

## ORIGINAL RESEARCH

### Maternal and fetal outcome in antepartum hemorrhage

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Received: 08 May, 2022

Accepted: 11 June, 2022

#### ABSTRACT

**Background:** Antepartum hemorrhage is defined as bleeding from the vagina after 24 weeks. The present study was assess maternal and fetal outcome in patients with antepartum hemorrhage.

**Materials & Methods:** The present study was conducted on 100 cases of antepartum hemorrhage. In all cases, maternal and fetal outcome was recorded.

**Results:** Common type of APH was abruptio placentae seen in 58, placenta Praevia in 20 and undetermined in 12 patients. The difference was significant ( $P < 0.05$ ). Birth weight  $< 2500$  grams was seen in 30, 11 and 7. Fetal presentation was breech in 32, 12 and 6. IN maximum cases cause of death was sepsis seen in 3, 1 and 1. There were 51 live birth, 19 and 10 in AP, PP and undetermined respectively. The difference was significant ( $P < 0.05$ ). 50 cases, 12 and 10 cases had emergency C/S. Most common complication in AP was anemia seen in 7 in AP, 5 in PP and 4 in undetermined. Maternal death was seen 4 in AP, 2 in PP and 1 in undetermined type. 20 patients in AP, 10 in PP and 6 in undetermined need blood transfusion. The difference was significant ( $P < 0.05$ ).

**Conclusion:** Common reason of APH was abruptio placentae, placental previa and undetermined. Most common cause of death was sepsis in all type of APH.

**Key words:** Antepartum hemorrhage, placental previa, Abruptio placentae

#### INTRODUCTION

Antepartum hemorrhage is defined as bleeding from the vagina after 24 weeks. It occurs in 2-5% of pregnancies and is an important cause of fetal and maternal death.<sup>1</sup> 30% of maternal deaths are caused by antepartum hemorrhage of which 50% are associated with avoidable factors. The causes of antepartum hemorrhage can be divided into three main groups, placenta previa, placental abruption and others.<sup>2</sup> Abruptio placentae are the terminology used for premature separation of a normally sited placenta due to bleeding. Placenta previa occurs when the placenta is implanted wholly or in part into the lower segment of the uterus. Abruptio placentae and placenta praevia comprised of almost half cases of APH whereas causes such as cervical polyp, cervicitis, genital tumors, vulvar varicosities etc. are also seen.<sup>3</sup> Causes of antepartum hemorrhage include placenta praevia (PP), placental abruption (AP), vasa praevia, rupture of marginal sinus, local lesions in the vulva, vagina or cervix and unclassified.<sup>4</sup> It is the cause of maternal deaths in both developed and developing countries. Prompt diagnosis, resuscitation and management are essential to save the mother and fetus.

The incidence of placenta praevia (PP) approximate about 0.33% to 0.55% and incidence of abruptio placenta (AP) about 0.5-1%.<sup>5</sup> The present study was conducted to assess maternal and fetal outcome in patients with antepartum hemorrhage.

## MATERIALS & METHODS

The present study consisted of 100 cases of antepartum hemorrhage. All patients were explained regarding the study and written consent was obtained.

Patient data such as name, age etc. was recorded. A thorough clinical examination was done. Laboratory investigation such as complete blood count, TLC, DLC, blood grouping and viral markers was reported. In all cases, maternal and fetal outcome was recorded. Results thus obtained were subjected to statistical analysis. P value less than 0.05 was considered significant.

