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Original Research Article

## Primary cesarean section in multigravidas

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### ABSTRACT

**Background:** Cesarean section is one of the widely performed surgical procedures across the world. Cesarean section is associated with increased risk of maternal morbidity and mortality, despite remarkable improvements in the safety. The objective of the present study is to study the cesarean section in the context of various indications, parity, intraoperative complications, post-operative morbidity, and perinatal morbidity among multigravidas undergoing cesarean section for first time.

**Methods:** The present study was carried out at Yenepoya medical college hospital. All multigravidas who had delivered vaginally once or more and who underwent primary caesarean sections for the first time during time period of August 2015-May 2016 were included in study and various factors are analyzed.

**Results:** In our study most of primary cesarean sections were in second paras who constituted 50%, followed by 4/> paras constituting 29.54%, and it was observed that incidence in third paras was 20.45%. 75% of the patients underwent emergency cesarean section and 25% had elective cesarean section. The most common indication for cesarean in our study was observed to be fetal distress accounting for 25% of the cases, 2nd most common being malpresentations (19.31%), non-progress of labor constituting 11.36% of cases. Intra operative complications were noted in 6.81% of cases, most common complication being extension of uterine incision.

**Conclusions:** Complications may occur in women who previously had a normal vaginal delivery requiring interventions in the form of caesarean section and is not uncommon. Though to a small extent, they are contributing to rise in total caesarean section rates seen. There are many cases where a caesarean becomes mandatory for her. The fact that a multipara who has had one or more vaginal deliveries should be regarded as an optimistic historical fact, not as diagnostic-criteria for spontaneous delivery of the pregnancy at hand. A parous woman needs good obstetric care to improve maternal and neonatal outcome and still keeping caesarean section to a lower rate.

**Keywords:** Caesarean section, Multiparous, Parous women

### INTRODUCTION

Cesarean section is one of the most commonly performed surgical procedure in the world and it can be life-saving for the child, the mother, or both, in some cases.<sup>1</sup> There is worldwide increase in caesarean section rates.<sup>2</sup>

The World Health Organization recommends that the cesarean section rate should not be higher than 10% to 15%. The rapid increase in the rate of cesarean section in the recent years deserves serious concern. Many Studies conducted across India have shown an alarming increase in the rate of cesarean section deliveries.<sup>3,4</sup> Cesarean

section poses a greater risk of maternal morbidity, mortality and high cost of health care compared with vaginal deliveries, hence it is important to assess the several indications, maternal and fetal outcome associated with a caesarean delivery which was demonstrated in numerous studies.<sup>4</sup> There are several indications of cesarean sections, chiefly severe major degree of placenta previa and severe pre eclampsia, fetal distress, bad obstetric history (BOH) and difficult vaginal operative delivery.<sup>5</sup>

It is a common belief in many that if a mother delivers her child normally, all her successive deliveries will be normal, resulting in the neglecting of routine antenatal

check up by multiparous women. It is therefore felt need to study the indications for cesarean section and outcome among women who have previously delivered vaginally.<sup>6,7</sup> The present study is undertaken with the objectives to know the indications of primary cesarean section in multigravidae, incidence according to parity, maternal and fetal outcome.

## METHODS

The present study is carried out at Yenepoya medical college hospital. All multigravidas who had delivered vaginally once or more and who underwent primary caesarean sections for the first time during time period of August 2015 to May 2016 were included in the study.

### Inclusion criteria

- Multigravidas
- Term pregnancy
- Singleton pregnancy

### Exclusion criteria

- Primigravida
- Previous LSCS
- Gestational age <37 weeks

## RESULTS

In our study most of primary cesarean sections were second paras who constituted 50%, followed by 4/> paras constituting 29.54% and it was observed that incidence in third gravidas was 20.45%.

**Table 1: Distribution according to parity.**

Gravidity	Number	Percentage
2	44	50%
3	18	20.45%
>/=4	26	29.54%

**Table 2: Type of cesarean section.**

Type of CS	Number	Percentage
Emergency	66	75%
Elective	22	25%

In this study 75% of the patients underwent emergency cesarean section and 25% had elective cesarean section.

The most common indication for cesarean in our study was observed to be fetal distress accounting for 25% of the cases, 2nd most common being malpresentations (19.31%), non-progress of labor constituting 11.36% of cases followed by medical disorders accounting for 6.81% of cases and APH and TWIN gestation constituting 5.68% each.

