

Effect of various factors associated with APH on perinatal outcome

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Abstract

Introduction: Antepartum haemorrhage (APH) is defined as bleeding from or in to the genital tract, occurring from 24 weeks of pregnancy and prior to the birth of the baby. Up to one-fifth of very preterm babies are born in association with APH, and the known association of APH with cerebral palsy can be explained by preterm delivery. **Aims and Objectives:** To study the effect of various factors associated with APH on perinatal outcome. **Materials and Methods:** In the present study all cases of bleeding per vaginam after 28 weeks of the gestation with the clinical symptoms and signs suggestive of antepartum hemorrhage were selected. Thus total 57 cases of antepartum hemorrhage were enrolled in the study. Detailed history of each case was recorded which includes age, registration status, parity, gestational age, onset, amount and nature of bleeding. Associated complaint of abdominal pain and its severity, leaking per vaginam, decreased fetal movement, confusion, giddiness, and palpitation, pallor were also noted down. All the women were followed till the termination of pregnancy and strict fetal and maternal well being was monitored. All the cases were managed by standard treatment protocol. Perinatal outcome was measured by calculation total live births, still birth and neonatal deaths. Perinatal mortality was compared with type of abruptio placentae and placenta previa. **Results:** Abruption was diagnosed in 63.16% pregnant women whereas placenta previa was diagnosed in 36.34% pregnant women. In 45.61% cases outcome of the pregnancy was fresh stillbirth. Full term live birth was observed in 31.58% cases. Preterm live birth was observed in 21.05% cases; out of these neonatal death was observed in 3.52% cases. It was seen that 59.65% pregnancies with APH were unbooked. 59.65% were multigravida. Gestational age less than 37 weeks was observed in 66.67% pregnant women. **Conclusion:** Thus we conclude that high rate of stillbirth is observed in patients with APH. And unbooked pregnancy, multi gravida, preterm delivery were the associated factors with it. **Keyword:** Antepartum haemorrhage, still birth, Placenta praevia. Abruption.

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INTRODUCTION

Antepartum haemorrhage (APH) is defined as bleeding from or in to the genital tract, occurring from 24 weeks of pregnancy and prior to the birth of the baby. The most important causes of APH are placenta praevia and placental abruption. APH complicates 3–5% of pregnancies and is a leading cause of perinatal and maternal mortality worldwide.¹ Up to one-fifth of very preterm babies are born in association with APH, and the

known association of APH with cerebral palsy can be explained by preterm delivery. Obstetric haemorrhage remains one of the major causes of maternal death in developing countries and is the cause of up to 50% of the estimated 500 000 maternal deaths that occur globally each year.² Placenta praevia (PP) and placental abruption are common causes for APH. APH accounts for a substantial percentage of maternal and fetal mortality and morbidity. Availability of emergency services has definitely reduced the morbidity and mortality. It thus provides a wide scope to study and analyze the various factors with APH, and its outcomes and hence this study. Louis Buerger in 1609 was the first to recognize that premature separation of placenta was the cause of bleeding during last trimester. Portal in 1683 described the entity called placenta previa.³ The abrupt onset of hemorrhage almost always jeopardizes the fetus only in very few cases. When the patient comes in comparatively early stages or when the bleeding itself has been minimal the fetus does stand any chance of survival. The maternal mortality and morbidity are due to various complications

such as haemorrhage, hypofibrinogenemia, renal failure and puerperal infection. It has been observed that maternal mortality due to APH has significantly decreased in developed countries due to better obstetrical services and outcome. In India, maternal and perinatal mortality is still very high due to associated problems like anemia, difficulties in transport in case of emergency and restricted medical facilities.⁴

AIMS AND OBJECTIVES:

To study the effect of various factors associated with APH on perinatal outcome.

