

Study of Primary Cesarean Section in Multiparous Women at Tertiary Care Hospital

Dr. Ankita Choudhary¹, Dr. Rekha Jakhar²

¹Resident, Department of Obs and Gynae, Dr. S.N Medical College, Rajasthan, India

²Professor, Department of Obs and Gynae, Dr. S.N Medical College, Rajasthan, India

Corresponding Author: Dr. Ankita Choudhary

Abstract

Background: Cesarean delivery is one of the most commonly performed surgical procedure across the world. Primary cesarean section in a multipara means first cesarean in a woman who has undergone childbirth vaginally once or more. With the advancement in technology it has become much safer and therefore C-section rates are on a continuous rise. The objective of this study was to study the cesarean section in context of various indications, age incidence and to evaluate maternal and perinatal outcome.

Methods: It was an observational study of primary cesarean section done in multiparous women at Umaid Hospital, Dr. S.N Medical college at the Department of Obs and Gynae over a period of six months. Labour was monitored throughout as per protocol and indication of cesarean section noted.

Results: During the study period a total of 3170 cesarean deliveries were conducted in our hospital and it was observed that proportion of primary cesarean in parous women was 17.44%. The maximum number of women undergoing cesarean section were in age group of 25-29 years (39.78%). APH was the most common indication for cesarean section, having highest number of cases 144 (26.04%) which was just followed by fetal distress, 118 (21.34%) and then the no. of cases having malpresentations were 97 (17.54%).

Conclusion: Every pregnancy is different so is every childbirth so, complications may occur in women who previously had a normal vaginal delivery at any stage making cesarean section mandatory for her. Labour in these women should be monitored with utmost vigilance as in a primigravida. So, the belief –that multipara means an easy labour is a myth and may not always assure a spontaneous vaginal delivery.

Date of Submission: 27-11-2018

Date of acceptance: 08-12-2018

I. Introduction

There is a trend of worldwide increase in cesarean section rates. It is one of the most commonly performed surgical procedure across the world. Primary cesarean section in a multipara means first cesarean in a woman who has undergone childbirth vaginally once or more. Attention has focussed to reduce its use due to the concern that higher cesarean section rates do not confer any additional health gain but - may increase maternal risk, have implications on future pregnancies, lead to an increased risk for repeat cesarean delivery.

WHO recommends that the cesarean section rate of > 15% is not justified (1). The increase in cesarean rates has been attributed to factors such as fetal monitoring with early detection of fetal distress, early detection of high risk cases increasing maternal age at delivery, changes in clinical management of labour, rising rates of elective induction of labour and socio-economic factors (2) and the common reasons in multipara include placental localisation and an increase in size of fetus or fetal head leading to CPD. It is a common belief that if a mother delivers her child vaginally, all her successive deliveries will be normal, and a sense of false security prevails in them but not only the labor in primigravida may be a difficult one, an obstetrician may encounter hard times in cases of labour in multiparous women. Unforeseen complications that may occur in multipara were identified long ago and studied by Solomon in 1932, who called them as “dangerous multipara” (3) and Feeny (4) in 1953 as “unpredictable multipara”.

The objective of this study was to study the cesarean section in context of various indications, age incidence and to evaluate maternal and perinatal outcome.

II. Material And Method

It is an observational study of over 553 cases of cesarean section done for the first time in multipara for a period of 6 months from Jan 2016 to June 2016

Inclusion Criteria: multigravida, pregnancy >32 weeks, multiple pregnancy

Exclusion Criteria: Primigravid, Prev. LSCS, Gestational age <32 weeks, Known medical complication except anaemia Labour was monitored through out as per protocol and indication of cesarean section noted ,detailed history of patient was taken at admission with reference to present pregnancy and also previous pregnancy,basic investigations like CBC,RFT ,LFT ,RBS,HIV ,HBsAg ,VDRL done,USG done to estimate gestational age , for placental localisation and to rule out any congenital anomaly. Decision for mode of delivery made based on evaluation of progress of labour and maternal and fetal indications.All intra-operative details recorded.All neonates were attended by paediatrician.All post-operative maternal complications and newborn complication noted and managed appropriately.

III. Results

During the study period a total of 3170 cesarean deliveries were conducted in our hospital and it was observed that proportion of primary cesarean in parous women was 17.44%. The study was done on these 553 cases.

| Total no. of | No. of cases | Percentage |
|-----------------------------|--------------|------------|
| Primary C.S in multigravida | 553 | 17.44 |
| C.S in primigravida | 1265 | 39.91 |
| Repeat C.S | 1352 | 42.65 |

Distribution of cases according to age and parity

The maximum number of women undergoing cesarean section were in age group of 25-29 years(39.78%) and majority of patient belonged to parity 2 with an incidence of 37.9 followed by para 1 with an incidence of 32.

