



STUDY OF PRIMARY CESAREAN SECTION IN MULTIGRAVIDAE

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ABSTRACT

Background: The widened scope for primary caesarean section in multigravida promoted to study the raising trends for the concern of mother and foetus

AIM OF THE STUDY Aim of the present study is to find out the incidence, foetomaternal outcome of primary caesarean section in multigravida and to review the various indications that required primary section in multipara

MATERIALS AND METHODS A prospective hospital based study was done on multigravidae (n=232) who underwent primary caesarean section with prior vaginal delivery, for two years from November 2013 to October 2015, at Government General Hospital /RMC Kakinada.

Maternal examination, pelvic assessment, investigative workup including USG, CTG and were done prior to caesarean section. The indications for caesarean section were statistically analysed.

Results: There were total 6,192 caesarean sections (26.4%) out of 23,161 total deliveries with 457 caesarean sections (4.95%) during study period. Out of 457 caesarean section 218 sections in primary sections in primigravida, 108 repeat sections. Primary caesarean section rate in multigravida was 28.5% (n=232) among all caesarean sections and 2.12% of total number of deliveries. The major indications for caesarean section were malpresentation 22.3%, cephalo pelvic disproportion 20.38% fetal distress 16.37% and antepartum hemorrhage 16.12%, uterine dysfunction 12.3%. Corrected perinatal mortality rate was 1.5%.

Conclusion: Prior vaginal delivery gives a false sense of security. Parous women who have had successful previous vaginal delivery may need section in future pregnancy for improved maternal and fetal salvage. Routine antenatal care with proper monitoring for complications both during antenatal and intrapartum improves chance for improved maternal and perinatal outcome with low caesarean rates

KEYWORDS : Primary caesarean section, Multipara, Foetal distress.

Introduction

The Primary section in multigravida is the section done for the first time in women who had delivered vaginally once or more¹. The World Health Organization² believes to limit section rate to 15% of all live births. According to a study by Indian council of medical research (ICMR)³, the incidence of Caesarean section is 25.4%. The indications for performing caesarean section have changed in recent years for varied circumstances. Multiparous women more often prefer caesarean delivery than women giving birth for the first time. In a cross sectional study based on the Norwegian Mother and Child Cohort study of 58,881 women, 6% of women favored caesarean over vaginal delivery.⁴

AIM OF THE STUDY : To study the incidence of primary caesarean section in multigravida among all deliveries and to review the various indications in multigravida and to discuss their individual merits. The study includes the maternal morbidity and the responsible conditions, foetal outcome after primary caesarean section in multigravida.

MATERIALS AND METHODS

A prospective hospital based study was done on multigravidae who underwent primary caesarean section with prior vaginal delivery for two years from November 2013 to October 2015 in Government General Hospital attached to RMC Kakinada. There were 232 cases of multigravida (n=232). Maternal examination, and pelvic assessment workup including USG, CTG were done on all, prior to caesarean section. The indications for caesarean section were analysed using MS Excel Program for descriptive analysis..

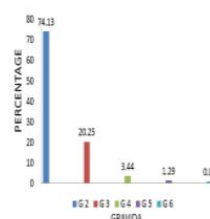
Age varied from 16yrs to 40yrs more in 21-30yrs(72.3%), mean age was 26.2yrs. 84% unbooked, 16% were booked cases. Gravida 2 patients comprised (n=210) 91% figure¹ Gestational age was 32-42wks, figure² mean gestational age was 38.6wks. 80% of the cases underwent caesarean section after attaining clinical maturity i.e., beyond 37 weeks. In 14% of cases caesarean section was done preterm for maternal factors like placenta previa in labour, failed induction for severe PIH. The major indications for caesarean section were malpresentation 22.3%, cephalo pelvic disproportion 20.38%, fetal distress 16.37% uterine dysfunction 12.3% and antepartum

hemorrhage 5.72%. Emergency sections were done in 93.53% under spinal anesthesia. Elective section was done in 6.46% of the cases. The type of operation of was Lower Segment Caesarean Section. Caesarean hysterectomy was done in one case for uncontrollable atonic postpartum hemorrhage. Complications like P.P.H, retention of urine and urinary tract infection, pyrexia, wound sepsis, Haemorrhagic Shock, pelvic infection angle extension were seen in (n=44) 18.95%. Perinatal loss was 10.34%. due to prematurity and associated congenital malformations and sepsis- Table 1

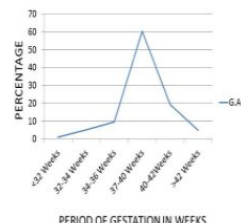
Table 1 maternal complications Fetal outcome

S. No	Complications (Abdominal Deliveries)	No. of Cases	Percentage
1	P.P.H	15	6.46
2	Retention of urine and urinary tract infection	2	0.86
3	Pyrexia	4	1.72
4	Wound sepsis	10	4.31
5	Haemorrhagic Shock	1	0.43
6	Pelvic infection	2	0.86
7	Angle extension	10	4.31
8	No complications	188	81.03
S. No	Foetal out Come	No. of Cases	Percentage
1	Live	208	89.65
2	Still Births	3	1.29
3	Dead	21	9.05

INCIDENCE GRAVIDA WISE



INCIDENCE AS PER THE PERIOD OF GESTATION



Discussion.

