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ASSESSMENT OF MATERNAL AND FETAL OUTCOME IN ANTEPARTUM HEMORRHAGE

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ABSTRACT

Antepartum hemorrhage is bleeding from the vagina after 24 weeks. It is a significant cause of foetal and maternal death and occurs in 2-5% of pregnancies.[1] Antepartum hemorrhage accounts for 30% of maternal deaths, 50% of which are linked to preventable causes. The three primary categories of antepartum hemorrhage causes include placenta previa, placental abruption, and others.

The present study was conducted to assess maternal and fetal outcome in patients with antepartum hemorrhage.

120 cases of antepartum hemorrhage were studied. Abdominal examination, per speculum and per vaginum examination was done. Intravenous fluids were given according to severity of bleeding and patient's general condition. USG was done to establish the cause of APH.

Common type of APH was abruptio placentae seen in 62, placenta Praevia in 40 and undetermined in 18 patients. The difference was significant (P< 0.05). Among AP, PP and undetermined cases, 48, 28 and 15 cases had emergency C/S. Elective C/S was seen in 10, 7 and 2 and vaginal in 4, 5 and 1 case respectively. Most common complication in AP was anemia seen in 7 in AP, 4 in PP and 3 in undetermined. 15 patients in AP, 9 in PP and 5 in undetermined need blood transfusion. Maternal death was seen 2 in AP, 1 in PP and 1 in undetermined type. The difference was significant (P< 0.05). Birth weight <2500 grams was seen in 40, 24 and 12. Fetal presentation was breech in 32, 26 and 13. In maximum cases cause of death was sepsis seen in 2, 1 and 1. There were 58 live birth, 39 and 15 in AP, PP and undetermined respectively. The difference was significant (P< 0.05).

Common reason of APH was abruptio placentae, placental previa and undetermined. Sepsis was most common cause of death.

Key words: Antepartum hemorrhage, foetal, maternal outcome

Introduction

Antepartum hemorrhage is bleeding from the vagina after 24 weeks. It is a significant cause of foetal and maternal death and occurs in 2-5% of pregnancies.[1] Antepartum hemorrhage accounts for 30% of maternal deaths, 50% of which are linked to preventable causes. The three primary categories of antepartum hemorrhage causes include placenta previa, placental abruption, and others.[2] The word "abruptio placentae" refers to the early separation of a normally sited placenta

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as a result of bleeding. When the placenta is implanted entirely or partially into the lower portion of the uterus, it is known as placenta previa. Nearly half of instances of APH were caused by abruptio placentae and placenta praevia, while other causes included cervical polyps, cervicitis, genital tumours, vulvar varicosities, and others.[3]

Placenta praevia (PP), placental abruption (AP), vasa praevia, marginal sinus rupture, local lesions in the vulva, vagina, or cervix, and unclassified are some of the causes of antepartum haemorrhage.[4] Both in affluent and developing nations, it is the reason for maternal deaths. To rescue the mother and foetus, prompt diagnosis, resuscitation, and care are crucial. Placenta praevia (PP) occurs about 0.33% to 0.55% of the time, and placenta abruptio (AP) occurs about 0.5-1% of the time.[5]

Aims & Objective

The present study was conducted to assess maternal and fetal outcome in patients with antepartum hemorrhage.

Materials & Methods

The present study consisted of 120 cases of antepartum hemorrhage. All patients gave their written consent to participate in the study.

Data such as name, age etc. was recorded. Smoking and drug use, history regarding her previous antenatal checkups was noted. General physical examination was done to assess both maternal and fetal condition. Abdominal examination, per speculum and per vaginum examination was done. Intravenous fluids were given according to severity of bleeding and patient's general condition. USG was done to establish the cause of APH. Results thus obtained were subjected to statistical analysis. P value less than 0.05 was considered significant.

Results

Table 1. Type of APH

Types of APH	Number	P value
Abruptio placentae	62	0.01

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Placenta Praevia	40	
Undetermined	18	

Table 1 shows that common type of APH was abruptio placentae seen in 62, placenta Praevia in 40 and undetermined in 18 patients. The difference was significant (P< 0.05).

