



Clinical Study of Primary Caesarean Section in Multiparous Women

Dr.G .Partha Saradhi Reddy

M.D;D.G.O, Assistant Professor, Govt. Maternity Hospital, Tirupathi S.V. Medical College, Tirupathi.

Dr.S.Venkata Ramana

M.D;D.G.O, Assistant Professor, Govt. Maternity Hospital, Tirupathi S.V. Medical College, Tirupathi.

Dr. Salma Bhanu,PG

S.V. Medical College, Tirupathi. Subject to be published under : Gynaecology and Obstetrics.

ABSTRACT

primary caesarean section is the first caesarean procedure for the mother irrespective of parity. The present study focuses on the indication for caesarean section in multiparous women who delivered vaginally earlier atleast once after period of viability. The caesarean sections done in second stage will also be analyzed for their maternal and fetal outcome.

KEYWORDS

caesarean section ,primipara, multipara, indication,

Introduction

Caesarean section rates show a wide variation among the countries in the world ranging from 0.4% to 40% and the trend in continuous rise has been observed in the past 30 years.

Primary caesarean section rate contribute to nearly 49% of the total caesarean section rate and it is on the increase. WHO recommends that a caesarean section rate of more than 15% is not justified. The increase has been attributed to factors such as fetal monitoring with early detection of fetal distress, the need for repeat caesarean section, increasing maternal age at delivery, socioeconomic factors, and changes in clinical management of labour.

The aim of the study is to know the indications and need of primary caesarean section in multiparous women who had atleast one vaginal delivery previously after period of viability.

To study incidence according to age and parity.

To study maternal and fetal outcome.

Observations

This is a prospective study undertaken to analyse 436 cases of caesarean section done for first time in multiparous women.

There were 25,206 deliveries during the study period, around 5673 caesarean sections were done, which represented 22.506% of all deliveries.

Incidence of primary caesarean section in parous women is 1.73% of all deliveries and accounted for 7.68% of all sections done.

Frequency of primary caesarean section in multipara.

Total number of deliveries 25,206, total no of caesarean sections 22.506%, total number of primary caesarean sections 12.76%, total number of caesarean sections in primigravida 11.03%, total number of caesarean sections

in multipara 1.73%, total number of primary caesarean section in para 1 is 1.25%.

Distribution of cases according to age in multipara :

Maximum number of women undergoing primary caesarean section were in age group of 25-29 years (45.18%) and the lowest number were in the age group less than 20 years. In the present study younger mother as 19 years and the oldest was 37 years of age. With advancing age incidence of caesarean section decreased.

Distribution of cases according to registration status :

analysis	No of cases	%
booked	342	78.44%
Booked outside	51	11.69%
Un booked	43	9.86%

Associated maternal disorders:

Total 58 parous women had associated medical complications (13.3%). Almost all patients were mild to moderate anemic and 10 patients had severe anemia with Hg less than 7gms/dl, and they required blood transfusion. In these patients surgery done for obstetric indications. 40 patients had PIH, 4 patients had antepartum eclampsia, 17 had severe PIH, 19 had mild PIH, 3 had chronic hypertension, 3 patients had gestational diabetes, 2 had bronchial asthma, 2 patients had epilepsy, 1 patient had hypothyroidism, 3 patients had associated gynaecological disorders.

Incidence of type of operation:

Type of operation	No. Of cases	%
Emergency	390	89.44%
elective	46	10.55%

Indications of primary caesarean section in multipara:

In the present study malpresentation accounted for 30.73% followed by failed induction 15.36% as the commonest indications. CPD accounted for 10.32%, antepartum haemorrhage 8.90%, failed progress accounted for 8.25%, fetal distress accounted for 8.02%, obstructed labour accounted for 5.04%, cord prolapse for 2.06%, BOH for 2.06% , abnormal Doppler for 1.37%, severe PIH for 0.91%, unstable lie for 0.91%, eclampsia for 0.68%.

In grand multipara which constituted one case, multiple preg-

nancy with breech malpresentation was the indication for primary caesarean section.

Indications

Out of 22 cases undergoing primary caesarean section for the indication of obstructed labour 17 women had previous normal deliveries and in remaining 5 cases probable pelvic contraction as the cause as evidenced by previous prolonged and difficult deliveries resulting in instrumental delivery by outlet forceps, 6 cases had still births during previous deliveries.