Over a two years study period from Nov 2013-Nov 2015 there were total 6192 caesarean sections in 23161 deliveries (26.4%) Caesarean section rate among primis was 7% and among 3.9%. in multis, There were a total (n=232) primary caesarean sections in multigravida giving a section rate of 28.5% and 2.12% among all normal deliveries. A multipara who has earlier delivered vaginally, may still require a caesarean section for safe delivery.³ Incidence of primary caesarean sections in multipara in the present study is 28.4% equal to Desai et al 29.05%, Jyothi et al⁸ less than Himabindu⁹ et al more when compared to Samal et al¹⁰. In a study based on Robsons classification of cesarean section primary section in multi is grouped in class3, the incidence was 10% in study by Samba et al¹¹

Obstetric admissions in our study were 74.3%, second gravida. Booked and unbooked cases in our present study are 16% and 84% respectively. In comparable to others 789 In the present study elective caesarean sections account for 6.47% and 93.53% were emergency sections comparable with study by Samal et al 10 5.9% cases and emergency caesareans were 94.1%. Desai et al had only 3% elective caesarean sections. In our study different indications sections were malpresentation 22.3%, cephalo pelvic disproportion 20.38 % fetal distress 16.37% and antepartum hemorrhage 16.12%, uterine dysfunction 12.3%. In their study Desai et al, had fetal distress (25.58%) as common indication, antepartum haemorrhage (APH, 22.09%), more common than CPD (19.77%) and abnormal presentations (17.44%) From our study it is observed fact that a multipara who had a successful vaginal delivery in the past, does not make her immune to cephalopelvic disproportion 12. Babies tend to increase in size in successive pregnancies. Diminution of pelvic capacity with increasing age due to spondylolisthesis, increased pelvic inclination obliteration of sacroiliac joints and subluxation of sacral promontory are other contributing factors in a multi. Malpresentation was the indication in 15%. According to Eastman abnormal relaxation of abdominal muscles, placenta previa and cephalopelvic disproportion were the contributing factors for malpresentation in multi which increases with parity. It was explained by a pendulous abdomen with relaxed muscles which allow the uterus to fall forwards deflecting long axis of fetus away from birth canal. Abnormal presentations were noticed in 22.8%. Breech was the indication in 13.79% among study caesarean section in multi was 13.4%. There were 8 cases of transverse lie. All other malpresentations namely face and brow, twins, cord and compound presentations and occipito-posterior position were responsible for caesarean section in 1/3rd of the total malpresentations.

Major degree placenta previa was the indication in 4.3% In multi, occurrence of placenta previa is more common than in primi. Foetal distress was the indication in 16.37%. 38 cases of the present series. In 4 cases there was cord round the neck, in 3 cases there was Doppler velocimetric changes with IUGR. Previous bad obstetric history was the indication in 5.3% of the cases 50% of the CPDs in present series went undiagnosed when they were primigravidas in previous pregnancies.

In our series caesarean hysterectomy was done in one case for uncontrollable atonic P.P.H., 1 case for sepsis.

Foetal outcome; out of 232 babies there was 208 live births 21 dead births and 3 still births. Thus the foetal mortality was 9.1% in all cases and 1.5% when dead births were excluded and 0.8% when a congenital malformation was excluded. The perinatal mortality rate for the vaginal deliveries in this study period was 3.7%..

When the dead births were analysed 8 out of 10 were found in cases done for major degree placenta previa. Maternal shock and gross prematurity (all were between 28-30 weeks of gestation) were responsible for the foetal loss. The foetal outcome in the group done for CPD and malpresentation was 100%. The absence of mortality and morbidity suggests that section is an ideal method of delivery in C P D and malpresentation compared to vaginal delivery. Also

caesarean section is preferred to vaginal in the management of foetal distress, uterine dysfunction and post-maturity.

Maternal morbidity: out of 130 cases, 9 cases were hospitalisation for a period of 16 days. It was interesting to note that there were no post-operative complications among those where section was done either electively or at the onset of labour. Among the group who developed post-operative complications, 9.2% had pyrexia, 12.3% had sepsis, 7% developed abdominal distension. Atonic PPH was seen in 3.1% and retention of urine seen in 3.1% of cases. All the complications were encountered in emergency caesarean section and in those who had labour lasting for more than 13 hours. Majority of the women were non-booked belonged to poor socio-economic group.

There was no mortality in the present series, however the group studied is very small to reckon with. Abdominal delivery certainly has an inherent risk of morbidity and mortality when compared with vaginal delivery. There was no mortality in my series and among all caesarean section during the study period.

The improved facilities for blood transfusions, improved anaesthesia and skill of the obstetricians were responsible for this maternal salvage rate.

Conclusion: Prior vaginal delivery gives a false sense of security. Parous women who have had successful previous vaginal delivery may need section in future pregnancy for improved maternal and fetal salvage. Routine antenatal care with proper monitoring for complications both during antenatal and intra partum improves chance for improved maternal and perinatal outcome with low caesarean rates.

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