

Research

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## STUDY OF PRIMARY CAESAREAN SECTION IN MULTIPAROUS WOMEN IN A TERTIARY CARE CENTRE

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#### Abstract

Background: Caesarean section is one of the most commonly performed surgeries in obstetrics worldwide. The caesarean section rate has increased over the past few years in both developed and developing countries. Primary cesarean section in multipara means the first cesarean section done in women who had one or more vaginal delivery. These women are considered low risk for cesarean section, but previous vaginal delivery does not guarantee a repeat vaginal delivery. Aim: To study the incidence, indications of primary cesarean section in multigravida and evaluate the fetal and maternal outcome following cesarean section. Materials and Methods: Present study was a retrospective observational study carried out at SMGS hospital Jammu over a period of 3 months from January 2022 to March 2022. Total 215 patients were enrolled in the study. Data was collected from hospital records and analyzed. Result: Out of 215 patients, majority of the patients were in the age group of 26-30 years (74 %). Majority of the patients were gravida 2(40.93 %) followed by gravida 3 (31.16 %). In our study, 191 patients (88.83 %) underwent emergency LSCS and 24 patients (11.16 %) underwent elective LSCS. Indications for LSCS were fetal distress (37.67 %), breech (12.55 %), transverse lie (10 %), placenta praevia (6.97 %), abruption (2.32 %), oligohydramnios/IUGR (7.44 %), failed progress (6.04 %), failed induction (3.25 %), cord prolapse (1.86 %), antepartum Eclampsia (1.86 %), obstructed labour (0.93%), precious pregnancy (4.18 %), maternal request (0.46 %), twin pregnancy (2.32 %), DTA (3.72 %) and CPD (3.72 %). Majority of the babies weighed between 2.5 - 3 kg (40.46 %). 215 babies (97.72 %) were livebirth and 5 babies (2.32 %) were stillbirth. Conclusion: Childbirth in itself carries potential risks for the mother and her baby regardless of the mode of delivery. Early diagnosis of complications in multipara and proper antenatal and intranatal management including caesarean section will help to improve maternal and fetal outcome.

# **INTRODUCTION**

Caesarean section is one of the most commonly performed surgeries in obstetrics worldwide. The caesarean section rate has increased over the past few years in both developed and developing countries.<sup>[1]</sup> Primary cesarean section in multipara means the first cesarean section done in women who had one or more vaginal delivery.<sup>[2]</sup> It decreases the maternal and perinatal morbidity and mortality.<sup>[3]</sup> These women are considered low risk for cesarean section, but previous vaginal delivery does not guarantee a repeat vaginal delivery. With decreased use of operative vaginal delivery and ECV, the incidence of cesarean section is increasing. Even though the safety of cesarean section has improved over years, patients are unwilling to accept even small increased risks associated with certain types of operative vaginal delivery and social and medicolegal expectations of prefect neonatal outcome which has influenced obstetric care. Multipara are considered as a high risk for anemia, malpresentation, multiple pregnancy, antepartum hemorrhage, pre-eclampsia, eclampsia, cephalopelvic disproportion, uterine rupture and chronic medical disorders like hypertension and diabetes. So, they are an important target to decrease the rate of cesarean section in an institute and country at large. High and rising rate of cesarean section in developing countries like India constitute an important health care problem.

AIM: To study the incidence, indications of primary cesarean section in multigravida and evaluate the

fetal and maternal outcome following cesarean section.

## MATERIALS AND METHODS

Present study was a retrospective observational study carried out at SMGS hospital Jammu (tertiary care hospital, in tire 2 city) over a period of 3 months from January 2022 to March 2022. Total 215 patients were enrolled in the study.

#### **Inclusion Criteria**

1. All the multigravida with gestational age >28 weeks (i.e., gravida 2 or more).

2. Patients who had at least 1 vaginal delivery.

# Exclusion Criteria

- 1. Women with previous caesarean section.
- 2. Women with previous history of uterine surgery
- 3. Women with previous history of hysterotomy, myomectomy.

Data was collected from hospital records and analyzed in terms of demographic details like age and parity, antenatal risk factors, period of gestation and indications of cesarean section, birth weight, and Apgar score. The obtained data was processed using MS Excel and analyzed with simple descriptive statistics.

# RESULTS

Table 1: Age wise distribution of cases			
Age in years	Number	Percentage	
20-25	55	25.58	
26-30	74	34.41	
30-35	69	32.09	
>35	17	7.9	

Total number of cesarean done during the study period was 2013, out of which 215 multiparous women who underwent primary cesarean section. Out of these 215 patients, majority of the patients were in the age group of 26-30 years (74 %) followed by 30-35 years (32.09 %), 20-25 years (25.58 %) and more than 35 years (7.9 %) as shown in [Table 1].

Table 2: Distribution of patients according to gravida			
Parity	Number	Percentage	
Gravida 2	88	40.93	
Gravida 3	67	31.16	
Gravida 4	40	18.6	
Gravida 5 and above	20	9.3	

Majority of the patients were gravida 2(40.93 %) followed by gravida 3 (31.16 %), gravida 4(18.6 %) and gravida 5 and above (9.3 %) as shown in [Table 2].

