

Placenta Praevia - An Analysis of 4 year Experience

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Summary : Hundred patients with placenta praevia over a 4 year period were reviewed. Incidence was 0.57%. Previous caesarean section / abortion was associated in 20% of cases. Most of the women were multiparous in the age group of 20-29 years while 48% of the patients had major degree of placenta praevia and 33% had preterm deliveries and Caesarean section rate was 64%. Perinatal mortality was 240/1000. However there was no maternal death.

Introduction :

Placenta praevia complicates 0.3 to 0.5% of all live births and results in significant perinatal morbidity and mortality (Sauer et al. 1985, Hemmadi et al 1995). The precise cause of placenta praevia is unknown but it is known to be associated with advanced maternal age, parity, gravidity, multiple pregnancy and foetal malpresentation. Prior surgery on endometrium or myometrium like caesarean section and abortion are possible predisposing factors (Ivastu et al., 1993). In this study we analysed the incidence of placenta praevia at our hospital, the risk factors, management and the perinatal outcome.

Materials and Methods.

We obtained data for this study from the case records of all women who delivered at our hospital during the 4 year period from 1992-1995 and who were diagnosed to have placenta praevia. We calculated the incidence, identified the risk factors and analysed the management including perinatal outcome. The data consists of 100 patients with placenta praevia among 17504 deliveries during the study period.

Results :

During the 4 year study period, 17504 patients delivered in the hospital. Two hundred & nineteen patients had antepartum haemorrhage out of which 100 patients were diagnosed to have placenta praevia accounting for 0.57% of all deliveries.

Age : Most patients were between 20-29 years. (Table I)

Parity : Sixty nine percent of patients were multiparous. (Table II)

Table - I

Age (years)	Cases (%)
N = 100	
< 19	5
20-29	75
30-35	18
> 36	4

Table - II

Parity	Cases (%)
Prim	20
Multi (2-4)	69
Grand Multi (> 5)	11

Table - III

Risk factors	Cases (%)
N = 100	
Caesarean Section	11
Abortion	9
Twin Gestation	4
Large Placenta	4
Ectopic	
Adherent Placenta	1
Bicornuate Uterus	1
Total	31

Table - IV

Antenatal Complication	Cases (%)
N = 100	
Severe Anaemia (< 7 gm %)	20
Malpresentations	20
a) Transverse lie	12
b) Breech	7
c) Compound presentation	1
P1H	15

Risk factors : Previous caesarean section was the risk factor in 11% of patients. Past history of abortion was noted in 9% of patients. Majority of the patients had no known risk factors. (Table III)

Table V

Type of placenta praevia	No. of Cases
Minor degree (Type I and Type II anterior)	52
Major degree (Type II Posterior and Type III, IV)	48
Associated Abruptio	8

Table VI

Gestational Age at delivery	No. of Cases
28 – 33 Weeks	12
34 – 36 Weeks	21
Term	67

Table VII

Mode of Delivery	Cases
Vaginal	36
Spontaneous	26
Low forceps	10
Caesarean	64
Elective	11
Emergency	53

Table VIII

Problems	No. of Cases
Vascular lower segment	20
Lower segment not formed	10
Extension laterally	4
Extension into upper segment	1

Table IX

Complication	No. of Cases
Adherent Placenta	2
Battledore placenta	2
Postpartum haemorrhage	10

Table X

Perinatal outcome	No. of Cases
Still births	18
Early neonatal death	6
Total	24

Associated antenatal complications : Severe anaemia was seen in 20 patients and another 20 patients had malpresentation including transverse lie, breech and compound presentations. (Table IV) Ultrasound evaluation was done in all cases within 24 hours of admission. (Table V). Almost half the patients had major degree of placenta praevia.

Gestational age at delivery : Thirty three % of patients had preterm delivery. (Table VI)

Mode of delivery : Incidence of caesarean section was very high viz 64%. Thirty six patients had vaginal delivery either spontaneously or assisted by low forceps. (Table VII)

Common problems and complications encountered during caesarean section are listed in Table VIII. Lower segment was very vascular in 20 patients while in 10 patients lower segment was not formed. (Table VIII)

Post – partum haemorrhage was seen in 10 patients half of which was traumatic. (Table IX)

Perinatal outcome : Thirty three % of patients had preterm deliveries, 12% of whose babies weighed below 1.5 kg at birth. Eighteen babies were still born and another 6 died during the early neonatal period. (Table X)

There was no maternal death in the study group

Discussion :

Our data showed an incidence of 0.57 % of placenta praevia as compared to 0.4% reported by Hemmadi et al 1995. Iyasu et al (1993) reported an incidence of 4.8 per thousand deliveries in USA in a study comprising 164,000 deliveries over a 9 year period.

In the present study were 73% of patients between 20-29 years. According to the epidemiological study by Iyasu et al (1993) placenta praevia is strongly associated with increased maternal age, women > 30 years old were three times more likely to have placenta praevia than women < 20 years old. Most women in the present study were

multiparous and 61% of them were unbooked and presented to hospital as emergency.

Eleven percent of the patients had a previous caesarean section. Taylor et al (1994) reported that 20% of women with placenta praevia had delivered previously by caesarean section. They estimated 50% increased risk of placenta praevia in women who earlier had delivered by caesarean section. They also found that women with one or more abortions are 30% more likely to have placenta praevia in later pregnancies (Taylor et al 1993). In the present study 9% of the patients had history of previous abortions

Malpresentations were seen in 20% of our cases and abruption was seen in 8% whereas Iyasu et al (1993) reported an incidence of 9.6% malpresentations in USA and associated abruption in 12.4%.

Majority of patients in the study group (64%) underwent caesarean section, 48 of whom had major degree of placenta praevia and 16 had minor degree of placenta praevia. Iyasu et al (1993) also noted a high incidence of caesarean section viz 78.3%

Problems encountered during caesarean section were highly vascular lower segment, improper formation of lower segment and extension of incision laterally and into upper segment.

Severe anaemia was encountered (< 7 gm %) in 20 patients. Ten patients had postpartum haemorrhage. Twenty six patients had blood transfusion (2-4 bottles). In 2 patients manual removal of placenta was done because of adherent placenta. However Iyasu et al (1993) quoted a low incidence of postpartum haemorrhage.

Incidence of still births was high in the present study viz

18% and 6 neonatal deaths occurred mostly due to prematurity. Thirty three % of the babies were delivered before 37 weeks of gestation which is comparable to the study of Hemmadi et al (1995). Iyasu et al (1993) reported that women with placenta praevia appeared to be 7.5 times more likely to have a still born baby than women without placenta praevia.

There were no maternal deaths in the present study where as Iyasu et al (1993) from a large series reported a case fatality rate of 0.03%. The two leading causes of death were uterine bleeding (50%) and disseminated intravascular coagulation (15.9%)

Conclusion :

Placenta praevia accounts for approximately 0.5% of all deliveries but it & still till remains a major cause of perinatal morbidity and mortality. Women with placenta praevia stayed longer in hospital and had a higher rate of caesarean section but perinatal mortality remained high and the principal cause was prematurity. Improvements in ultrasound, blood transfusion facilities, early detection of placenta praevia and conservative management will help to decrease the perinatal mortality

Bibliography

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