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Original Research Article

Maternal and Foetal Outcome in Placenta Previa

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Abstract:

Background & Method: The aim of this study is to study the Maternal and Foetal Outcome in Placenta Previa.

In this retrospective study, 36 cases of placenta praevia who underwent caesarean section from a time period of 2 years in tertiary centre were taken. All cases of APH in whom diagnosis of placenta praevia was made clinically and/or confirmed by abdominal ultrasound were included in the study. In all these cases care was taken to exclude other causes of APH.

Result: 21 cases (39.08%) cases of placenta praevia had no history of previous uterine surgery while 60.92 % had history of previous uterine surgery. In present study, 39.08 % placenta praevia occurred in patients without any history of previous uterine surgery, out of which 18.39 % were primigravida , 20.63 % were multigravida. In present study, 27.58% were complicated. Most common was PPH, DIC, Bladder injury and placental bed bleeding.

Conclusion: In our series , the major contributing factors in etiology of placenta praevia appear to be Multiparity – 66.67 % Previous ceaserean section - 29.88 % Endometrial damage following MTP & Abortion – 43.67%. Careful adoption of conservative measures in suitable cases of Placenta praevia who have no bleeding episodes and when the foetus is still immature should be done only in a tertiary care hospital with emergency operative services and experienced staff and good NICU facilities.

Keywords: risk, placenta & praevia.

Study Designed: Observational Study.

1. INTRODUCTION

Obstetrical haemorrhage still remains a leading cause of direct maternal morbidity and mortality. In countries with fewer resources the contribution of haemorrhage to maternal mortality rates is even more striking (Jegasothy, 2002; Rehman and co-workers, 2002)[1].
Lalonde, 2006[2] and McCormick and associates, 2002[3]-Obstetrical haemorrhage accounts for almost half of all postpartum deaths in developing countries. Placenta praevia can be a very scary diagnosis for all involved. The period of time from the diagnosis to the delivery is often clouded with great worry and fear. Because of the speed with which obstetric

haemorrhage occurs, it can become life threatening to the mother and the foetus Antepartum haemorrhage (APH) still poses a serious threat to life and health, both of the mother and the child.

APH – Is defined as bleeding from or into the genital tract occurring in pregnancy after the period of viability or during labour before child birth. Placenta previa forms the majority of these cases and is in itself a major obstetric complication. In placenta praevia , the placenta instead of being implanted in the body of the uterus well away from the cervical internal os , is located in the lower uterine segment[4].

As far as placenta praevia is concerned, according to the birth certificate data in United States in 2003, placenta praevia complicated almost 1 in 300 deliveries (Martin and co-workers, 2005)[4] and similar incidence was reported in other studies.

Praevia (IN FRONT) denotes the position of placenta in relation to presentating part. Placenta praevia is an obstetric complication that occurs in the second and third trimesters of pregnancy. It is one of the leading causes of vaginal bleeding in the second and third trimesters. The condition is associated with significant maternal morbidity and perinatal morbidity and mortality. Postpartum examination of the placenta and fetal membranes in patients with antepartum hemorrhage, placenta should be carefully checked to verify the diagnosis. Although the etiology of placenta praevia remains speculative, several risk factors associated with this condition have been established.

2. MATERIAL & METHOD

Present study was conducted at Index Medical College Hospital & Research Centre, Indore. In this retrospective study, 36 cases of placenta praevia who underwent caesarean section from a time period of 2 years in tertiary centre were taken. All cases of APH in whom diagnosis of placenta praevia was made clinically and/or confirmed by abdominal ultrasound were included in the study. In all these cases care was taken to exclude other causes of APH.

All cases of Placenta praevia with

a.) foetal immaturity

b.) When warning haemorrhage was slight and controllable; Both admitted and emergency cases were treated conservatively with bed rest and blood transfusion if and when necessary.

Recourse was taken to immediate termination of pregnancy if, 1.) Foetal maturity was at least about 35 weeks.

2.) If bleeding was severe and uncontrollable (in the maternal interest)

All cases that underwent caesarean section due to uncontrollable haemorrhage or some other obstetric indication were included in the study.

