

## Maternal and Perinatal Outcome in Cases of Antepartum Hemorrhage in Gandhi Hospital

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**Abstract:** Introduction: Antepartum hemorrhage (APH) is a grave obstetrical emergency which is an important cause of maternal mortality besides postpartum hemorrhage and sepsis. It contributes to 15-20% of maternal deaths in India. Maternal and perinatal complications of antepartum hemorrhage are anemia, postpartum hemorrhage, shock, low birth weight, intrauterine death, and birth asphyxia.

**Aims & Objective :-** (I) To study factors associated with Antepartum hemorrhage, (II) To study maternal morbidity and mortality due to antepartum hemorrhage (III) To study perinatal outcome in cases with antepartum hemorrhage.

**Patients And Methods:** It was a retrospective study carried out over a period of one year from 2014 -2015 on 110 women admitted with the diagnosis of antepartum hemorrhage.

**Results:** In the present study the incidence of APH was 1.2%. Out of 110 cases 68 % were multigravidae and 84.5 % of them were of low socio economic status. Most of the cases (68%) presented with bleeding per vagina , 40 % had features of pre eclampsia. 74 (67%) cases delivered vaginally and C-section done in 36 (32.7%) cases ,out of which 12 were done for placenta praevia. The maternal and perinatal mortality was 1.8% and 20% respectively.

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### I. Introduction

Antepartum hemorrhage (APH) is a grave obstetrical emergency and is a leading cause of maternal and perinatal mortality and morbidity. Incidence varies from 2-5% of all deliveries. It contributes to 15-20% of all maternal deaths in India.

APH is defined as hemorrhage from the genital tract after 20 weeks of gestation but before the delivery of the baby. APH can be due to placenta previa, abruption placentae, indeterminate cause or local causes of genital tract. The maternal complications in patients with APH are malpresentation, premature labor, postpartum hemorrhage, sepsis, shock and retained placenta. Various fetal complications are preterm delivery, low birth weight, intrauterine death, congenital malformation and birth asphyxia.

### II. Aims & Objective

- (I) To study factors associated with Antepartum hemorrhage,
- (II) To study maternal morbidity and mortality due to antepartum hemorrhage,
- (III) To study perinatal outcome in cases with antepartum hemorrhage.

### III. Patients And Methods

This was a retrospective study carried out over a period of 1 year from 2014 -2015 on all the patients admitted with the clinical diagnosis (based on examination and ultrasound) of antepartum hemorrhage. A total of 110 cases of APH were studied. Age, parity, booking status, education and occupation of the patients were noted down. Relevant investigations and imaging was performed. Anemia and hypovolemia was corrected. Mode of termination of pregnancy was taken according to maternal and fetal condition including gestational age, general condition of the patient and bishop's score. Maternal complications like Postpartum hemorrhage, renal failure, DIC, sepsis, postpartum anemia etc were analyzed. Details of the babies like weight, maturity, APGAR score and NICU admissions were noted.

### IV. Results

Out of 9,300 deliveries, 110 had APH, incidence being 1.2%. Results are shown in tables 1-5. Majority of cases were in 26-30 yr age with poor socio-economic status. Most of them were multigravida with average gestation age of 32-34 weeks.

As shown in table-2, 68% of cases presented with bleeding p/v, 40 % had pre-eclamptic features.

Out of 110 cases cesarean section required in 36 cases, out of which 12 were done for placenta previa. Out of 110 babies, 88 were live and healthy at the time of discharge. 12 were NICU admissions, out of which 2 babies died, 10 babies discharged in good condition. So perinatal mortality is 20%. Major neonatal morbidity was due to low birth weight related to preterm (15%) and NICU admissions (6%) due to birth asphyxia. And out of two maternal deaths, one patient died with irreversible hemorrhagic shock and multi organ failure. Another patient was brought in a state of shock, patient had placenta accreta, underwent cesarean hysterectomy, had 6 units of blood transfusion. Post operatively patient had DIC, renal failure and succumbed to death.