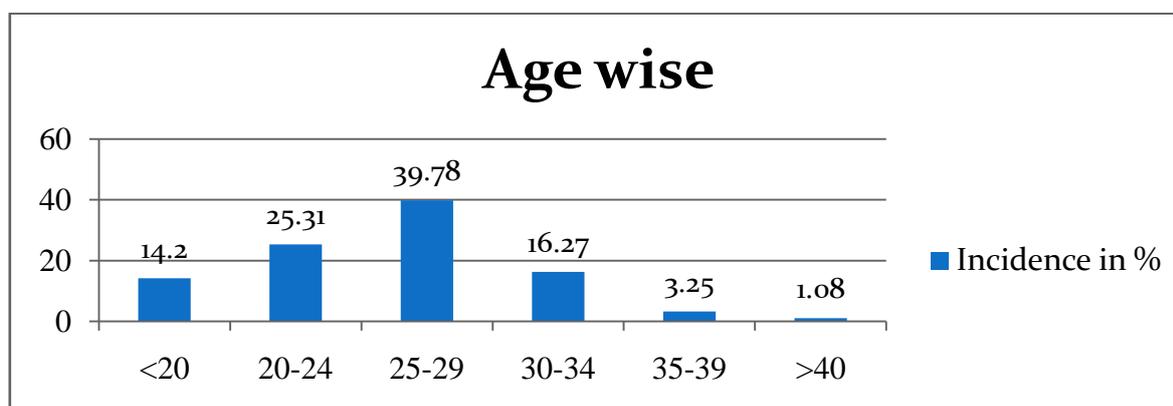


Table 1: Distribution According to Parity Status

| S.no | Parity | No. of cases | % of cases |
|------|----------------|--------------|------------|
| 1 | Para 1 | 177 | 32 |
| 2 | Para 2 | 210 | 38 |
| 3 | Para 3 | 83 | 15 |
| 4 | Para 4 | 33 | 6 |
| 5 | Para 5 | 28 | 5 |
| 6 | Para 6 & above | 22 | 4 |

Table 2: Status of Cases

| S.NO. | ANC BOOKING | No. | % |
|-------|-------------------|-----|-------|
| 1. | Booked | 188 | 34 |
| 2. | Unbooked | 365 | 66 |
| S.NO. | REFERRAL STATUS | No. | % |
| 1. | Referred | 196 | 35.44 |
| 2. | Direct admissions | 357 | 64.56 |

Out of 553 cases 188(34%) were booked at our hospital and unbooked were 365(66%) showing negligence towards antenatal care. Further the no. of cases that were referred were 196(35.44%), direct admissions included 357(64.56%) cases .

Table 3: Maternal indications for C.S

| S.NO. | INDICATIONS | NO. | PERCENTAGE% |
|-------|-----------------|-----|-------------|
| 1. | APH | 144 | 26.04 |
| 2. | Fetal Distress | 118 | 21.34 |
| 3. | Malpresentation | 97 | 17.54 |

| | | | |
|-----|-------------------|----|------|
| 4. | Prolonged labour | 48 | 8.68 |
| 5. | CPD | 40 | 7.23 |
| 6. | BOH | 28 | 5.06 |
| 7. | Failed induction | 28 | 5.06 |
| 8. | Cord Prolapse | 22 | 3.98 |
| 9. | Obstructed labour | 17 | 3.07 |
| 10. | Impending Rupture | 11 | 1.99 |

APH was the most common indication for cesarean section, having highest number of cases 144(26.04%) which was just followed by fetal distress, 118(21.34%). Then the no. of cases having malpresentations were 97(17.54%). Around 48(8.68%) patients had prolonged labour and 40(7.23%) had CPD. Cesarean in 28(5.06%) patients were done for bad obstetric history and in same no. of patients for failed induction and in 22 patients for cord prolapse. 17(3.07%) came with obstructed labour. Only 1.99% of pts were operated for impending rupture.

Table 4: Type of cesarean

| S.NO. | TYPES | No. | % |
|-------|-----------|-----|----|
| 1. | Elective | 155 | 28 |
| 2. | Emergency | 398 | 72 |

The number of patients who underwent emergency cesarean section were 398(72%) and 28% of patients were taken for elective cesarean section. The most common indication for elective cesarean was malpresentation like transverse lie and breech followed by placenta previa and then CPD.

Table 5: Various causes of Maternal Morbidity

| S.NO. | TYPES | NO. | % |
|-------|-------------------------------|-----|------|
| 1. | PPH | 54 | 9.76 |
| 2. | Wound sepsis | 42 | 7.59 |
| 3. | Extension of uterine incision | 32 | 5.78 |
| 4. | Pyrexia | 31 | 5.60 |
| 5. | Paralytic ileus | 19 | 3.43 |
| 6. | Prolonged catheterization | 7 | 1.26 |
| 7. | Psychosis | 2 | 0.36 |

In this study, 34% of patients had intra operative or post-operative complications leading to maternal morbidity, commonest being PPH seen in 54(9.76%) patients. PPH occurred intra op. in 32 patients while the rest had PPH in post-op period mainly in first 6-8 hrs. Second common complication noted was wound sepsis in 42(7.59%) patients.

