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Primary Caesarian Section in Multipara

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Abstract:
Background: *caesarian section is one of the most commonly performed operations in modern obstetrics. The first operation performed on a patient is referred to as primary caesarian section, and when operation is performed in subsequent pregnancies, it is called repeat caesarian section. Primary caesarian section in a multipara means caesarian section done for the first time in patients who had delivered vaginally once or more.*
Aims and objectives: *Aim of the present study is the analysis of cases where caesarian section was done for the first time in parous women who had vaginal delivery once or more. Various indications for caesarian section were studied in relation to age, gravidity and maternal, fetal outcome were analyzed.*
Methods: *It is a prospective hospital based study of 186 cases of caesarian section done for the first time in parous women admitted at government general hospital, Vijayawada during the period Jan-Dec, 2014. Cases requiring elective and emergency caesarian sections were included in the present study. Indications for caesarian section, intra-operative details, maternal and fetal outcome were recorded. Analysis of cases in relation to different factors was done.*
Results: *Most of the cases were unbooked and referred as emergency. Most common age group was 20-25 yrs and majority were 2nd and 3rd gravidas. Among the various indications for caesarian section in multiparae, fetal distress, abnormal presentations PROM, APH, prolonged labour were the common causes.*
Conclusion: *Even though parous women had previous normal vaginal delivery, there were many complications like increased incidence of malpresentations, CPD, placenta prievia, and others which may need caesarian section. Careful analysis of present pregnancy is needed to improve maternal and fetal outcome.*
Keywords: *Caesarian section, primipara, multipara, fetal distress, antepartum hemorrhage.*

I. Introduction

There is a trend of worldwide increase in caesarian section rates. With increased safety following introduction of modern anesthesia, blood transfusion facilities, and higher antibiotics, the indications for caesarian section are liberalized to include dystocia, placenta previa, fetal distress, BOH, and others. Caesarian section is considered as a safer alternative to prolonged and difficult vaginal operative delivery so as to reduce maternal and perinatal morbidity and mortality.

With the introduction of modern technology in the labour wards like cardiotopography, color doppler, biophysical profile, there was further increase in caesarian section rates with numerous other medical, social, economic and medico-legal factors which are responsible for the alarmingly high rate of caesarian section all over the world.

The other responsible factors for rise in caesarian section rate in multiparae are identification of high risk pregnancies with improved antenatal care and antepartum fetal surveillance techniques, rising rates of elective induction of labour, decline in operative vaginal deliveries, and vaginal breech deliveries, increased number of women with pregnancies after 30 yrs with associated medical complications.

Multipara means those who have delivered once or more after the period of viability. 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. Other obstetric complication like APH, malpresentations, obstructed labour, were more common in multigravida which must be seriously considered.

Unforeseen complications that may occur in multipara were identified long ago and studied by Solomon in 1932, who called them as “dangerous multipara”, and Feeney in 1953 as “unpredictable multipara”.

II. Aims and objectives

1) To study the incidence of primary caesarian section in multipara and analysis of various related factors.
2) To know the maternal and perinatal outcome following caesarian section.
3) To know the Incidence of post-operative morbidity.

Inclusion criteria: 1) Multipara, 2) Pregnancy > 32 wks, 3) Multiple pregnancy
Exclusion criteria: 1) Gestational age < 32 wks, 2) Previous LSCS

III. Materials and methods

It is the prospective study of 186 cases of primary caesarian section done in multiparae during the period from Jan-Dec 2014 in the government general hospital, Vijayawada 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 caesarian 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 caesarian 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.

IV. Observation and results

About 186 cases of primary caesarian section done in multiparae during a period of 1 year were analyzed and the results were as follows.

1) Total LSCS incidence in 1 yr

	No. of cases	Percentage	Primary CS in multipara
Total deliveries	6498	100%	2.8%
LSCS	2635	40.55%	7%

Among 6498 deliveries, 40.55% was the incidence of LSCS in general, and 7% was incidence of primary caesarian section in multipara.

