



## PRIMARY CAESARIAN SECTION IN MULTIPARA WITH NEONATAL OUTCOME: A CLINICAL STUDY FROM TERTIARY CARE CENTRE AT GOVERNMENT GENERAL HOSPITAL, ANANTHAPURAMU.

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**ABSTRACT** **BACKGROUND:** One of the most commonly performed operations in modern obstetrics is caesarean section. Primary caesarean section in a multipara means first caesarean section done in the patients who had delivered vaginally once or more. Mainly malpresentations and fetal distress are responsible for caesarean section in multipara.

**AIMS AND OBJECTIVES:** To study the incidence, indications, maternal and fetal outcome in primary caesarean section in multiparous women.

**MATERIAL AND METHODS:** It is a retrospective observational hospital based study of 100 cases of primary caesarean section admitted at Government General Hospital, Ananthapuramu during the period January – December, 2019. Cases requiring elective and emergency caesarean sections were included in the present study. Various indications for caesarean section, intraoperative details, maternal and fetal outcome were recorded.

**RESULTS:** Most of the cases were unregistered and referred as emergency. Most common age group was 25 – 30 years and majority were 2nd and 3rd gravidas. Malpresentations (24%), fetal distress (20%), antepartum hemorrhage (12%), CPD (9%), and prolonged labour (9%) were the main indications for primary caesarean section.

**CONCLUSION:** Even though parous women who had previous normal vaginal delivery, there were many complications like increased incidence of malpresentations, CPD, placenta previa and others which may need caesarean section. The fact that a multipara 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.

**KEYWORDS :** Caesarean Section, Primipara, Multipara, Cpd: Cephalopelvic Disproportion, Fetal Distress, Aph: Antepartum Hemorrhage.

### INTRODUCTION:

Caesarean section is the most common and oldest obstetrical operation being indispensable even in modern obstetrics and is now increasing in incidence<sup>1,8</sup>.

There is a trend of worldwide increase in caesarean section rates, with increased safety following introduction of modern anesthesia, blood transfusion facilities, and higher antibiotics. The indications for caesarean section are liberalized to include dystocia, placenta previa, fetal distress, bad obstetric history, and others. Caesarean section is considered as a safer alternative to prolonged and difficult vaginal operative delivery so as to reduce maternal and perinatal morbidity and mortality<sup>7</sup>.

Multipara means those who had delivered once or more after the age of viability. It includes primipara (para 1), multipara (para 2, 3, 4) and grand multipara (para more than 4)<sup>3</sup>.

Multipara, even though they have delivered once vaginally, they still may have cephalo pelvic disproportion in view of pendulous abdomen with lordosis of the lumbar spine responsible for failure of the head to engage<sup>2</sup>.

Unforeseen complications that may occur in multipara were identified long ago and studies by Soloman in 1932, who called them as "dangerous multipara"<sup>4</sup>, and Feeny in 1953 as "unpredictable multipara"<sup>5</sup>.

### AIMS AND OBJECTIVES:

The present study is a retrospective observational study which focuses on the indications, maternal and fetal outcome of primary caesarean section in multiparous women.

### MATERIAL AND METHODS:

It is a retrospective randomized observational study of 100 cases of primary caesarean section done in multipara during the period from January – December 2019 in Government General Hospital, Ananthapuramu which is a tertiary referral center. This includes patients reporting directly to the labour room in various stages of labour as emergency cases and elective cases who were admitted in the antenatal wards for various high risk factors taken up for elective caesarean section. Among the referral patients admitted in labour room, detailed history was taken at admission with reference to present

pregnancy and also previous obstetric history. Detailed obstetric examination was done including pelvic assessment. For all cases basic investigations and ultrasonography were done to estimate gestational age, placental position, rule out anomalies and AFI measurement. Labour was monitored by partogram. Decision for caesarean section was based on clinical examination and progress of labour. Intra-operative details were noted and any complications managed accordingly. Post-operative period was monitored and complications managed as per regular protocol.

### OBSERVATION AND RESULTS:

About 100 cases of primary caesarean section done in multipara were randomly selected during a period of 1 year and analyzed and the results were as follows.

**TABLE I: REGISTERED STATUS**

Total No. Of Cases	Registered	Not Registered	Elective	Emergency
100	28	72	25	75
Percentage	28%	72%	25%	75%

Majority of the cases were unregistered (72%), referred as emergency cases.

**TABLE II: GRAVIDA DISTRIBUTION**

Total	G2	G3	G4	G5
100	60	30	08	02
Percentage	60%	30%	08%	02%

Out of 100 cases, majority of them were gravida 2(60%), and next is gravida 3 (30%) and gravid 4 and gravida 5 were 8% and 2% respectively.