MATERIALS AND METHODS

In the present study all cases of bleeding per vaginum after 28 weeks of the gestation with the clinical symptoms and signs suggestive of antepartum hemorrhage were selected. Antepartum hemorrhage cases without bleeding per vaginum but diagnosis of abruptio placenta clinically suspected followed by sonographic confirmation of concealed abruptio placentae. Thus only confirmed cases of abruption placentae and placenta previa were enrolled in the study. Thus total 57 cases of antepartum hemorrhage were enrolled in the study. Detailed history of each case was recorded which includes age, registration status, parity, gestational age, onset, amount and nature of bleeding. Associated complaint of abdominal pain and its severity, leaking per vaginum, decreased fetal movement, confusion, giddiness, and palpitation, pallor were also noted down. Details of previous deliveries if any, its outcome and also any similar significant past episode in previous pregnancy and abortion or PIH or chronic hypertension or trauma in present pregnancy were also inquired and noted. All the women were followed till the termination of pregnancy and strict fetal and maternal well being was monitored. On admission following points were noted, general condition, vital parameter, pallor and its severity, presence or absence of hypovolaemic shock. All the cases were managed by standard treatment protocol. Perinatal outcome was measured by calculation total live births, still birth and neonatal deaths. Perinatal mortality was compared with type of abruptio placentae and placenta previa.

RESULTS

Table 1: Distribution of women according to type of APH

Type of APH	No. of cases	Percentage (%)
Abruptio placenta	36	63.16%
Placenta previa	21	36.34%
Total	57	100%

In the present study, abruptio placentae was diagnosed in 63.16% pregnant women whereas placenta previa was diagnosed in 36.34% pregnant women.

Table 2: Various Perinatal outcome

Perinatal outcome	No of cases	Percentage (%)
Full term Live born	18	31.58
Preterm Live born	12	21.05
Fresh stillbirth	26	45.61
Macerated stillbirth	1	1.75
Neonatal death	2	3.51

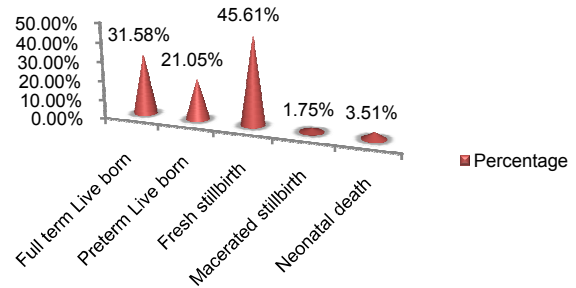


Figure 1: Perinatal outcome

It was evident from the table that in 45.61% cases outcome of the pregnancy was fresh stillbirth. Full term live birth was observed in 31.58% cases. Preterm live birth was observed in 21.05% cases; out of these neonatal death was observed in 3.52% cases.

Table 3: Various factors associated with APH

Variable	No. of cases	%
ANC registration	Unbooked	34 59.65
	Booked	23 40.35
Age group	≤19 yrs	7 12.28
	20-29 yrs	43 75.44
	≥30 yrs	7 12.28
Gravida	1	23 40.35
	2-3	31 54.39
	≥ 4	3 5.26
Gestational age	<37wks	38 66.67
	>37wk	19 33.33
Severity of bleeding (post partum HB)	< 6	18 31.58
	6-10	30 52.63
	>10	9 15.79
Total	57	100.00

It was seen that 59.65% pregnancies with APH were unbooked. Majority of the pregnant women (75.44%) in the study were between the age group of 20 -29 years. 40.35% pregnant women with APH were primigravida and 59.65% were multigravida. Gestational age less than 37 weeks was observed in 66.67% pregnant women. Majority of the cases had post partum hemoglobin less than 10gm%