2) Booking status

Cases	Booked	Unbooked	Elective	Emergency
186	54	132	40	146
100%	29%	71%	21.5%	78.5%

Majority of the cases were unbooked (71%), referred as emergency cases (78.5%).

3) Gravida distribution

Total	G2	G3	G4	G5
186	119	53	12	2
100%	63.9%	28.5%	6.5%	1.07%

Most of them were gravida-2 (63.9%) and gravida-3 (28.5%).

4) Age distribution

Total	<20 yrs	21-25 yrs	26-30 yrs	31-35 yrs	36-40 yrs
186	4	128	41	10	3
100%	2.15%	68.8%	22.04%	5.37%	1.6%

Most of them were in the age group of 21-25 yrs (68.8%).

5) Indications for primary caesarian section in multipara

Indication	No. of cases	Percentage
Fetal distress	46	24.7%
Abnormal presentation	36	19.3%
APH	21	11.2%
PROM	18	9.6%
Prolonged labour	16	8.6%
Medical disorders	12	6.4%
Failed induction	11	5.9%
Obstructed labour	6	3.2%
CPD	6	3.2%
BOH with precious pregnancy	6	3.2%

For 8 cases, indication could not be assessed properly as the patients were apprehensive due to various reasons like abnormal Doppler, non-reactive NST, advanced age (> 35 yrs), and did not give consent to either induction or acceleration of labour. Hence, elective caesarian section was done on maternal request.

6) Incidence of various malpresentations

Type	Breech	Transverse/ Oblique lie	Twins	Compound presentation	Brow	Mento – posterior
No. of cases	22	6	5	1	1	1

7) Maternal morbidity

Puerperial pyrexia	34	18.27%
UTI	18	9.6%
Respiratory tract infection	17	9.1%
Wound infection	16	8.6%
Paralytic ileus	14	7.5%
Atonic PPH	21	11.3%
Traumatic PPH	7	3.76%

8) Birth weight

Weight	< 2 kg	2-2.5 kg	2.5-3.5 kg	> 3.5 kg
No. of cases	11	21	141	13

9) Perinatal Outcome

Cases	IUD + stillbirth	NICU admission	APGAR > 7
186	7	28	151
100%	3.7%	15%	81%

Causes of IUD were central placenta previa (3), tranverse lie with obstructed labour (1), congenital anomalies (2), and page-3 abruption (1).

Causes of NICU admission were pre-term/low birth weight (10), fetal distress with meconium stained liquor (8), resuscitation with low APGAR (4), respiratory distress syndrome (5), and GDM with hypoglycemia (1).

V. Discussion

Total number of deliveries during the present study period for 1 year were 6498 and caesarian section was done in 2635 cases accounting for 40%. The high caesarian section rate was because our hospital is a tertiary referral center for many rural areas around, from which exclusively high risk cases were referred for delivery. Most of the cases were unbooked (71%) with no antenatal checkups and came as emergency admission to labour ward late in labour (78.5%).

Among the indications for primary caesarian section in multiparae, most common was fetal distress (24.7%) identified by thick meconium stained liquor, fetal heart abnormalities detected by CTG, failure of progress of labour with caput formation, followed by abnormal presentations (19.3%). Most common abnormal presentation was breech for which caesarian section was done as most of the patients did not give consent for vaginal breech delivery after explaining the risk. Hence elective caesarian section was done for most cases of breech presentation in multiparae. Among 5 cases of twin pregnancies, in one case caesarian section was done for 2nd twin with transverse lie and hand prolapse. Premature rupture of membranes accounted for 9.6% of cases. Most of them were referred from outside more than 24 hours after PROM with failed induction.

Antepartum hemorrhage accounted for 11.2% of cases with placenta previa (17 cases) and abruption (4 cases). Most of the cases of placenta previa were referred for delivery from outside. 4 of them were in shock and resuscitated before delivery. Subtotal hysterectomy was done for 1 case of placenta previa with uncontrolled hemorrhage. Internal iliac artery ligation was done in 1 case and intrauterine packing was done in 2 cases. Almost all the cases received multiple blood transfusions.

