Research Article

Study of various factors influencing perinatal outcome in APH

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Abstract

Introduction: Third trimester bleeding is known as major cause of maternal mortality throughout the world since very ancient times, though its identification and significance has only recently recognized. Variouss factors have been correlated with the outcome of APH by various authors. **Aims and Objective:** to study the effect of various factors influencing outcome in APH. **Materials and Method:** Present prospective study was conducted among the pregnant attending ANC OPD. Cases of antepartum hemorrhage were identified and followed up to the delivery. Details of various factors such as age of mother, gestational age at the time of delivery, gravid, severity of bleeding were studied in detail. **Results:** Total 66 cases of APH were diagnosed. Out of them 45 were of abruption placentae and 14 were of placenta prevea. Perinatal death was found maximum (84.85%) in un booked ANCs. Preterm deliveries were also found to be influencing the perinatal mortality. Other factors influencing the perinatal outcome were severity of bleeding during labour and increasing gravid status of mother. **Conclusion:** thus we can conclude that perinatal outcome in APH is influenced by un booked pregnancy, multi gravida, preterm delivery, high blood loss during labour.

Keywords: Hemorrhage, puerperium.

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INTRODUCTION

Third trimester bleeding is known as major cause of maternal mortality throughout the world since very ancient times, though its identification and significance has only recently recognized. In early part of nineteenth century the death of the princess charlotte, daughter of George IV, from this type of haemorrhage created great interest amongst the obstetrician. Probably it was Louis Burgoeis who first recognizes this condition in 1609. Then Mauricau Puzos and other worker described such isolated cases in the early half of 18th century. In 1775 Edward Rigby first made distinction between premature separations of normally implanted from that of low lying placenta. The former was termed as accidental haemorrhage, and the later non-preventable haemorrhage.[1]"Placenta" the life of fetus in utero, can lead to life threatening emergency because of its abnormal positioning of obscure etiology in uterus. Norman white (1929)[79] suggested grouping of the placenta previa into four degrees and it was strongly recommended by F.J. Brown and Macafee[2]. Placenta previa can be diagnosed by history, clinically and by investigative procedures. The history of classical painless pv bleeding in third trimester with an abnormal presentation or non engaged presenting part will arouse suspicious of placenta previa and fianal diagnosis will be made by ultrasonography. Pervaginal examination is contraindicated. Moir[3] (1971) Stated that most dangerous haemorrhage almost always followed by an ill advised obstetrical interference such as digital examination. Rao in 1975 reported that maternal mortality is four times higher in woman where digital examinations was done outside the hospital[4].

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AIMS AND OBJECTIVE

To study the effect of various factors influencing outcome in APH

MATERIAL AND METHODS

Study Design

Present prospective study was conducted in PVPGH, Sangli to study the various outcome of pregnancy in antepartum hemorrhage.

Following Criteria was used for selection of cases

- All cases of bleeding per vaginum after 28 weeks of the gestation with the clinical symptoms and signs suggestive of antepartum hemorrhage.
- Antepartum hemorrhage cases without bleeding per vaginum but diagnosis of abruptio placenta clinically suspected followed by sonographic confirmation of concealed abruptio placentae.

Only confirmed cases of abruption placentae and placenta previa were enrolled in the study. All the study population was followed till the outcome of pregnancy. Detailed history was recorded on a restructured and pretested pro forma at the time of enrolment. It 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 delivery, its outcome and any similar episode in previous pregnancy and abortion or PIH or chronic hypertension or trauma in present pregnancy were also inquired and noted. All the women in the study were managed by using standard protocol. Perinatal outcome was measured by calculation total live births, still birth and neonatal deaths. Effect of age, gestational age, gravida, severity of bleeding during the pregnancy and ANC registration and its effect on the outcome of pregnancy was measured and compared.

RESULTS

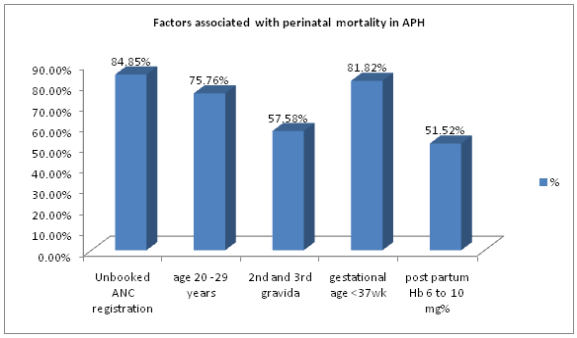
Table 1: Distribution of perinatal deaths according to type of APH

Type of APH	No. of Perinatal deaths	Percentage (%)
Abruption (n=45)	30	66.67%
Palcentaprevia (n=21)	03	14.28
Total (n=66)	**33**	50%

It was observed that out of the total 45 cases of abruptio placentae 30 (66.67%) were perinatal deaths. Whereas out of 21 cases of placenta previa only 3 (14.28%) were perinatal deaths.