## RESULTS

**Table I Distribution of patients**

Types of APH	Number	P value
Abruptio placentae	58	0.01
Placenta Praevia	20	
Undetermined	12	

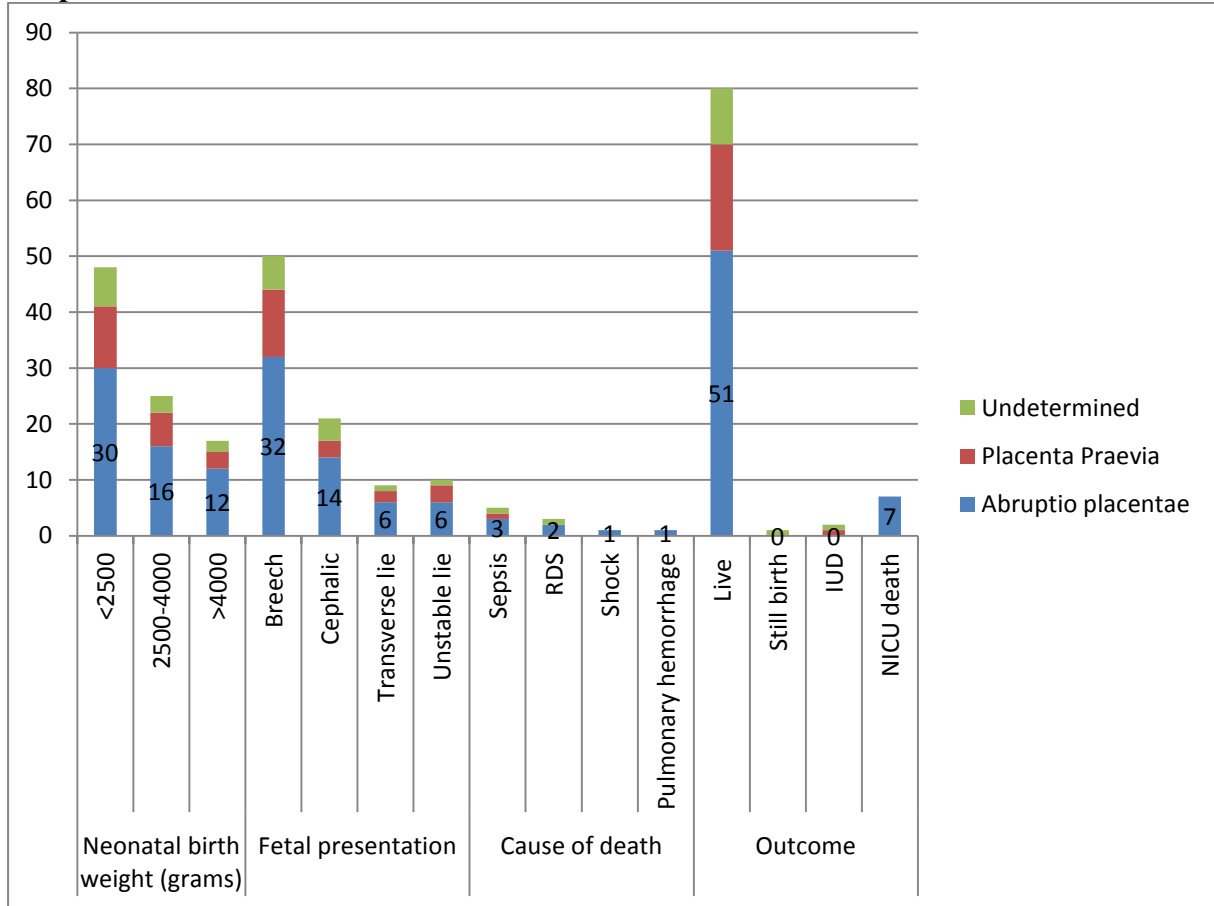
Table I shows that common type of APH was abruptio placentae seen in 58, placenta Praevia in 20 and undetermined in 12 patients. The difference was significant ( $P < 0.05$ ).