Table 2. Assessment of maternal outcome

Outcome	Variables	AP	PP	Undetermined	P value
Mode of delivery	Emergency C/S	48	28	15	0.03
	Elective C/S	10	7	2	
	Vaginal	4	5	1	
Complications	Anemia	7	4	3	0.05
	HELPP	2	1	1	
	MI	0	1	0	
	DIC	1	0	0	
	PPH	3	2	0	
	Blood transfusion	15	9	5	
	Maternal death	2	1	1	

Table 2. shows that among AP, PP and undetermined cases, 48, 28 and 15 cases had emergency C/S. Elective C/S was seen in 10, 7 and 2 and vaginal in 4, 5 and 1 case respectively. Most common complication in AP was anemia seen in 7 in AP, 4 in PP and 3 in undetermined. 15 patients in AP, 9 in PP and 5 in undetermined need blood transfusion. Maternal death was seen 2 in AP, 1 in PP and 1 in undetermined type. The difference was significant (P< 0.05).

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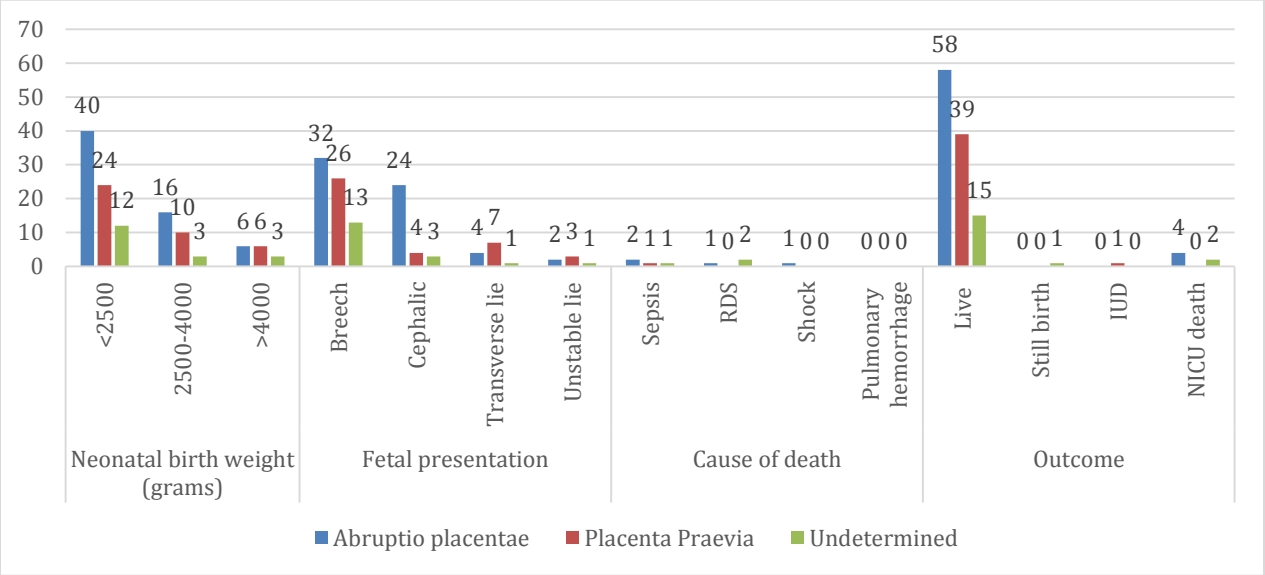
Graph 1. Determination of fetal outcome



Graph 1. show that birth weight <2500 grams was seen in 40, 24 and 12. Fetal presentation was breech in 32, 26 and 13. In maximum cases cause of death was sepsis seen in 2, 1 and 1. There were 58 live birth, 39 and 15 in AP, PP and undetermined respectively. The difference was significant (P< 0.05).

Discussion

One of the most dreaded obstetrical consequences has always been antepartum hemorrhage (APH).[6] In our nation, maternal and perinatal morbidity and death are still significantly influenced by antepartum hemorrhage, a serious obstetric emergency.[7] In roughly 30% of instances, hemorrhage was the direct cause of maternal death. Approximately 2-5% of all pregnancies are complicated with APH. Malpresentations, early labour, postpartum hemorrhage (PPH), sepsis, shock, and retained placenta are the maternal consequences in individuals with APH.[8] Currently, increased use of ultrasound for placental localization and to diagnose placenta abruption, improved obstetrical and anaesthetic facilities, increased use of blood and its products to treat anaemia, and advanced neonatal care facilities to increase the chances of survival of a preterm infant, all in all, are all contributing to the current increase in the use of these

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treatments.[9] The present study assessed maternal and fetal outcome in patients with antepartum hemorrhage.