Table 2: Influence of various factors on perinatal outcome

Variable		No. of cases (%)	Perinatal Death
ANC registration	Unbooked	39 (59.09%)	28 (84.85%)
	Booked	27 (40.91%)	05 (15.15%)
Age group	≤19 yrs	9 (13.64%)	3 (9.09%)
	20-29 yrs	50 (75.76%)	25 (75.76%)
	≥30 yrs	7 (10.60%)	5 (15.15%)
Gravida	1	26(39.3)	12 (36.36)
	2-3	35 (53.0)	19 (57.58)
	≥ 4	5 (7.57)	02 (6.06)
Gestational age	<37wks	41 (62.12)	27 (81.82)
	>37wk	25 (37.88)	06 (18.18)
Severity of bleeding (post partum HB)	< 6	16 (24.24)	13 (39.39)
	6-10	36 (54.55)	17 (51.52)
	>10	14 (21.21)	3 (9.09)
	Total	**66**	**33**



Considering perinatal deaths in booked and un booked cases, perinatal mortality was much higher in un booked (84.85%) as compared to booked (15.15%) cases. When effect of age was studied on the output of APH it was observed that majority of the cases (75.76%) were between the age group of 20 to 29 years. And peri natal mortality was also maximum in the same age group. In our study no. of cases found in gravida 2-3 were 35 and perinatal mortality was also high in these cases (57.58%). While primigravida were 26 with perinatal mortality 36.36%. Total no of preterm cases in the study were 41 and out of that perinatal death was observed in the 27 cases. As it was difficult, to measure exact amount of bleeding, Hb level was taken as a measure of bleeding which showed a definite affect on PNMR. There were 16 cases of severe anemia and out of those 13 cases reported perinatal mortality. Severe the anemia more were the perinatal mortality, in abruption placentae as well as in placenta previa.

DISCUSSION

Maternal mortality is the death of a woman in relation to pregnancy. According to W H O “A maternal death is defined as the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the

duration and site of pregnancy, from any cause related or aggravated by pregnancy or its management". The present study revealed that 23.07 % maternal death was due to indirect obstetrical causes, 76.93 % due to direct cause. Other studies have shown variations in direct obstetrical death from. 68.7 % in a study by Kulkarni *et al* [6] and 60 % by Salhan *et al*.[7] Direct obstetric deaths accounted for 76.93 % of all deaths in our study that included hemorrhage 26.92 %, severe pre-eclampsia 20.51 %, sepsis 23.08 %, abortion 6.42 %. Hemorrhage especially during post partum is sudden, unpredictable and more dangerous when woman has pre-existing anemia. Globally 25 % of all maternal deaths are due to hemorrhage. Other studies show variation between 9.72 % and 27.5 %.[4, 8] In our study the rate of deaths due to hemorrhage was 26.92%. This is due to lack of proper antenatal care, poor nutritional status, home deliveries and late referrals. Sepsis which is a direct consequence of poor hygiene during delivery, account for 15 % of maternal deaths globally. In our study it was 23.08 %. Globally, bindirect cause of maternal deaths account for 20 % of all maternal deaths, particularly from anemia, malaria, HIV, etc. Other studies their range between 17.2% and 40 %. In our study it was 23.07 % and included deaths due to anemia 17.95 %, ARF 1.28 %, cardiac failure 1.28 % and malaria deaths 2.56 %. This was similar to in a study by Chhabra *et al*.[9] in which the main indirect cause of death was anemia (13.9%). Our study showed that 74.36 % of women died between the age group 21 and 30 years, as highest number of women belong to this age group. Similarly, multi gravidas contribute 56.41 % of maternal deaths. Admission death interval of our study revealed that 62.5 % of women died within 24 hours of admission, probably due to poor general condition of women at the time of admission and late referrals.

CONCLUSION

Thus we can conclude that perinatal outcome in APH is influenced by un booked pregnancy, multi gravida, preterm delivery, high blood loss during labour.

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