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3. RESULTS

Table 1- Age distribution of placenta praevia

AGE (IN YEARS)	NUMBER OF CASES	PERCENTAGE
<19	1	3.45%
20-24	7	19.54%
25-29	15	39.08%
>30	13	37.93%

In the present study of 36 cases, 3.45 % (1 cases) of placenta praevia found in the age group of 19 yrs. 19.54 % of placenta praevia (7 cases) were seen in age group 20-24 yrs. 39.08 % (15 cases) were in age group 25 – 29 yrs and 37.93 % (13 cases) were in more than 30 yrs. Placenta praevia is more commonly seen in increasing age.

Table 2 -Types of Placenta Praevia

TYPE OF PLACENTA PRAEVIA	NUMBER OF CASES	PERCENTAGE
TYPE I	1	4.60%
TYPE II	10	29.88%
TYPE III	19	47.12%
TYPE IV	6	18.39%

Type III placenta praevia was more common

Table 3 –Etiology

UNSCARRED UTERUS	NUMBER OF CASES	PERCENTAGE
Primigravida	6	18.39%
Multigravida	7	20.68%
G2	4	11.49%
G3	2	5.74%
G4	1	2.29%
G5	1	1.149%
Total	**21**	**39.08%**

21 cases (39.08%) cases of placenta praevia had no history of previous uterine surgery while 60.92 % had history of previous uterine surgery. In present study, 39.08 % placenta praevia occurred in patients without any history of previous uterine surgery, out of which 18.39 % were primigravida , 20.63 % were multigravida.

Table 4 - Maternal outcome: Complications

COMPLICATIONS	TOTAL	PERCENTAGE
PPH	9	27.58%
PPH	2	8.04%
PPH with DIC	2	8.04%
PPH with Bladder injury	1	1.14%
PPH with Placental Bed Bleeding	2	8.04%
PPH with DIC with Bladder	1	1.14%

Injury		
PPH with DIC with Placental Bed Bleeding	1	1.14%

In present study, 27.58% were complicated. Most common was PPH, DIC, Bladder injury and placental bed bleeding.

4. DISCUSSION

In present study the maximum incidence is in the age group 20 – 29 years and most probably due to the fact that early marriage and achieving a multiparous state much earlier leading to increase in incidence at a much younger age group. Iyasu S[5] - Higher incidence > or =35 years than women < 20years old women. William MA[6] - Women who were 30 years old or older had double chance of having it.

In the present study with its 29.88% of patients of previous LSCS which is comparable to those found in other study, scarring of the endometrium due to previous uterine surgery stands out as a one of the major etiological factor of placenta praevia and thus a future judicious use of caesarean section and bringing down the alarming rise in rate of caesarean section because of modern obstetric practice could help reduce the incidence of placenta praevia. Also with the legalisation of abortion, MTP‘s have been misused by the populace and has become a mode of contraception than a measure for failure of contraception thus resulting to an alarming increase in the number of MTP‘s and thus iatrogenic cause of endometrial damage due to MTP and Abortion was present in 43.67% of the patients in present study. Significant reduction in rate of MTP after carefully evaluating the cases that require it, and by health education as regards the harmful effects of MTP would help bring down the incidence of placenta praevia.

Clark et al [7]- One uterine incision increases the risk of incidence of 0.26% compared with 10% in women with four more uterine incisions.

Taylors VM [8] - Women who had the history of caesarean delivery are 50% more likely to have placenta praevia

Handrick MS [9] - Risk of placenta praevia increases with increasing numbers of caesareans section

Herkowitz R [10] found that in women with praevia, 21.1% had history of previous caesarean section but its incidence is not enhanced by increasing number of caesarean section.

5. CONCLUSION

In our series , the major contributing factors in etiology of placenta praevia appear to be Multiparity – 66.67 % Previous ceaserean section - 29.88 % Endometrial damage following MTP & Abortion – 43.67%. Careful adoption of conservative measures in suitable cases of Placenta praevia who have no bleeding episodes and when the foetus is still immature should be done only in a tertiary care hospital with emergency operative services and experienced staff and good NICU facilities.

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