

ORIGINAL ARTICLE

PREVALENCE OF CAESAREAN AND POSSIBLE ETIOLOGY ASSOCIATED WITH IT: A CLINICAL STUDY

Seema Mishra¹, Kalpana Gupta²

¹Associate Professor, ²Assistant Professor, Department of Obstetrics and Gynaecology, Mayo Institute of Medical Science, Barabanki, U.P.


ABSTRACT:

Background: Pregnancy and delivery are considered as normal physiological phenomena in women. Approximately, 10% deliveries are considered as high risk, some of which may require caesarean section. This study was done to determine the prevalence of caesareans and possible reasons for it. **Materials & Methods:** This cross sectional study was conducted in department of Obstetrics & Gynaecology in year 2015. A total of 1022 females were included in study. All mandatory investigations such as Hb level, blood group analysis, complete blood count, complete urine examination, random blood sugar level and viral markers were performed. Caesarean section was performed in those who failed for normal trial of delivery. **Results:** Out of 1022 females admitted to the department, 173 underwent caesarean section with the prevalence of 17% (Table I). Table II shows that 25% females were primagravida, 45% females were between G₂-G₄ and 30% females were G₅ above. We have recorded various reasons for caesarean failures. These included previous caesarean (56), fetal distress (43), failed labor progression (34) and breech presentation (40). The difference was non significant (P=0.2) **Conclusion:** Author concluded that caesarean sections are increasing worldwide. Proper antenatal care is required for the betterment of mother and foetus.

Key Words: Caesarean, fetal distress, Pregnancy.

Corresponding Author: Dr. Seema Mishra, Associate Professor, Department of Obstetrics and Gynaecology, Mayo Institute of Medical Science, Barabanki, U.P., India

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INTRODUCTION

Pregnancy and delivery are considered as normal physiological phenomena in women. Approximately, 10% deliveries are considered as high risk, some of which may require caesarean section. Ferdinand Adolf Keher¹, a German gynecologist in 1881, did the first modern caesarean section. World Health Organization conducted a survey, between 2004 and 2008 has reported in 2010, that, in 23 countries rate of Caesarean deliveries without medical indication ranged between 0.01% and 2.10%, whereas, in China it shoots up to 11.6%.²

Increased hospital based deliveries and access to hospital have been proven in saving lives of many mothers and their babies. It has been argued that decreasing Caesarean

deliveries would have a detrimental effect on mothers and infants' health and patient's choice should be considered. In ancient times, normal vaginal deliveries were considered safest option. But nowadays, there is any risk of mother and baby's life, caesarean section is performed. It may be the choice of the patient in some cases. Caesarean section is common surgical operation nowadays with 33% prevalence rate. The estimates of Caesarean Sections rates recorded in 1998 was in India was 7.1%. The rate is quite high as compared to other countries in Asia.³ A study conducted in Kolkata showed a Caesarean Section rate of 49.9% and another study in Madras showed a 50% Caesarean Section rate.⁴

There are several reasons for the increase in number of caesareans. With the Advancement in anesthesia and

surgical procedures, complications have decreased a lot and mortality risks for mothers and babies. Other possible reasons are low literacy level, poor socioeconomic conditions, lack of primary health care and low threshold of some doctors for caesarean section.⁵

This study was done to determine the prevalence of caesareans and possible reasons for it.

MATERIALS & METHODS

This cross sectional study was conducted in department of Obstetrics & Gynaecology in year 2015. A total of 1022 females were included in study. The following inclusion & exclusion criteria were followed.

Inclusion: Age ranged 20-45 years with indication of caesarean.

Exclusion: gestational age less than 28 weeks.

All mandatory investigations such as Hb level, blood group analysis, complete blood count, complete urine examination, random blood sugar level and viral markers were performed. Caesarean section was performed in those who failed for normal trial of delivery. Results were tabulated and subjected to statistical analysis.

RESULTS

Out of 1022 females admitted to the department, 173 underwent caesarean section with the prevalence of 17% (Table I). Table II shows that 25% females were primigravida, 45% females were between G₂-G₄ and 30% females were G₅ above. We have recorded various reasons for caesarean failures. These included previous caesarean (56), fetal distress (43), failed labor progression (34) and breech presentation (40). The difference was non significant (P-0.2) (Graph I).