Table 3: Distribution of patients according to period of gestation			
Gestational age in weeks	Number	Percentage	
28-32	9	4.18	
32-36	32	14.88	
36-40	150	69.76	
>40	24	11.16	

150 cases (69.76 %) were between gestational age of 36-40 weeks followed by 32-36 weeks (14.88 %), >40 weeks (11.16 %) and 28-32 weeks (4.18 %) as shown in [able 3].

Table 4: Type of cesarean section.			
Type of LSCS	Number	Percentage	
Emergency	191	88.83	
Elective	24	11.16	

In our study, 191 patients (88.83 %) underwent emergency LSCS and 24 patients (11.16 %) underwent elective LSCS as shown in [Table 4].

Table 5: Indication of cesarean section.			
indication of cesarean	Number	Percentage	
Fetal distress	81	37.67	
Breech	27	12.55	
Transverse lie	10	4.65	
Placenta praevia	15	6.97	
Abruption	5	2.32	
Oligohydramnios/IUGR	16	7.44	
Antepartum eclampsia	4	1.86	

Cord prolapse	4	1.86	
Failed induction	7	3.25	
Failed progress	13	6.04	
Obstructed labour	2	0.93	
Precious pregnancy	9	4.18	
Maternal request	1	0.46	
Twin pregnancy	5	2.32	
DTA	8	3.72	
CPD	8	3.72	

In our study, indication for lscs were fetal distress (37.67 %), breech (12.55 %), transverse lie (10 %), placenta praevia (6.97 %), abruption (2.32 %), oligohydramnios/IUGR (7.44 %), failed progress (6.04 %), failed induction (3.25 %), cord prolapse (1.86 %), antepartum eclampsia (1.86 %), obstructed labour (0.93%), precious pregnancy (4.18 %), maternal request (0.46 %), twin pregnancy (2.32 %), DTA (3.72 %), CPD (3.72 %) as shown in [Table 5].

Table 6: Birth weight distributions.			
Birth weight	Number	Percentage	
<1.5 KG	4	1.86	
1.5-2.5 KG	69	32.09	
2.5-3 KG	87	40.46	
3-3.5 KG	30	13.95	
>3.5 KG	30	13.95	

In our study, majority of the babies weighed between 2.5 - 3 kg (40.46 %) followed by 1.5 - 2.5 kg (32.09 %), 3 - 3.5 kg (13.95 %), more than 3.5 kg (13.95 %) and less than 1.5 kg (1.86 %) as shown in [Table 6].

Table 6: Apgar score at birth.			
Apgar score	Number	Percentage	
0	5	2.32	
1-3	2	0.93	
4-6	13	6.04	
>6	200	93.02	

Out of 215 patients, 5 patients gave birth to twin babies. 215 babies (97.72 %) were live birth and 5 babies (2.32 %) were stillbirth as shown in [Table 7].

## **DISCUSSION**

Multiparity is a common problem associated with illiteracy and lack of knowledge of family planning methods. In our study, out of 215 patients, majority of the patients were in the age group of 26-30 years (34.41 %). In a study conducted by Sethi P et al.<sup>[4]</sup> maximum number of participants (41%) were from the age group of 25-29 years. Majority of the patients were gravida 2 (40.93 %) followed by gravida 3 (31.16 %) which is similar to the study conducted by Sethi P et al.<sup>[4]</sup> where 35% were gravid 2 and 30% were gravid 3 status. In our study, 150 cases (69.76 %) were between gestational age of 36-40 weeks which was similar to studies reported by Rowaily MA et al.<sup>[5]</sup> and Rajput N et al. <sup>[6]</sup> In our study, 191 patients (88.83 %) underwent emergency lscs and 24 patients (11.16 %) underwent elective lscs. Similar results were shown by a study done by Sethi P et al.<sup>[4]</sup> where 91% of patients had emergency and only 9 % had elective caesarean delivery. In our study, indication for lscs were fetal distress (37.67 %) followed by malpresentations (17.20 %) and APH (9.30 %).

Similarly, in the study by Desai et al.<sup>[7]</sup> fetal distress (25.58%), antepartum haemorrhage (22.09%), CPD

(19.77%) and abnormal presentations (17.44%) were the most common indications for caesarean sections. In the studies, done by Himabindu P et al.<sup>[8]</sup> and Jyothi H. Rao et al.<sup>[9]</sup> foetal distress was the most common indication of caesarean section (24.7%). In our study, majority of the babies weighed between 2.5 - 3 kg (40.46%) followed by 1.5-2.5 kg (32.09%), 3-3.5 kg (13.95%), more than 3.5 kg (13.95%) and less than 1.5 kg (1.86%). Out of 215 patients, 5 patients gave birth to twin babies. 215 babies (97.72%) were livebirth and 5 babies (2.32%) were stillbirth

### CONCLUSION

Childbirth itself carries potential risks for the mother and her baby regardless of the mode of delivery. Early diagnosis of complications in multipara and proper antenatal and intranatal management including caesarean section will help to improve maternal and fetal outcome. All multigravida women should have 100 % institutional deliveries to reduce maternal and perinatal morbidity and mortality.

Conflict of interest: none.

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