DISCUSSION

The present study was conducted to study the effect of various factors associated with APH on perinatal outcome. For this purpose total 57 cases were enrolled in the study. Out of which abruptio placentae was diagnosed in 36 (63.16%) pregnant women whereas placenta previa was diagnosed in 21 (36.34%) pregnant women. In the study conducted by Lele *et al*⁵ and Bhatt *et al*⁶ incidence of placenta previa was 42.9% and 31.8% respectively which was similar to findings of present study. whereas Khosla *et al*⁷, Palaniappan *et al*⁸ and Raksha *et al*⁹ studied incidence of abruptio placentae in their study and it was 60%, 60.5% and 53.55 respectively which was nearly same to the finding in present study. It was observed that, in 45.61% cases outcome of the pregnancy was fresh stillbirth. While full term live birth was observed in 31.58% cases. Preterm live birth was observed in 21.05% cases; out of these neonatal deaths was observed in 3.52% cases. Salihu *et al*¹⁰ reported neonatal mortality rate was three fold higher in pregnancies complicated by placenta previa primarily because of increased preterm birth. In our studies preterm was the common cause of neonatal death. Ananth *et al*¹¹ reported a comparably increased risk of neonatal death even for those fetuses delivered at term. It was seen that majority (59.65%) of the pregnancies with APH were unbooked. similar findings were also reported by Arora R *et al*.¹² Majority of the pregnant women (75.44%) in the study were between the age group of 20 -29 years. B Das *et al*¹³ observed similar findings in their study. Beard *et al*¹⁴ also demonstrated that APH was common in age between 21-26 yrs. It was seen that 59.65% were multigravida. Bhide *et al*¹⁵ also observed higher incidence of APH and maternal mortality and morbidity in multi gravid. Gestational age less than 37 weeks was observed in 66.67% pregnant women. The adverse maternal and fetal outcome was higher in preterm babies. Rosario *et al*¹⁶ and Ashar *et al*¹⁷ also observed similar findings in their study. Majority of the cases had post partum hemoglobin less than 10gm%. Sarwar I *et al*¹⁸ observed 96.2% women had postpartum Hb less than 10gm% in their study.

CONCLUSION

Thus we conclude that high rate of stillbirth is observed in patients with APH. And unbooked pregnancy, multi gravida, preterm delivery were the associated factors with it.

REFERENCES

1. Fraser D. I, Mukhopadhyay s. Antepartum hemorrhage, Chapter 12, The management of labour. 2nd Edition, Orient Longman, 2005; 177 –194.
2. Frederiksen-M C; Glassenbery –R; stika-C S; placenta praevia a 22 year analysis. Am J obstet Gynecol, 1999: 180; 1432 –7.
3. Myerscough P R, Antepartum haemorrhage: Placenta Praevia, chapter 29, operative obstetrics, 10th Edition, Bailliere Tindall, 2004; 400 –414.
4. S Singhal, Nymphaea, S Nanda. Maternal And Perinatal Outcome In Antepartum Hemorrhage: A Study At A Tertiary Care Referral Institute. The Internet Journal of Gynecology and Obstetrics;2007: 9(2.)
5. Lele S.B., Punjabi J.T., Motashaw. N.D. Purandare B.N.: A review of 340 cases of placenta previa Am J obstet Gynaecol India 18, 1968: 636.
6. Bhat S.S.G. Hosp. Baroda 1985. Post Gr. ob Gy. 4 th Ed. Menon., Devi Rao Edited by K.B. Rao, P 107 orient longman.
7. Khosla A., Dahiya V., Sangwan K., Rathi S., Perinatal outcome in Antepartum haemorrhage J obst Gynec India 39: 1989: 71.
8. Palaniappan B., Srinivas D., Fatima S.M., caesarean section accidental haemorrhage J obst Gynec India 34:1984:77.
9. Raksha Arora, Uma Devi: Kindgok Majumdar: Perinatal morbidity and mortality in antepartum haemorrhage, 102-104:1970.
10. Salihu HM, Li Q., Rouse DJ., *et al*: Placenta previa: Neonatal death after live births in the united states. Am J Obstet Gynecol 188: 1305, 2003.
11. Ananth C.V., Wilcer A.J., Placental abruption and perinatal mortality in the united states Am J epidemiol; 2001:153pg332
12. Arora R, Devi V, Majumder. Perinatal morbidity and mortality in Antepartum haemorrhage, J of obst and Gyn of India, May/ June 2001, Vol. 51, No.3; 102-104.
13. Das B: Accidental haemorrhage Ind J obst. Gynecol 11; 389: 1970
14. Beard D.J. Journal of obst and Gynec of British empire 90; 809:1983
15. Bhide AG, Venkatraman V, Daftary SN. Factors affecting perinatal outcome in Antepartum hemorrhage. J. Obstet Gynecol 1990; 40, No.1; 517-520
16. Rosario Y.P., Prabhu A: An assessment of placenta previa with its management J obst Gynec India 21:1971: 437.
17. Ashar, Purandare: Accidental haemorrhage, Indian J obst gynae. 18; 630:1968.
18. Sarwar I, Abbasi AN, Islam A. Abruptio placenta and its complication at Ayub teaching hospital Abbottabad. J. Ayub Med coll Abbottabad 2006; 18 page No 127-131

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