



To study and compare maternal complications following primary caesarean section in primigravida and multigravida.

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ABSTRACT:

Background: The incidence of cesarean section has doubled or tripled all over the world in the last 15 years. Though modern technology and facilities have made this operation remarkably safe, but still cesarean section is associated with increased risk of maternal morbidity and mortality as compared to vaginal delivery as well as it also complicates the management of subsequent pregnancies.

Methods: This is hospital based prospective study of comparing the primary caesarean section in primigravida and multigravida.

Results: Maternal intra-operative complications like PPH, Subtotal hysterectomy, extended anaesthesia and near-miss morbidity were much higher in group B (38%) as compared to group A (1.3%). Blood transfusion rate was high in multigravida (20.7%) compared to primi gravida (4.7%).

Conclusion: Primary caesarean section in multipara are associated with high maternal morbidity.

Keywords: Primary caesarean, Multipara, Primipara.

Introduction

The incidence of cesarean section has doubled or tripled all over the world in the last 15 years¹. Though modern technology and facilities have made this operation remarkably safe, but still cesarean section is associated with increased risk of maternal morbidity and mortality as compared to vaginal delivery as well as it also complicates the management of subsequent pregnancies. Also this increase in cesarean rate has not contributed significantly to the simultaneous observed reduction in perinatal mortality². Hence the primary cesarean section performed on a woman is of much obstetric significance and needs an in depth study. Furthermore, the two groups, primigravida and multigravida show significant variation in terms of indications and complications of primary cesarean section and require separate evaluation.

A sense of false security prevails in most of the multiparous women who had previous uneventful labour. As most of the multiparous women have had easy vaginal deliveries they do not pay much attention to the antenatal care they deserve. Moreover, the socio economic condition of these patients does not permit them to have adequate balanced diet, which the pregnant stage demands. These patients get expert supervision only when unforeseen emergency arises during pregnancy and labour. The relative ease with which some multiparous women deliver in the presence of faulty position and presentation may account for false sense of security. This invites laxity on part of patients as well as Obstetrician. Due to those factors the multiparous women pass through the stage of pregnancy and labour in a subnormal stage of health with a potential risk, when caesarean section has to be performed¹. Lack of scrupulous antenatal examination and intranatal care may lead difficulty in labour from an unsuspected and undetected abnormality. The

hazards associated with such labour show that mothers with past history of eutocia may exhibit dystocia and one must be on guard for such dystocias³.

Material and Methods

- Study design: Hospital based prospective comparative study.
- Study population: Women who underwent caesarean section for the first time.
- Sample size: 150 primary caesarean cases in the hospital during the above said duration.
- Sampling Method: Systematic random sampling

Inclusion Criteria

- Women who underwent caesarean section for the first time either primigravida or multigravida were included.
- Gestational age (>28 weeks)

Exclusion Criteria

1. Women who had previous caesarean sections.
2. Known medical disorders except anemia.
3. Gestational age < 28 weeks.

Data Collection: This includes the patients reporting directly to our hospital requiring elective or emergency caesarean section after trial, both primigravida and multigravida. All the patients taken up for study were to be followed up for 14 days. At the time of discharge, the patients were explained about the importance of spacing, contraception and immunization.

Data Analysis

To collect required information from eligible patients a pre-structured pre-tested proforma was used. For data analysis Microsoft excel and statistical software SPSS was used and data will be analyzed with the help of frequencies, figures, proportions, measures of central tendency and appropriate statistical tests.

Observations

Table 1: Distribution of cases according to maternal intra-operative complications

Maternal Intra-Operative Complications	Gravida				Total	
	Group A		Group B		No.	%
	No.	%	No.	%		
PPH	2	1.3	46	30.7	48	16.0
Subtotal Hysterectomy	0	-	3	2.0	3	1.0
Extended Anaesthesia	0	-	2	1.3	2	0.7
Near-miss Morbidity	0	-	6	4.0	6	2.0

In group A 1.3% patients had PPH compared to 30.7% in group B. Other intrapartum complications like subtotal hysterectomy, extended anaesthesia and near-miss morbidity were 2%, 1.3% and 4% in group B respectively while it was nil in group A.