**Table II Assessment of fetal outcome**

Parameters	Variables	Abruptio placentae	Placenta Praevia	Undetermined	P value
Neonatal birth weight (grams)	<2500	30	11	7	0.02
	2500-4000	16	6	3	
	>4000	12	3	2	
Fetal presentation	Breech	32	12	6	0.01
	Cephalic	14	3	4	
	Transverse lie	6	2	1	
	Unstable lie	6	3	1	
Cause of death	Sepsis	3	1	1	0.05
	RDS	2	0	1	
	Shock	1	0	0	
	Pulmonary hemorrhage	1	0	0	
Outcome	Live	51	19	10	0.01
	Still birth	0	0	1	
	IUD	0	1	1	
	NICU death	7	0	0	

Table II, graph I shows that birth weight <2500 grams was seen in 30, 11 and 7. Fetal presentation was breech in 32, 12 and 6. IN maximum cases cause of death was sepsis seen in 3, 1 and 1. There were 51 live birth, 19 and 10 in AP, PP and undetermined respectively. The difference was significant ( $P < 0.05$ ).

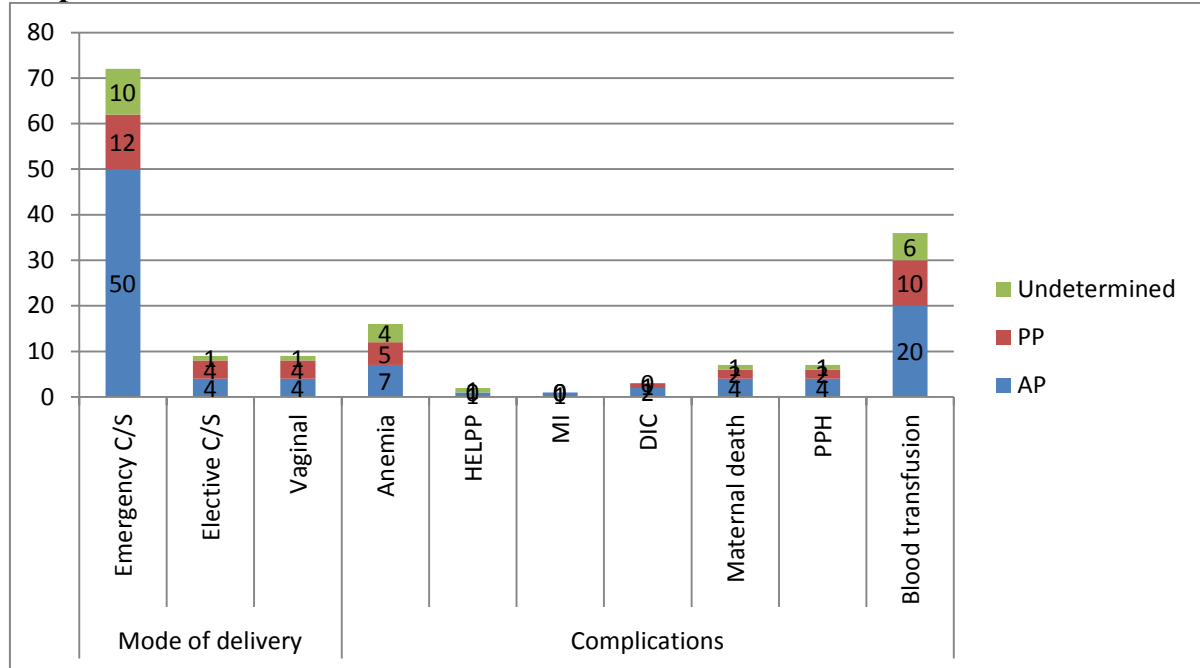
**Graph I Assessment of fetal outcome**



**Table III Assessment of maternal outcome**

Outcome	Variables	AP	PP	Undetermined	P value
Mode of delivery	Emergency C/S	50	12	10	0.01
	Elective C/S	4	4	1	
	Vaginal	4	4	1	
Complications	Anemia	7	5	4	0.02
	HELPP	1	0	1	
	MI	1	0	0	
	DIC	2	1	0	
	Maternal death	4	2	1	
	PPH	4	2	1	
	Blood transfusion	20	10	6	

Table III, graph II shows that 50 cases, 12 and 10 cases had emergency C/S. Most common complication in AP was anemia seen in 7 in AP, 5 in PP and 4 in undetermined. Maternal death was seen 4 in AP, 2 in PP and 1 in undetermined type. 20 patients in AP, 10 in PP and 6 in undetermined need blood transfusion. The difference was significant ( $P < 0.05$ ).