Incidence of malpresentations in multipara

Most common malpresentation was breech accounting for 60.44% of all malpresentations and followed by transverse lie 15.6%. There were 17 cases of twin pregnancy. One case came with 1st twin delivered and 2nd twin with breech. In other 16 cases first twin was breech presentation.

Causes and type haemorrhage as indication for primary caesarean section in multipara

There were 39 cases of antepartum haemorrhage. Placenta previa accounted for 29 cases and remaining 10 cases abruptio placenta. Out of 29 cases of placenta previa, 20 received blood transfusion. Out of 10 cases of abruptio placenta, 7 received blood transfusion.

Indication of primary caesarean section in multiparous women in the present study.

For malpresentations is common in 20-24 age group

For indication of placenta previa is common in 20-24 age group and para -1

For Indication of abruptio is common in 25-29 age group and para-1

For indication of oligohydramnios common in 25-29 age group and para-1

For indication of CPD common in 20-24 age group and para-1

For indication of fetal distress common in 20-24 age group and para-1

For indication of obstructed labour is common in 20-2 age group and para-1

Indication of cord prolapse common in 25-29 age group and para-1

Indication of failed induction incidence is same in 20-25 and 25-29 age group and para-1

For indication of failed progress common in 25-29 age group and para-1

Indication of BOH common in 25-29 age group and para-1

For eclampsia common in 25-29 age group and same distribution in para-1, para-2, para-3.

For sever PIH and occipitoposterior common in para1 and para 3 in age group 30-34 and 25-29 respectively.

There is significant association between indications of caesarean section according to age and parity.

The indication of primary caesarean section in multiparous women in the present study for malpresentation

For breech presentation, compound presentation, cord presentation, is common in 20-24 age group.

Transverse lie, twin presentation, transverse lie is common in 25-29 age group.

Face and brow presentation is common in 20-24 and in 25-29 age group.

In the present study all malpresentations are common in para-1 group. There is significant association between the type of malpresentation and its distribution according to age and parity.

In the present study out of 436 cases in their previous pregnancies 88 abortions, 98 perinatal deaths out of which 45 still births, 29 preterm deaths and 25 full term deaths.

Intra operative complications in primary caesarean section in multipara

Around 21 patients had intraoperative complications with an incidence of around 4.81. PPH was seen in 11 cases. These complications were seen in patients with obstructed labour, and in patients with APH.

Subtotal hysterectomy was done in one case of placenta previa for complication of atonic PPH. In 9 cases there was extension of uterine incision and was sutured. Uterine artery ligation was done in one case. Upper segment caesarean section was done in one case of placenta previa. Anomalous uterus found in 2 cases (arcuate uterus, septate uterus).

Intra operative complications are similar in 20-24 and 25-29 age group, more in para-2 followed by para-1.

Blood transfusion was given in 41 patients (9.04%), for APH and PPH and anemia.

Perinatal morbidity in primary caesarean section in multipara

52 babies out of 453 babies had perinatal morbidity and required NICU admission. Birth asphyxia, IUGR were the most commonest cause accounting for 50% and 25% cases respectively. Meconium aspiration seen in 10 cases.

Indications causing perinatal morbidity: out of 52 babies 17.3% of babies admitted in NICU were the babies of mothers who underwent caesarean section for fetal distress followed by malpresentation and APH.

Indications causing perinatal mortality: out of 453 babies there were 14 still birth and 17 were early neonatal deaths, common cause of still birth being fetal distress.

Out of the 52 babies admitted to NICU 17 died and 35 improved. Perinatal mortality seen in 31 babies.

Common cause for perinatal mortality was fetal distress and this could be reduced by strict fetal heart monitoring, early artificial rupture of membranes in indicated cases to know liquor status, and fetal heart monitoring in high risk cases.

Intra operative and post operative complications and its distribution in relation to registration status.

Out of 21 cases with intra operative complications 12 cases were booked cases, one case was booked and 8 unbooked. Intraoperative complications was seen in 3.51% of total booked cases, 2.32% of booked outside and 18.6% of unbooked cases.

Out of 48 cases of postoperative complications 37 were booked cases, 6 were booked outside, 5 were unbooked. Post operative complications was seen in 10.8% of total booked cases, 11.76% of booked outside cases, 11.62% of unbooked cases. Intraoperative and postoperative complications were less in booked cases.