Table 2: Distribution of cases according to need of blood transfusion

Need of Blood Transfusion	Gravida				Total	
	Group A		Group B			
	No.	%	No.	%	No.	%
Yes	7	4.7	31	20.7	38	12.7
No	143	95.3	119	79.3	262	87.3
Total	150	100	150	100	300	100
χ^2	17.3564					
p	<0.001					

Table 2 shows blood transfusion rate is very high in multigravida (20.7%) compared to primi gravida (4.7%) and this difference was found statistically highly significant ($p < 0.001$).

Table 3: Distribution of cases according to maternal postoperative complications

Postoperative complication	Gravida				Total	
	Group A		Group B			
	No.	%	No.	%	No.	%
Respiratory tract infection	3	2.1	9	6.0	12	4.0
Abdominal Distension	0	-	4	2.7	4	1.3
Urinary Infection	4	4.2	11	7.3	15	5.0
Pyrexia	6	6.3	24	16.0	30	10.0
Sub involution of uterus	0	-	3	2.0	3	1.0
Wound Infection	2	1.3	7	4.7	9	3.0
Secondary PPH	0	-	5	3.3	5	3.3
Secondary suturing	0	-	7	4.7	7	2.3

Overall postoperative complications rate were higher in multies in group A, complications were pyrexia (6.3%), urinary infection (4.2%), respiratory tract infection and wound infection was seen in 2.1% and 1.3% of cases respectively. In group B, most common complication was pyrexia (16%) followed by urinary infection (7.3%). Beside this other complications like respiratory tract infection (6%), wound infection and secondary suturing (4.7% each), secondary PPH (3.3%) and

abdominal distension (2.7%) is high in group B as compared to group A.

Discussion

PPH was most common intra-operative complication in Group B (30.7%) which leads to need of subtotal hysterectomy, extended anaesthesia, nearmis morbidity these results were comparative with the study of Rajput et al⁴.

Uterine atony is most common cause of PPH in group B. Placenta previa, abruption, prolonged

labour, fetal macrosomia can cause uterine atonicity. Maternal morbidity was very high but fortunately no maternal death had occurred.

Blood transfusion rate is very high in multigravida (20.7%) compared to primigravida (4.7%). It is because of high incidence of intra-operative complication and subnormal stage of health in group B. These observations were comparable with study done by Rajput et al⁴.

Overall postoperative complications rate were higher in multies. In group A, complications were pyrexia (6.3%), urinary infection (4.2%), respiratory tract infection and wound infection was seen in 2.1% and 1.3% of cases respectively. In group B, most common complication was pyrexia (16%) followed by urinary infection (7.3%). Beside this other complications like respiratory tract infection (6%), wound infection and secondary suturing (4.7% each), secondary PPH (3.3%) and abdominal distension (2.7%) is high in group B as compared to group A. These results are

comparable to study conducted by Rao and Rampure⁵.

Conclusion:

Primary caesarean section in multipara are associated with high maternal morbidity.

Bibliography

1. Solomon B. The dangerous multi gravida . Lancet 1932; 2:8-11.
2. Feeny K. The unpredictable multi gravida. J Irish Med Assoc 1953; 32:36-40.
3. Basak S, Lahri D. Dystocia in eutocic multigravida. J Obstet Gynaecol India 1975; 25:502-7.
4. Rajput N, Singh P, Verma YS. Study of primary caesarean section in multigravida patients. Int J Reprod Contracept Obstet Gynecol 2018; 7(1):185-191.
5. Rao JH, Rampure N. Study of Primary Caesarean Section in Multiparous Women. J Evolu Med Dental Sci 2013; 2(24):4414-4418.