

Risk factors for ante partum haemorrhage: A hospital based study

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Abstract

Objective: The present study was done to assess the prevalence and the associated risk factors of ante partum haemorrhage (APH) at a tertiary care hospital. **Materials and Methods:** It was a retrospective hospital-based study. It was done over a period of 3 months in the Obstetrics and Gynaecology department at the tertiary care hospital. All the cases with bleeding from or into the genital tract after 28th week of pregnancy but before the birth of the baby were classified as APH and included in analysis. The risk factors associated with APH were assessed and analyzed. **Results:** The prevalence of APH was found to be 4.71% in the study population. Multiparity, hypertension, pregnancy induced hypertension, maternal age greater than 35 years, prior caesarean section, absence of antenatal care and rural residence were the risk factors found to be associated with APH in the study group. **Conclusion:** There was a high prevalence of APH in the study group. The obstetricians should be aware regarding the risk factors so that there can be early diagnosis and treatment of APH.

Keywords: Multiparity, Placenta praevia, Abruptio Placentae.

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INTRODUCTION

Ante partum Haemorrhage (APH) is a very serious and one of the most frequent obstetrical emergencies. It has been a major cause of maternal as well as perinatal morbidity¹ APH is defined as bleeding from or into the genital tract after 28th week of pregnancy but before the birth of the baby. Ante partum Haemorrhage may be due to the placenta praevia or abruptio placentae or there may be an unexplained cause. Around 35% cases of ante partum haemorrhage are due to placenta praevia and there are almost an equal numbers of cases due to abruptio placentae.^[2] Obstetric haemorrhage is the most common preventable cause of maternal death and is responsible for 25-60% of maternal deaths. Also, ante partum

haemorrhage occurs without warning signs.^[3] Thus, there is a need to identify the risk factors associated with ante partum haemorrhage so that it can help obstetricians in the early diagnosis and treatment of ante partum haemorrhage. Present study was done to evaluate the prevalence and the associated risk factors of ante partum haemorrhage at a tertiary care hospital.

MATERIALS AND METHODS

It was a retrospective hospital-based study. It was done over a period of 3 months in the Obstetrics and Gynaecology department at the tertiary care hospital. Patients were informed at the time of admission about the possibility that their medical records will be reviewed for scientific purposes. The study population included all cases presenting with ante partum haemorrhage during the study period. All the cases with bleeding from or into the genital tract after 28th week of pregnancy but before the birth of the baby were classified as ante partum haemorrhage. Data regarding the maternal age at the time of presentation, parity, urban/rural residence, presence or absence of antenatal care, presence of hypertension, pregnancy induced hypertension; prior caesarean section was collected and analyzed.

RESULTS

Following table describes the prevalence and risk factors associated with ante partum haemorrhage in the study population during the study period at our tertiary care hospital.

Table 1: Prevalence and risk factors of ante partum haemorrhage in study group

Variable	Number of cases	Prevalence of APH (Percentage)	Crude OR (95%CI)	p value
Total subjects	1867	88 (4.71%)	--	--
Maternal age				
<35 years	1158	38 (3.28%)	1	0.0003
>35 years	709	50 (7.05%)	2.24 (1.45 to 3.45)	(S)
Parity				
Nullipara/Primipara	846	23 (2.72%)	1	0.0003
Multipara	1021	65 (6.37%)	2.43 (1.5 to 3.95)	(S)
Area of residence				
Urban	917	28 (3.05%)	1	0.001
Rural	950	60 (6.32%)	2.14 (1.35 to 3.38)	(S)
Antenatal care				
Yes	1125	31 (2.76%)	1	<0.0001
No	742	57 (7.68%)	2.94 (1.88 to 4.59)	(S)
Hypertension				
Yes	236	18 (7.62%)	1.84 (1.08 to 3.15)	0.02
No	1631	70 (4.29%)	1	(S)
PIH				
Yes	189	21 (11.11)	3 (1.8 to 5.03)	<0.0001
No	1678	67 (3.99%)	1	(S)
Prior Caesarean Section				
Yes	156	19 (12.18%)	3.3 (1.93 to 5.65)	<0.0001
No	1711	69 (4.03%)	1	(S)

OR: Odds Ratio, CI: Confidence Interval, S: statistically significant

DISCUSSION

The prevalence of APH was found to be 4.71% in the study population. It was found to be higher than the value of 3.5% reported in the literature.⁴ In an Indian study by Archana Maurya *et al* [3] the prevalence of APH has been reported to be 2.96%. However in a Qatari study, a very high prevalence of 15.3% was reported by A Bener *et al*.⁵ The patients with hypertension and pregnancy induced hypertension (PIH) were found to be at significantly higher odds of landing in ante partum haemorrhage. Patients with gestational hypertensive diseases have been reported to be prone to develop ante partum haemorrhage.⁶ Hypertension can lead to placental insufficiency and also aggravate it eventually leading to ante partum haemorrhage.⁷ Maternal age over 35 years was found to be a risk factor for ante partum haemorrhage in our study. Older maternal age may show an association with increased obstetric complications which maybe secondary to reduced cardiovascular reserve, relatively high incidence of underlying medical disease and also decreased ability to respond and adapt to the physical stress that accompanies ageing.⁸ With more and more women opting for late pregnancies, this risk factor needs a considerable degree of medical attention.⁹ Multiparity

and previous caesarean section delivery were also found to be at higher odds of ante partum haemorrhage in our study population. Study by Berihun Adhena¹ has also highlighted that Multiparity and previous caesarean section delivery are significant risk factors for ante partum haemorrhage. Absence of antenatal care and rural residence were also found to be at significantly higher odds of developing ante partum haemorrhage which stresses the importance of awareness programs for pregnant women especially from the rural areas to visit the hospitals for antenatal care. To conclude, there was a high prevalence of APH in the study group. The obstetricians should be aware regarding the risk factors so that there can be early diagnosis and treatment of APH.

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