We found that common type of APH was abruptio placentae seen in 62, placenta Praevia in 40 and undetermined in 18 patients. Kedar et al[10] in their study patients were distributed according to type of APH into Abruptio Placentae (AP), Placenta Previa (PP) and Unclassified Haemorrhage (UH). Causes of APH were noted and maternal as well as perinatal outcome observed. Out of 131, 51.91% was AP followed by PP (45.80%) and 2.29% of UH. Maximum patients belonged to 25 to 29 years age group (40.46%), which was statistically significant. Maximum no. of patients who presented with APH was of more than 36 weeks of gestational age which was statistically significant. 52.94% had PIH as a causative factor of abruption while 41.67% had history of previous LSCS for PP. Anaemia was most common complication in APH followed by PPH. One patient died of renal failure in AP. Neonatal jaundice was the most common complication amongst the neonate followed by prematurity.

We found that among AP, PP and undetermined cases, 48, 28 and 15 cases had emergency C/S. Elective C/S was seen in 10, 7 and 2 and vaginal in 4, 5 and 1 case respectively. Most common complication in AP was anemia seen in 7 in AP, 4 in PP and 3 in undetermined. 15 patients in AP, 9 in PP and 5 in undetermined need blood transfusion. Maternal death was seen 2 in AP, 1 in PP and 1 in undetermined type. Wasnik et al[11] found that APH was seen in 1.31%. Pregnancy-induced hypertension (PIH) was linked to 73% of cases of APH, indicating that it is one of the main risk factors. With increased rates of caesarean section (90%), postpartum hemorrhage (36%), requirement for blood transfusion (75%), preterm deliveries (65%), low birth weight (40%) and NICU hospitalisation (44%), maternal and perinatal morbidity was quite high. Despite the fact that prompt intervention prevented any maternal deaths, 3% of patients underwent obstetric hysterectomy, and 6.4% required hospitalisation to the intensive care unit. Very high (21%) perinatal mortality was observed. The rate of maternal and perinatal morbidity is extremely high.

We found that birth weight <2500 grams was seen in 40, 24 and 12. Fetal presentation was breech in 32, 26 and 13. In maximum cases cause of death was sepsis seen in 2, 1 and 1. There were 58 live birth, 39 and 15 in AP, PP and undetermined respectively. Jharaik et al[12] found that the prevalence of APH was discovered to be 1.98%. Most often, placenta previa occurred. APH

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was frequently linked to multigravida, and the majority of cases occurred in women between the ages of 26 and 30. The majority of PP and abruption patients, respectively, were admitted at 34–37 weeks and 31–33 weeks. Prior LSCS and D&C, hypertension, numerous pregnancies, and malpresentations were high risk factors. The majority of the patients had preterm LSCS. Prematurity was the leading cause of foetal problems. 58.6% of patients received blood transfusions. Maternal mortality was zero, and overall perinatal mortality was 20.1%.

Conclusion

In conclusion, this study aimed to assess the maternal and fetal outcomes in patients with antepartum hemorrhage (APH). The most common types of APH observed were abruptio placentae and placenta previa. Emergency cesarean section was the most frequent mode of delivery for both types, followed by elective cesarean section and vaginal delivery. Anemia was the most common complication observed in APH cases, followed by postpartum hemorrhage and the need for blood transfusion. Maternal deaths were also reported, although they were relatively rare. Regarding fetal outcomes, low birth weight and breech presentation were observed in a significant number of cases. Sepsis was identified as the primary cause of fetal death in most instances. Despite these challenges, there were a considerable number of live births, indicating successful management and intervention in many cases. This study highlights the importance of early diagnosis, prompt resuscitation, and appropriate care for patients with APH to improve maternal and fetal outcomes. It also emphasizes the significance of interventions such as cesarean section and blood transfusion in managing APH-related complications.

Further research and efforts should focus on implementing preventive measures and improving access to quality antenatal care, including regular checkups and ultrasound examinations, to detect and manage APH cases effectively. By doing so, we can aim to reduce the incidence of APH, minimize maternal and fetal morbidity and mortality, and enhance overall maternal and child health outcomes.

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