Perinatal morbidity and perinatal mortality and its distribution in relation to registration status

Out of 52 babies of Perinatal morbidity 33 cases were booked, 11 cases were booked outside and 8 unbooked. Out of 14 perinatal deaths 11 cases were booked, 2 cases were

booked outside and 1 case unbooked. Perinatal morbidity and perinatal mortality is less in booked cases.

Discussion

This is a prospective study undertaken to analyse 436 cases of caesarean section done for first time in multiparous women.

There were 25,206 deliveries, around 5673 caesarean section which represented 22.506% of all deliveries.

Incidence of primary caesarean section in parous women is 1.72% of all deliveries and accounted for 7.68% of all sections done.

Incidence of total caesarean section in total deliveries is 22.506% and it is almost nearer to Bhasin SK series 25.4%.

In the present study incidence of caesarean section in total caesarean section is 56% and is nearer to Abdul Aziz 49% and Adnan Abu Omar 48% et al studies.

Incidence of primary caesarean section in multiparous women is 1.73% and it is nearer to van Praag 1.9% and Tovell series.

In the present series maximum number of women undergoing primary caesarean section in multipara were in the age group 25-35 years (54.58%). In Kiyoko N Parish series maximum number of patients were in the age group of 25-35 years. In Adnan A. Abu Omar series, maximum number of patients were in the age group of < 25 years.

In the present study the parity group maximum number in para group 1.

In Mohammed S. Hiasat series the maximum number of this may be due to more older child bearing women and delay in childbirth in the Jordan.

In the present study incidence of caesarean section in booked cases is 78.4%. According to Ugwu et al study incidence of caesarean section in booked cases is 57.5%.

Indications for primary caesarean section in multiparous women compared to other studies.

indication	Pragg& tovell %	Sidney a.joneste al %	Adnan.abu omar et al%	Present study
Malpresentation	10.18%	22.72%	7.8%	30.7%
Placenta previa	14.21	22.72	2.8	6.65
abruption	4.97	8.5	1.4	2.29
CPD	27.25	15.99	6.5	10.3
Fetal distress	7.6	-	20.2	8.02
Failed induction	-	-	2.7	15.3
Obstructed labour	-	-	-	5.04
Failed progress	-	-	30.1	8.25
Cord prolapse	-	10.2	0.96	2.06
BOH	-	-	1.8	2.06
oligohydramnios	-	-	-	4.58
Medical disorders	3.3	1.13	5.5	1.91

Maternal mortality

In the present study maternal mortality is nil. This may be because of availability of antibiotics, blood transfusion facilities, safe methods of anesthesia, timely intervention, better surgical techniques and operative skill of obstetrician. The small study group might be the cause for maternal mortality being nil.

However, maternal and perinatal mortality and morbidity are typically higher with caesarean section than with vaginal deliveries in part because of the complications that led to caesarean section and in part because of increased risks inherent in the abdominal route of delivery. But still caesarean section is more safer than difficult vaginal delivery.

Efforts to lower caesarean section rate should focus on the

areas of fetal distress, failure to progress in labour and by attempting vaginal birth after caesarean delivery.

Summary

The study " Primary caesarean section in multiparous women " was done at Government Maternity Hospital, Tirupati.

This is a prospective study of 436 cases of primary caesarean section in multiparous women.

Frequency of primary caesarean section in multiparous women as 1.729%

Majority of the women were para-1 and in 20-24 age group and 78.44% of the patients were booked and 9.40% of the patients were referred.

13.3% had associated medical complications. Almost all cases were suffering from mild anemia, 17.24% severe anemia, 68.96% suffering from PIH.

Malpresentation accounted for 30.73% followed by failed induction 15.36% as the most common indications for caesarean section.

Out of 436 cases 89.44% were emergency caesarean sections.

4.81% cases had intra operative complications, 11% had post operative morbidity.

Blood transfusion as required in 9.04%.

Intraoperative & post operative complications were less in booked cases.

52 babies out of 453(11.47%) had perinatal morbidity and requiring NICU admission. Birth asphyxia, IUGR were the commonest cause accounting for 50% and 25% cases respectively. Meconium aspiration syndrome seen in 10 cases.

Perinatal mortality in the study was 6.84% and among them fetal distress as the indication of caesarean section has the highest perinatal mortality rate.

Perinatal morbidity and mortality is less in booked cases.

There were no maternal deaths in the present study.

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(1.72%) 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.