**Table 1: Demographic Profile Of Women**

Parameter		No. of women	Percentage%
Socio economic status	Poor	93	84.5
	Satisfactory	17	15.4
Booking status	Booked	37	34
	Unbooked	73	66.4
Parity	Primi	35	32
	Multi	75	68

**Table: 2 Clinical Presentation**

CLINICAL PRESENTATION	NO.OF CASES	PERCENTAGE%
Bleeding P/V	75	68
Preeclamptic features	45	40
H/O anemia with APH	35	32
Pain Abdomen	30	27
Previous H/o placenta praevia	6	5.4

**Table – 3 Mode Of Delivery**

MODE OF DELIVERY	NO.OF CASES	PERCENTAGE%
Vaginal	69	62.7
Outlet forceps	5	4.5
LSCS	36	32.7

**Table – 4 Details Of Babies**

FETAL OUTCOME	NO.OF CASES	PERCENTAGE
Preterm	35	32
Term	75	68
Live	88	80
Perinatal Mortality	IUFD	6
	Still Birth	14
	Died in NICU	2
APGAR (<7 AT 5 min)	28	25.4
Birth Wt. in Kg	>2.5	10
	2-2.5	34
	1.5-2	38
	1-1.5	28

**Table – 5 Maternal Outcome**

COMPLICATION	NO.OF CASES	PERCENTAGE
Postpartum anemia	47	42.7
Hypovolemic Shock	32	29.1
PPH	15	13.6
Coagulation failure	2	1.8
Renal Failure	2	1.8
Sepsis	2	1.8
Death	2	1.8

## V. Discussion

Antepartum hemorrhage is the important cause for maternal and perinatal morbidity and mortality. Incidence in our study was 1.2% when compared to 3 % incidence in Archana M, Sonal etal<sup>1</sup> and Singhal, Nymphaea, S Nanda etal<sup>2</sup> study. In our study 66.4% of cases were unbooked and 84.5% belonged to poor socioeconomic status resulting in anemia, malnutrition predisposing to poor placental structure formation (villi and blood vessels).

Majority were 26-30 year with 68% being multiparous with mean parity of 2.86% which is similar to Archana M, Sonal etal, Singhal, Nymphaea, S Nanda etal and Das etal<sup>3</sup> study. In our study clinical presentation varied in abruption, 40% of cases had hypertension, whereas in Singhal, Nymphaea, S Nanda etal study hypertension was found in 22% of cases.

Caesarean section in our study was 32.7 % compared to 55% in Bandamma et al<sup>4</sup> study. In our study there was 20% perinatal mortality and 1.8% maternal mortality which is comparable to Singhal et al and Bandamma et al study with 23 % perinatal mortality and maternal mortality of 2%. Arora et al<sup>5</sup> and Khosla et al<sup>6</sup> had very high perinatal mortality of 61.5 and 53.5% respectively. This difference may be due to better NICU care in our institute. Mean birth weight in our study was 2.2 kg comparable to Singhal, Nymphaea, S Nanda et al study. So neonatal morbidity was due to low birth weight related to preterm (31%) and NICU admission.

In our study coagulation failure noted in 1.8% of cases compared to 7% in Singhal, Nymphaea, S Nanda et al study requiring blood products transfusion. Fetal salvage was nil. 13.6 % of cases had PPH managed with uterotonics, B-Lynch, B/L uterine artery ligation. 2 cases had cesarean hysterectomy. This is comparable to Singhal, Nymphaea, S Nanda et al study which had 3 women requiring cesarean hysterectomy. It is concluded that good perinatal outcome is observed with perinatal outcome observed with early referral to tertiary care center, early caesarean section, availability of blood products and timely neonatal resuscitation.

## **VI. Conclusion**

- VII. Proper antenatal care and counselling aids in early diagnosis of APH, thereby reducing the maternal, fetal morbidity and mortality.
- VIII. APH complications can be reduced by early referral to tertiary care centre for management.
- IX. Availability of blood and blood products decreases the maternal morbidity and mortality due to antepartum hemorrhage.
- X. Increasing the birth interval and decreasing the family size by different family planning methods should be adopted to decrease the incidence of antepartum hemorrhage.

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