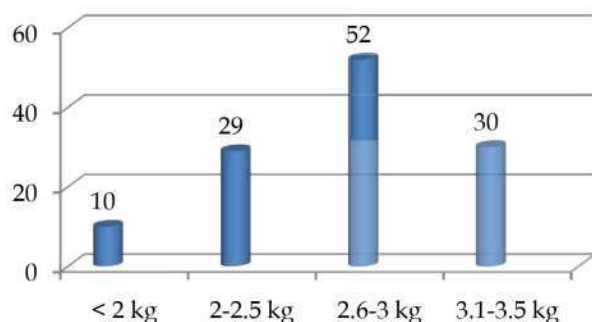


Fig. 4: Birth Weight

Table 6:

Indications	Present study (%)	Erika Desai et al (%)	Jyothi H Rao et al (%)	Himabindu P et al (%)	Samal et al (%)
CS in multipara	8.47	29.05	10.28	7	6.04
Fetal distress	33.88	25.5	17	24.7	42.6
Abnormal presentations	22.48	17.4	33.5	19.3	26.4
Antepartum haemorrhage	6.2	22.09	19.5	11.2	5.9
Prolonged labour	9.3	4.6	-	8.6	-
PROM/Non progress	3.10	6.9	-	9.6	-
CPD	3.88	19.7	-	3.2	14.7
Medical disorders	4.66	-	-	6.4	-
Severe oligo with IUGR	8.53	-	-	-	2.9

## Discussion

The present study includes 129 cases of primary caesarean sections in multigravida making the total rate of caesarean sections in multigravida 3.68% of total deliveries and 8.48% of all caesarean sections done. The cases were studied w.r.t age, parity, gestational age, indications for LSCS, antenatal complications. Postoperative maternal complications and foetal outcome was also studied.

Maximum number of multipara who had caesarean section were in the 26-30 age group and were of 2<sup>nd</sup> parity. This correlates with other studies of Jyothi H Rao, [2] G Sharmila [3].

The incidence of LSCS in multipara in our study was 8.48%, comparable to rates in studies by Jyothi H Rao [2], P Himabindu et al.[4] and G Sharmila [3]. In a similar study by Desai E et al.[5], the incidence was 29.05% but 72% of the cases in this study were unbooked.

Foetal distress followed by abnormal presentations were the commonest indications for caesarean section in multipara in our study. These findings were similar to findings in studies by Desai E et al. [5]. P Himabindu et al. [4] and Samal et al. [6]. But in studies by G Sharmila[3], Jyothi H Rao[2], abnormal presentations were the commonest indications for caesareans in multipara. Electronic foetal monitoring, medicolegal concerns may be the factors contributing to fetal distress as the commonest indication for caesareans in multis. Similarly declining vaginal breech and operative deliveries are also factors for increasing caesarean rates in multipara.

In our study, isolated severe oligoamnios contributed to 8.53% of caesarean sections done in multiparous women. Our hospital caters to the working class of women and whether this was a contributing factor needs further evaluation.

Postpartum haemorrhage, LRTI, wound infection and fever were the complications seen in our study. In studies by Desai E et al. [5], P Himabindu et al. [4], and G Sharmila [3], puerperal pyrexia and wound

infection were commoner postoperative complications. The overall maternal morbidity is considerably less in all the studies due to availability of antibiotics, safe anaesthesia, better surgical techniques and operative skills making caesarean section quite a safe procedure. NICU admissions in our study was 16.27% which was comparable to the study by Himabindu P et al.[4].

### Conclusion

Though previous vaginal delivery is a reassuring factor, primary caesarean in multipara is not uncommon in modern obstetric practice.

The causes are complications like foetal distress, malpresentations, the increasing incidence of hypertension, diabetes mellitus and oligoamnios. Physician factors like increased use of electronic foetal monitoring, medicolegal concerns are contributing to increased rate of caesareans in multipara. Also declining vaginal breech and operative deliveries may be contributing factors. However a sense of security provided by previous vaginal delivery should not be a deterrent in

diagnosing complications and performing caesarean sections in multipara when needed.

### References

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