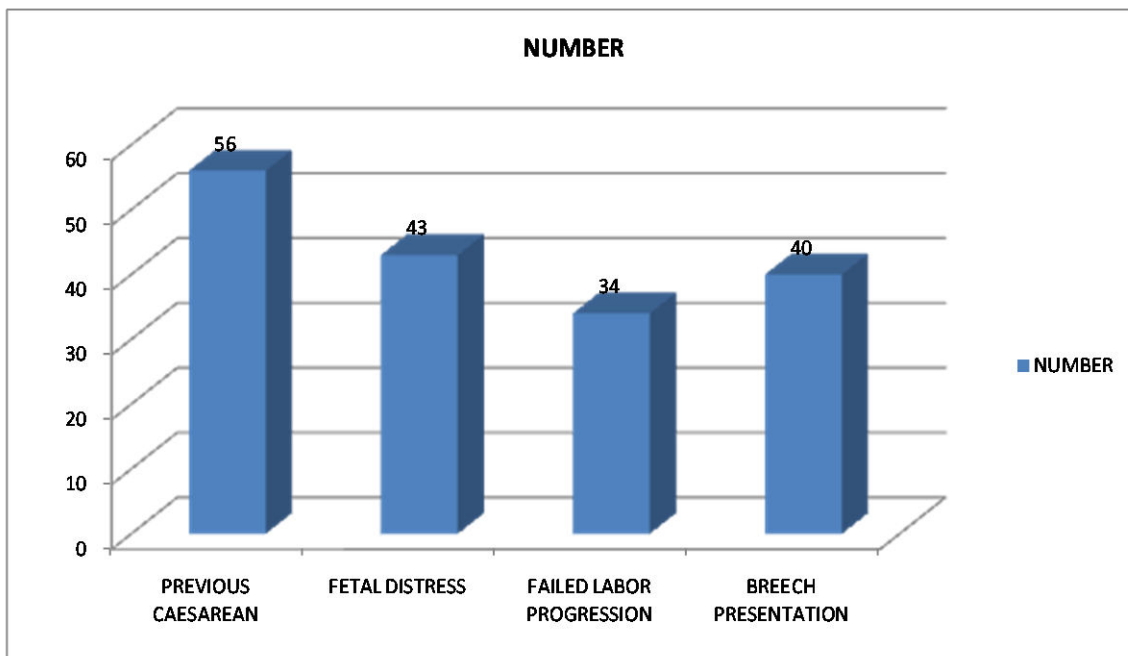
TABLE I Prevalence of caesarean

Total - 1022		
Procedure	Number	Percentage
Caesarean	173	17%

TABLE II Distribution of patients based on gravidity

	Primigravida	G ₂ -G ₄	G ₅ Above
Number	43	78	52
Percentage	25%	45%	30%

GRAPH I Reasons for caesarean



DISCUSSION

Primary caesarean section usually determines the future obstetric course of any woman and therefore should be avoided wherever possible. WHO states that there is no additional benefit associated with rising caesarean section rate of above 15%. The caesarean number is increasing day by day.⁶

This study was done to determine the prevalence of caesareans and possible reasons for it. This cross sectional study was conducted in department of Obstetrics & Gynaecology in year 2015. A total of 1022 females were included in study. Females age ranged 20-45 years were included in the study. Cases with gestational age less than 28 weeks were excluded from the study.

Out of 1022 females admitted to the department, 173 underwent caesarean section with the prevalence of 17%. Haider G et⁷ al reported caesarean section rate as high as 67.7% and 45.1% in 2007. Hamilton BE⁸ in his study reported prevalence rate of 48%. In our study, the prevalence rate was low as compared to other studies.

25% females were in primagravida, 45% females were between G₂-G₄ and 30% females were G₅ above. Similar results have been found by Thomas et al.⁹

We have recorded various reasons for caesarean failures. These included previous caesarean (56), fetal distress (43), failed labor progression (34) and breech presentation (40).

Fetal Distress is diagnosed by Fetal Heart Rate and presence of meconium stained amniotic liquor. The gold standard test is performed by fetal scalp blood pH estimation. Krychowska et al.¹⁰ in his study also found fetal distress as one of the cause of caesarean.

Repeat Caesarean Section in mothers with Previous Caesarean was another frequent cause found in our study. Cook et al has observed that Multiple Repeat Caesarean Section (MRCS) is associated with greater maternal and neonatal morbidity than fewer Caesarean Section.

The study conducted by Dabbas M et al¹¹ found has results of high neonatal morbidity in vaginal breech delivery than Caesarean Section. Roberts et al¹² in their study have found similar results.

Failed progression of labor is also one of cause of caesarean. Kim¹³ in his study found that failed labor progression is frequent cause favouring cases of caesarean as compared to vaginal delivery.

CONCLUSION

Author concluded that caesarean sections are increasing worldwide. Proper antenatal care is required for the betterment of mother and foetus.

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