

Clinical Study of Primary Caesarean Section in Multiparous Women

Dr M. Mallika¹ Dr R. Suchitra² Dr S. Shamshad begum³

¹(Assistant professor, Department of Obstetrics & Gynaecology, Govt Medical college, Ananthapuramu, Andhra Pradesh, India)

²(Associate professor, Department of Obstetrics & Gynaecology, Govt Medical college, Ananthapuramu, Andhra Pradesh, India)

³(Professor & HOD, Department of Obstetrics & Gynaecology, Govt Medical college, Ananthapuramu, Andhra Pradesh, India)

Corresponding Author: Dr. R. Suchitra²

Abstract

Aims & Objectives: To study the incidence, indications of primary caesarean section in multiparous women. To study the maternal and perinatal outcome after primary caesarean section in multiparous women.

Materials and Methods: It is a prospective study of 120 cases of caesarean section done for the first time in multipara for a period of 8 months from 1st January 2019 to 31st Aug 2019 at government general hospital, Ananthapuramu. For all the cases, blood was sent for basic investigations like Haemoglobin, Random blood sugar, Blood grouping and typing, total count, differential count. Special investigations like Liver function tests, Renal function tests done when required and Ultrasonography for placental localization, estimated fetal weight and to rule out abruption.

Results: There were 6210 deliveries during this period and 2405 caesarean sections were done, which represented 38.7% of all deliveries. Incidence of primary caesarean sections in parous women is 4.9% of all caesarean sections. Majority (55%) of patients were from the age group 21-25 yrs. 32.5% patients were booked cases and 67.5% were unbooked cases. Among the various maternal indications for caesarean section, fetal distress (25%) and malpresentations (23.3%) were common in multipara. There were no cases of maternal mortality in our study. Wound sepsis and pyrexia were more common causes of post operative morbidity. A total of 37 (30.8%) babies were admitted in NICU. Most common indications for NICU admissions were Meconium aspiration syndrome and Prematurity.

Conclusion: From the above study it is very clear that, many unforeseen complications can occur in woman who previously had a normal vaginal delivery. Difficult vaginal delivery and obstructed labour carries more morbidity and perinatal mortality when compared to caesarean section. Good antenatal and intrapartum care and early referral will reduce the maternal and perinatal morbidity and mortality in multipara.

Key words: Primary Caesarean section, Multipara, Maternal outcome, Neonatal outcome,

Date of Submission: 08-04-2020

Date of Acceptance: 23-04-2020

I. Introduction

The term Caesarean Section defines the delivery of the baby through incision made on the abdominal wall and on intact uterus after the period of viability.

Primary Caesarean Section in multipara means first Caesarean Section done in patients who had vaginal delivery once or more before. Multipara means those who had delivered once or more after the age of viability. It includes multipara (Para 2, 3, 4) and grand multipara (Para more than 4)¹.

It is a common belief amongst public that once a mother delivers her child normally, all her subsequent deliveries will be normal. As a result such multiparous mother often neglects routine antenatal checkup. Even though they have delivered once vaginally, they may have cephalo-pelvic disproportion in view of pendulous abdomen with lordosis of the lumbar spine responsible for failure of the head to engage.²

With the introduction of modern technology in the labour wards like cardiotocography, color doppler, biophysical profile, there was increase in caesarean section rates with numerous other medical, social, economic and medico-legal factors which are also responsible for the alarmingly high rate of caesarean section all over the world.³ The other responsible factors for rise in caesarean section rate in multipara are identification of high risk pregnancies with improved antenatal care and antepartum fetal surveillance techniques, rising rates of

induction of labour, decrease in operative vaginal deliveries, and vaginal breech deliveries, increased number of woman with pregnancies after 30 yrs with associated medical complications.

With introduction of modern anesthesia, blood transfusion facilities and higher antibiotics, the indications for caesarean section are liberalized to include dystocia, placenta previa, fetal distress, BOH, and others.⁴ Caesarean section is to be considered to avoid prolonged and difficult vaginal operative delivery so as to reduce maternal and perinatal morbidity and mortality.

Aims & Objectives: To study the incidence, indications of primary caesarean section in multiparous women. To study the maternal and perinatal outcome after primary caesarean section in multiparous women.

Inclusion criteria: 1) Multipara 2) Pregnancy > 32 wks 3) Multiple pregnancy

Exclusion criteria: 1) Gestational age < 32 wks 2) Previous LSCS

II. Materials And Methods

It is the prospective study of 120 cases of primary caesarean section done in multipara during the period from 1st January 2019 to 31st August 2019 in the government general hospital, Ananthapuramu which is a tertiary care hospital. 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, AFI measurement. Labour monitored by partogram and intra-partum CTG was done where required. Decision for caesarean section was based on clinical evaluation and progress of labour. All intra-operative details were noted and complications managed accordingly. Post-operative period was monitored and all complications were managed as per regular protocol.

III. Results

During the study period there were 2405 total caesarean sections performed among them 120 cases were primary caesarean sections in multipara. These cases were analyzed. Incidence of primary caesarean section in parous women is 4.9% of all caesarean sections.

Table 1: Proportion of caesarean sections in multipara

	No of cases	Percentage
Total no of Deliveries	6210	
Total no of CS	2405	38.7
Total no of primary CS in multipara	120	04.98

Table 2: Age distribution of the cases.

Age (years)	No of cases	Percentage
21-25	66	55
26-30	46	38.3
31-35	08	06.7

Most of them were in the age group of 21 – 25yrs (55%).