Among 4 cases of abruptio placenta, 3 were page-2 and 1 was page-3. DIC was detected in 1 case which recovered after delivery followed by transfusion of blood components. Maternal shock was detected in page-3 abruption which was resuscitated promptly.

Indications for caesarian section in the present study were compared with recent studies done by Erika Desai (2013) and Jyothi.H.Rao (2013).

Indication	**Present study**	**Erika Desai et al**	**Jyothi Rao et al**
Fetal distress	24.7%	25.5%	17%
Abnormal presentation	19.3%	17.4%	33.5%
APH	11.2%	22.09%	19.5%
PROM	9.6%	6.9%	-
Prolonged labour	8.6%	4.6%	-
CPD	3.2%	19.7%	-
Obstructed labour	3.2%	0.01%	18.5%
Medical disorders	6.4%	-	11%

Medical disorders detected in the present study were hypothyroidism (3 cases), HIV reactive (3 cases), heart disease (1 case), hyperthyroidism (1 case), GDM (1 case), HbsAg positive (3 cases).

Most common medical problem encountered in the present study was severe anaemia (Hb < 7 gm%) in 54 cases (29%) who required blood transfusion. Other obstetric problems detected were severe pre-eclampsia (6 cases), eclampsia (2 cases), and acquired vaginal atresia (1 case).

Among intra-operative complications, PPH was the most common (28 cases), atonic PPH accounting for 21 cases followed by traumatic PPH in 7 cases. PPH was seen in cases with late referral in obstructed labour and threatened rupture. PPH treated by blood transfusions and transfusion of blood components as and when necessary.

Puerperial pyrexia was the most common maternal morbidity seen in cases of prolonged labour, PROM > 24 hrs, and obstructed labour cases where caesarian section was done late in labour, treated with higher antibiotics and relevant investigations done. Wound infection requiring secondary suturing was done in 4 cases. Paralytic ileus managed conservatively with RTA and IV fluids.

Other maternal complications encountered were secondary PPH in 3 cases, post spinal headache in 5 cases, and bladder injury in 1 case. One case of secondary PPH required uterine artery embolization and emergency hysterectomy was done in another case.

Sterilization was done along with caesarian section in 94 cases (50.5%) on maternal request.

Fetal outcome was good, with APGAR 8-10 in 151 cases (81%). Most of the cases requiring NICU admission were due to prematurity/low birth weight.

There were no cases of maternal mortality in our study. There were 3 perinatal deaths due to meconium aspiration syndrome (1 case), respiratory distress syndrome (1 case), and prematurity (1 case).

VI. Conclusion

Multiparae, especially grand-multi belong to high risk group who may have many obstetric complications which were frequently overlooked due to false sense of security created by previous vaginal deliveries.

Recent concept of "Maternal Near-Miss" (MNM) or severe acute maternal morbidity (SAMM) defined as a woman who nearly died but survived a complication during pregnancy or child birth confers a warning in the management of multiparous women who may have many unforeseen complications which may contribute to serious maternal morbidity and mortality as outlined in the present study.

Improvement of antenatal care in multipara with early identification of high risk pregnancies, adoption of integrated and composite approach to improve the health status of women, good quality of emergency obstetric care, and lastly health education and counseling for adoption of small family norms are some of the measures to be undertaken for reducing the maternal morbidity and mortality in multiparae.

References

[1]. Jyothi H Rao, Nirmala Rampure. "Study of Primary Caesarean Section in Multiparous Women". Journal of Evolution of Medical and Dental Sciences 2013; Vol2, Issue 24, June 17; Page: 4414-4418.
[2]. 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.
[3]. Palanichamy G. A study of 900 primary caesarean sections with special reference to 151 primary caesarean sections in grand multipara. J Obstet & Gynec India1976;26:374-379.
[4]. Kala Vashista, Rekha Logawney, Gupta AM. Primary caesarean section in grand multipara. J Obstet & Gynec Ind1974; 26: 386-90.
[5]. Purandare CN. The Over Roofing Rates of Caesarean Section. The Journal of Obstetrics and Gynecology of India (September–October 2011) 61(5):501–502.