Extension of uterine incision was seen in 32(5.78%) patients, usually those who presented with obstructed labour.

31(5.60%) had pyrexia, paralytic ileus was seen in 19(3.43%). 5 of these pts. required Ryle's tube insertion while the rest were kept NBM till 3rd post op day. 7 pts. Required prolonged catheterisation and 2 pts also had post -partum psychosis.

There were 2 maternal deaths noted in the study population. Both patients were referred to our hospital and primary cause of death was irreversible haemorrhagic shock due to PPH.

One of them came to us in moribund condition with APH due to placenta previa patient, also underwent cesarean hysterectomy but could not be saved.

Table 6: According to Fetal Outcome

| S.NO. | TYPES | No. | % |
|-------|----------------|-----|-------|
| 1. | NICU Admission | 74 | 13.38 |
| 2. | IUFD | 22 | 3.97 |

In this study 82.64% of newborns were healthy and shifted to mother. There were 22(3.97%) IUFD's , causes were abruptio placentae, transverse lie with obstructed labour, congenital anomalies. There were 74(13.38) NICU admissions causes being preterm/low birth weight , low apgar score and fetal distress with meconium stained liquor.

IV. Discussion

Incidence of primary cesarean section in multipara in this study was 17.44% which is comparatively lower than the incidences in studies done by Desai et al(5) which was 29.05% & Himabindu et al(6), whose incidence was much higher at around 40%. The higher cesarean rate was because our hospital is a tertiary

referral centre for many rural areas from where high risk cases are referred. Among the indications for primary cesarean sections, the most common were APH(26.03 %) followed by fetal distress(21.33%) & malpresentations(17.54%) similar to study done by Desai et al(5).

Most of the cases were unbooked(66%) with no antenatal check ups, highlighting the need for appropriate care in ANC period to detect high risk cases timely ,which was similar to percentage of unbooked cases in study done by Himabindu et al(6), whereas the incidence of booked and unbooked cases in study done by R.Samal et al(7), were 97.1% and 2.9% respectively.

In present study maximum no. of patients undergoing primary cesarean section were in age group of 25-29 years(39.78%) which was similar to study done by Sethi et al(8) , where majority of patients(40%) belonged to this age group. This may be due to trend of early marriage, lack of education & unawareness regarding family planning methods.

The electronic fetal monitoring ,commonly used to detect fetal distress is known to have poor specificity resulting in increased no. of cesarean . Fear of litigation increases the use of continuous fetal monitoring and intervention in early labour. Malpresentations are more common in a grand –multipara and are favoured by a pendulous abdomen & lordosis of lumbar spine. Post-operative complication were seen in 34% of cases which was lower than the study done by Desai et al(5) in which it was around 46%. There were 2 maternal mortalities and 1 patient underwent subtotal hysterectomy for PPH.

V. Conclusion

Every pregnancy is different so is every childbirth so, complications may occur in women who previously had a normal vaginal delivery at any stage making cesarean section mandatory for her. Multipara ,especially grandmultipara are usually of low socioeconomic status, poor, ignorant , illiterate and unaware of family planning methods. These belong to high risk group and shall not be overlooked. Proper antenatal care and counselling regarding adoption of small family norms may help in reducing maternal morbidity. Labour in these women should be monitored with utmost vigilance as in a primigravidae. Though vaginal delivery is safer than cesarean section ,in some cases cesarean may be life saving for both mother and fetus. So, the belief –that multipara means an easy labour is a myth and may not always assure a spontaneous vaginal delivery.

References

- [1]. BJOG DOI:10.1111/1471-0528.13526
- [2]. Mala Vijaykrishnan, Bhaskar Rao K. Cesarean deliveries –changing trends. In Arulkumaran S, Ratnam SS, Bhaskar Rao K (Editors). The management of Labour, 2nd edition, Hyderabad , Oreint Longman, 2005: p.351-63.
- [3]. Solomon, B. (1934) The Dangerous multipara. Lancet, 2, 8-11.
- [4]. Feeny K. The Unpredictable multipara. J Irish Med Assoc 1953; 32:36-40.
- [5]. Desai et al. Int J Reprod Contracept Obstet Gynecol. 2013 sep; 2(3):320-324.
- [6]. Samal R et al. Int J Reprod Contracept Obstet Gynecol. 2016 May; 5(5):1506-1509.
- [7]. Sethi et al. Perspectives in medical research 2014; 2:3-7.
- [8]. Himabandu P, Tripura SM , Sireesha KV, Sairam MV. Primary Csarean Section in Multipara. IOSR-JDMS. 2015; 2014(5):22

Dr. Ankita Choudhary, "Study of Primary Cesarean Section in Multiparous Women at Tertiary Care Hospital". IOSR Journal of Dental and Medical Sciences (IOSR-JDMS), vol. 17, no. 12, 2018, pp 44-47.