Booking status

Status	No of cases	Percentage
Booked	39	32.5
Unbooked	81	67.5

Majority of the cases were unbooked (67.5%)

Parity distribution of cases

Parity	No of cases	Percentage
2nd Gravida	65	54.2
3rd Gravida	39	32.5
4th Gravida	10	8.3
5th Gravida	06	5.0

Most of them were gravida 2 (54.2%) & gravida 3 (32.5%)

Indication of primary caesarean section in Multigravida

Indication	No of cases	Percentage
Fetal distress	30	25.0
Malpresentations	28	23.3
Placenta previa	13	10.9
Failed induction	12	10.0
Oligohydromnios	11	9.2
Obstructed labor	09	7.50
Abruption	07	5.8
CPD	06	5.0
BOH	04	3.3

Most common indication is fetal distress corresponding to 25% of the cases followed by malpresentations corresponding to 23.3%

Incidence of various Malpresentations

Type	No of cases
Breech	15
Transverse	09
Compound	03
Mentoposterior	01

Most common malpresentation leading to primary caesarean section in multipara is breech.

Various causes of maternal morbidity

Causes	No of cases	Percentage
Wound sepsis	08	6.7
Abdominal distension	05	4.2
Pyrexia	12	10
PPH	10	8.3

Pyrexia is the most common cause of maternal morbidity.

Birth weight (In kilograms)

Weight	No of cases
2-2.5	25
2.5-3.0	62
>3	33

Most of the babies birth weight falls between 2.5- 3kgs.

Neonatal morbidity

NICU Admissions	No of Babies	Percentage
Preterm care	14	37.8
MAS	12	32.4
Birth Asphyxia	03	8.1
IUGR	06	16.2
Sepsis	02	5.5

Preterm and meconium aspiration syndrome were most common causes of NICU admissions. There were 6 perinatal deaths due to meconium aspiration syndrome (3 cases), respiratory distress syndrome (2 cases), and prematurity (1 case).

IV. Discussion

This prospective study was done in the department of obstetrics and gynaecology at Government general hospital, Ananthapuramu. A total of 120 cases were studied during the period of 8 months from Jan1 2019 to 31 August 2019.

A multipara who has earlier delivered vaginally may still require a caesarean section for safe delivery.

The total number of deliveries during this study period was 6210 and the total number of caesarean sections was 2405 with caesarean section rate of 38.7 %. Rajput N et al⁵ found a comparable caesarean sections rate of 37.3% in their study. The higher Caesarean section rate in our institution was because ours is a tertiary care center.

In Erika Desai et al⁶ study the proportion of booked / unbooked cases were 27.90% / 72.09% these results were resembling present study results accounting for 32.5% booked and 67.5% unbooked cases.

In the present study, maximum number of women undergoing primary Caesarean section were in the age group of 21-25 years (55%). This result may be due to the trends of early marriage and lack of education resulting in high fertility in early ages. Preeti bajaj et al⁴ also found similar results with 51% of cases belonging to 21-25yr age group.

In our study most the cases were gravida 2 (54.2%) which is comparable to study by Preeti bajaj et al⁴. In their study 55% of cases were gravida 2.

The most common indication for primary Caesarean section rate in multipara in our study was fetal distress accounting for 25% of the cases which is comparable to that observed in sherin sams et al⁷ study (27.07%). Next common indication is malpresentation accounting for 23.3% of cases. The factors responsible for malpresentations were lax and pendulous abdominal wall in multigravida, imperfect uterine tone, and extreme uterine obliquity.

In our study with good intra operative and post operative care there was no maternal mortality. The causes of maternal morbidity were fever, urinary tract infection, paralytic ileus, wound infection and puerperal sepsis. In our study of post-operative maternal morbidity the percentage is more in puerperal pyrexia of 10% which is comparable with study of Erika Desai et al⁶(11.63%).

V. Conclusion

Multiparity is a problem associated with poverty, illiteracy, ignorance and lack of knowledge of the available antenatal care and family planning methods. A multipara who has earlier delivered vaginally may still require a caesarean section for safe delivery. Primary caesarean sections in multipara constitute only a small percentage of total deliveries (4.98%) but are associated with high maternal and fetal morbidity. Good intrapartum and postpartum care have eliminated maternal deaths in our study. Hence a multiparous women in labour requires the same attention as that of primigravida. Good antenatal and intrapartum care and early referral will reduce the maternal and perinatal morbidity and mortality in multipara.

Bibliography

- [1]. Solomon B. The dangerous multipara. *Lancet* 1932;2:8-11.
- [2]. Basak S, Lahri D. Dystocia in eutocic multigravida. *J Obstet Gynecol India*. 1975;25:502-7.
- [3]. P.Himabindu, M. Tripura Sundari, K.V.Sireesha, M V. Sairam. "Primary Caesarean Section In Multipara." 2015; 14(5): 22-25.
- [4]. Preeti Bajaj, G.K. Kadikar et al A Study of Primary Caesarean Section in Multipara *NJIRM* 2017; Vol. 8(2) March – April eISSN: 0975-9840 pISSN: 2230 – 9969.
- [5]. Rajput N et al. Study of primary caesarean section in multigravida patients *Int J Reprod Contracept Obstet Gynecol*. 2018 Jan;7(1):185-191.
- [6]. Desai E, Leuva H, Leuva B, Kanani M. A study of primary caesarean section in multipara. *Int J Reprod Contracept Obstet Gynecol*. 2013; 2(3): 320-324.
- [7]. Dr Sherin Sams et al Institutional Study of Primary Caesarean Section among Multigravida *JMSCR* Volume 05 Issue 04 April 2017.