**Graph I Assessment of maternal outcome**

## DISCUSSION

Antepartum hemorrhage (APH) has always been one of the most feared complications in obstetrics. Antepartum hemorrhage is still a grave obstetric emergency contributing to a significant amount of maternal and perinatal morbidity and mortality in our country.<sup>6</sup> Hemorrhage was a direct cause of maternal death in about 30% of cases. APH complicates about 2-5% of all the pregnancies.<sup>7</sup> The maternal complications in patients with APH are malpresentations, premature labour, postpartum hemorrhage (PPH), sepsis, shock and retained placenta.<sup>8</sup> Presently increase in use of ultrasound for placental localization and to diagnose abruption placenta, improved obstetrical and anaesthetic facilities, increase in use of blood and its products to correct anemia and advanced neonatal care facilities to make increased chances of survival of 2 a preterm infant, all totally have played important role in decreasing perinatal as well as maternal morbidity and mortality.<sup>9</sup> The present study assessed maternal and fetal outcome in patients with antepartum hemorrhage.

We found that common type of APH was abruption placentae seen in 58, placenta Praevia in 20 and undetermined in 12 patients. Takai et al<sup>10</sup> found that prevalence rate of APH was 1.2%. In 68.3% of cases, the most common cause was abruption placenta and in 30% cases placenta previa. Maximum cases of APH were observed in 35–39 years of age group (33.0%). There were 123 live births and 92 stillbirths. The cesarean section rate was 53.5%.

We observed that Birth weight <2500 grams was seen in 30, 11 and 7. Fetal presentation was breech in 32, 12 and 6. IN maximum cases cause of death was sepsis seen in 3, 1 and 1. There were 51 live birth, 19 and 10 in AP, PP and undetermined respectively. The difference was significant ( $P < 0.05$ ). 50 cases, 12 and 10 cases had emergency C/S. Most common complication in AP was anemia seen in 7 in AP, 5 in PP and 4 in undetermined. Maternal death was seen 4 in AP, 2 in PP and 1 in undetermined type. 20 patients in AP, 10 in PP and 6 in undetermined need blood transfusion. Jharail et al<sup>11</sup> found that incidence of APH was found out to be 1.98%. Placenta previa was most common. APH was commonly associated with multigravida and most cases were in age group of 26-30 years. Most of the PP and abruption cases were admitted at 34-37 weeks and 31-33 weeks respectively. High risk factors included previous LSCS and D and C, hypertension, multiple pregnancies and malpresentations. Most of the patients underwent preterm LSCS. Most fetal complications

were due to prematurity. 58.6% patients were transfused blood. Overall perinatal mortality was 20.1% and maternal mortality was zero.

Wasnik et al<sup>12</sup> found that the incidence of APH was 1.31%. 73 % cases of APH were associated with Pregnancy induced hypertension suggesting PIH is one of the major risk factors. Maternal and perinatal morbidity was very high with increased rates cesarean section 90%, post partum hemorrhage (36%), need of blood transfusion (75%), preterm deliveries (65%), low birth weight (40%) and NICU admission (44%). Though there is no maternal mortality due to timely intervention but 3% patients underwent Obstetric Hysterectomy and 6.4% required CCU admission. Perinatal mortality was very high (21%). Conclusion: There is very high maternal and perinatal morbidity.

## CONCLUSION

Authors found that common reason of APH was abruptio placentae, placental previa and undetermined. Most common cause of death was sepsis in all type of APH.

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