**Table 3: Indications for cesarean section.**

Indications	Number	Percentage
Oligohydramnios	3	3.4%
Malpresentations	17	19.31%
APH	6	6.81%
CPD	5	5.68%
Medical disorders	6	6.81%
Fetal distress	22	25%
Non-reactive NST	3	3.41%
Non-progress	10	11.36%
Cord prolapsed	4	4.54%
Twins	5	5.68%
MSL	2	2.27%
Second stage arrest	3	3.41%
BOH	1	1.13%
Altered Doppler	1	1.13%

Intra operative complications were noted in 6.81% of cases, most common complication being extension of uterine incision.

**Table 4: Intraop complications.**

Complication	Number	Percentage
PPH	2	2.27%
Extension of uterine incision	4	4.54%

Post-operative morbidity was observed in 10.22% of cases which includes febrile morbidity (3.41%), wound infection (2.27%), urinary tract infection (2.27%), abdomen distension (1.13%), and psychosis (1.13%).

**Table 5: Post op morbidity.**

Type	Number	Percentage
Wound infection	2	2.27%
Febrile morbidity	3	3.41%
Urinary tract infection	2	2.27%
Abdomen distension	1	1.13%
Psychosis	1	1.13%
Total	9	10.22%

**Table 6: Perinatal morbidity.**

Type	number	Percentage
Low Apgar	3	3.41%
Sepsis and pyrexia	2	2.27%
Meconium aspiration	2	2.27%
Convulsions	1	1.13%
Respiratory distress	2	2.27%

Perinatal morbidity was seen in 11.36% of babies with low Apgar in 3.41% of cases, sepsis in 2.27%, meconium aspiration in 2.27%, respiratory distress in 2.27%, and convulsions noted in 1.13% babies.

## DISCUSSION

In the present study, maximum number of women undergoing primary cesarean section were in second paras 44 (50%), followed by 4/> paras constituting 29.54% and it was observed that incidence in third paras was 20.45%. These were similar to a study by Desai et al, among the patients undergoing C-section, the number of Primipara patients were 30 (34.88%), number of 2nd parapatients were 20 (23.26%), number of 3rd para patients were also 20 (23.26%), number of 4th para patients were 9 (10.47%), number of 5th para patients were 4 (4.65%) and number of 6th para patients were just 3 (3.49%).<sup>9</sup>

In our study 75% of the patients underwent emergency cesarean section and 25% had elective cesarean section. This findings were in close proximity to a study done by Al Rowaily et al, where two-thirds (67%) were emergency CSs, and one-third were elective CSs (33%).<sup>10</sup>

The most common indication for cesarean in our study was observed to be fetal distress accounting for 25% of the cases, 2<sup>nd</sup> most common being malpresentations (19.31%), non-progress of labor constituting 11.36% of cases followed by medical disorders accounting for 6.81% of cases and APH and TWIN gestation constituting 5.68% each. Similar indications were found in a study done by Desai E et al Fetal distress was the most common indication having highest number of cases 22 (25.58%), next most common being the APH whose cases were 19 (22.09%), than the number of cases having CPD was 17 (19.77%), number of patients having Abnormal presentations was 15 (17.44%).<sup>9</sup>

Intra operative complications were noted in 6.81% of cases, most common complication being extension of uterine incision extension of uterine incision. Post-operative morbidity was observed in 10.22% of cases which includes febrile morbidity (3.41%), wound infection (2.27%), urinary tract infection (2.27%), abdomen distension (1.13%), psychosis (1.13%). These findings were similar to study by Jyothi H Rao.<sup>11</sup>

Perinatal morbidity was seen in 11.36% of babies who required NICU admission, with low Apgar in 3.41% of cases, sepsis in 2.27%, meconium aspiration in 2.27%, respiratory distress in 2.27%, and convulsions noted in 1.13% babies.

These findings were similar to study by Sethi et al.<sup>12</sup> In this study 17 babies had perinatal morbidity, Birth asphyxia was seen in 4 babies, sepsis and pyrexia was observed among 4 babies, convulsions, MAS and RDS was seen in 3 babies each.

## CONCLUSION

Complications may occur in women who previously had a normal vaginal delivery requiring interventions in the form of caesarean section and is not uncommon. Though to a small extent, they are contributing to rise in total caesarean section rates seen. There are many cases where a caesarean becomes mandatory for her. The fact that a multipara who has had one or more vaginal deliveries should be regarded as an optimistic historical fact, not as diagnostic-criteria for spontaneous delivery of the pregnancy at hand. A parous woman needs good obstetric care to improve maternal and neonatal outcome and still keeping caesarean section to a lower rate, and proper counseling of the patients in cases where cesarean section is mandatory.

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