**TABLE III: INDICATIONS FOR PRIMARY CAESARIAN SECTION IN MULTIPARA**

Indication	Number Of Cases	Percentage
Abnormal presentation	24	24%
Fetal distress	20	20%
Antepartum hemorrhage	12	12%
CPD	09	09%
Prolonged labour	09	09%
PROM	08	08%
Failed induction	07	07%

Obstructed labour	04	04%
Medical disorders	04	04%
BOH with precious pregnancy	03	03%

Out of 100 cases, indications for primary section were abnormal presentation (24%) followed by fetal distress (20%). Other indications were antepartum hemorrhage (12%), prolonged labour (09%), CPD (09%), PROM (08%), failed induction (07%), medical disorders (04%), obstructed labour (04%), BOH with precious pregnancy (03%).

**TABLE IV: MATERNAL MORBIDITY**

Maternal Morbidity	Number Of Cases	Percentage
Puerperal pyrexia	11	11%
Urinary tract infections	05	05%
Paralytic ileus	04	04%
Respiratory tract infections	02	02%
Wound infection	02	02%
PPH	01	01%

Among maternal morbidity, puerperal pyrexia ranked first followed by Urinary tract infection and paralytic ileus.

**TABLE V: NEONATAL OUTCOME**

Outcome	Number Of Cases	Percentage
Live births	96	96%
Preterm	11	11%
Term	80	80%
Post term	05	05%
Still birth	04	04%

Out of 100 cases, 96 were live births and 4 were still births. Out of 96 live births, 11 cases were preterm and 5 cases were post term.

**TABLE VI: NEONATAL MORBIDITY**

Morbidity	Number Of Cases	Percentage
Meconium aspiration syndrome	05	05%
Birth asphyxia	03	03%
Prematurity	04	04%
Sepsis and pyrexia	02	02%
IUGR	01	01%
Total	15	15%

Out of 96 live births, 15 babies required NICU admission, out of which meconium aspiration syndrome and prematurity ranked foremost followed by rest of the complications.

## DISCUSSION:

Most of the cases were unregistered (72%) with no regular antenatal checkups and came as emergency admission to labour ward late in labour. Out of all the cases, 75% of cases were dealt with by emergency caesarean section probably because they were referred to our hospital, being a tertiary referral center for many rural areas around.

In a study conducted by Ford J et al<sup>6</sup> primary caesarean section in multi was comparable with our study, maximum number of cases being para 2 (60%).

The four main indications for caesarean section in our study were abnormal presentations (24%), fetal distress (20%), antepartum hemorrhage (12%) and CPD (9%). Malpresentations were present in 24% of the cases which is little high compared to P. Himabindu et al<sup>2</sup> and less than Jyothi Rao et al<sup>7</sup> and almost equal to Surekha S. Mohan et al<sup>8</sup>. The incidence of malpresentation increases with parity occurring 10 times more frequently in patients of parity three or more than in a primi gravida.

In this study, incidence of fetal distress as an indication for caesarean section is 20% which is higher than the study by Surekha S. Mohan et al<sup>8</sup> and less than study by P. Himabindu et al<sup>2</sup>.

In our study, incidence of APH as an indication for primary section is 12% which is almost comparable to P. Himabindu et al<sup>2</sup> study and it is less than when compared to other studies like Jyothi Rao et al<sup>7</sup> and Erika Desai et al<sup>3</sup>.

In present study, incidence of CPD was 9%, which is more when compared with P. Himabindu et al<sup>2</sup> and very less compared with Erika

Desai et al<sup>3</sup>.

In our study the causes of maternal morbidity were fever, urinary tract infection, and paralytic ileus, respiratory tract infections and wound infections. PPH was seen in one case. Similar results were seen when compared to other studies like P. Himabindu et al<sup>2</sup> and Surekha S. Mohan et al<sup>8</sup>.

In our study there were 96 live births and 4 still births out of 100 cases. Out of 96 cases, common neonatal morbidity found is prematurity and Meconium aspiration syndrome followed by birth asphyxia. Similar results were seen in other studies like Surekha S. Mohan et al<sup>8</sup>.

## CONCLUSION:

From our study it is obvious that many unforeseen complications occur in women who previously had a normal vaginal delivery. Multipara belong to high risk group who may have many unforeseen obstetric complications which were frequently overlooked due to false sense of security arising from previous vaginal deliveries.

This study high lights the importance of sound antenatal practices and appropriate labour management. Though vaginal delivery is always safer than caesarean section, difficult vaginal delivery and obstructed labour carriers more morbidity and perinatal mortality when compared to elective caesarean section. The impression that a multipara has had one or more vaginal deliveries should be regarded as an optimistic historical fact, not as a diagnostic criteria for spontaneous delivery of the pregnancy at hand. There should be no complacency on the part of the obstetrician while treating a multiparous woman and she should be treated on par with primis.

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