



## Study of Antepartal Hemorrhage with Reference to third Trimester Bleeding and its Perinatal Outcome in our Maternity Hospital of Skims Soura

Authors

**Dr Shazia Nisar<sup>1</sup>, Dr Shahzada Shahid Banday<sup>2</sup>**

<sup>1</sup>Senior Resident Department of Obstetrics and Gynaecology Skims Soura

<sup>2</sup>Senior Resident Department of Neonatal and Paediatric Surgery Skims Soura

Corresponding Author

**Dr Shazia Nisar**

Senior Resident Department of Obstetrics and Gynaecology Skims Soura, India

### Introduction

APH Is defined as bleeding from or into the genital tract from 28 weeks of pregnancy till delivery of baby (end of 2nd stage). 28 weeks is taken arbitrary as lower limit of fetal viability. Incidence of APH is 2-5% of all pregnancies<sup>(1)</sup>.

APH is grossly classified as

1. Placental bleeding(70%) that is further divided into
  - a. {placenta previa}35%.
  - b. {abruptio placentae}35%
2. Extraplacental (5%); cervical polp, cervical cancer, varicose veins, local trauma
3. Unexplained (25%)

In case of APH that is of placental origin bleeding is either following separation of placenta (low lying placenta) implanted in lower uterine segment or from premature separation of normally located placenta<sup>(2,3)</sup>

APH accounts for great toll of maternal mortality and morbidity in India. According to figure in 2013 maternal mortality in India was 17% and in

Nigeria it was 11%<sup>(4)</sup>. In this bleeding alone contributes to 75% cases (includes both APH and PPH), others being raised B.P, complications of delivery and unsafe abortions<sup>(5)</sup>. APH in pregnancy greatly affects perinatal mortality and morbidity because maternal health and newborn health are closely linked to each other. It is found that early neonatal death rate is 3 million annually and 2.6 million babies are still born<sup>(6,7)</sup> However in recent years due to improvement in medical facilities, early diagnosis, hospitalisation, availability of blood transfusion facilities, liberal use of cesarean section maternal and perinatal mortality and morbidity due to APH has dramatically reduced .

A no.of studies have established risk of placenta previa more with<sup>(8,9)</sup>;

- 1) Advanced maternal age
- 2) Multiparity
- 3) Previous placentae previa
- 4) Defecient endometrium
- 5) Multiple pregnancies
- 6) Smoking

Risk factors for placental abruption include; increased maternal age, multiparity, low BMI, abruption in previous pregnancy, pre eclampsia, polyhydraminos, intrauterine infections, premature rupture of membranes, abdominal trauma, smoking, pregnancy following ART, thromophilias<sup>(9)</sup>

**Aims and Objectives**

- 1) To find the incidence of APH in our study
- 2) To Study the etiological factors of APH.
- 3) Perinatal outcome in patients with APH.

**Methodology**

It was a prospective study carried in our hospital of Skims soura for a period (Dec 2018- Jan 2019). It included all antenatal patients with gestational >28 weeks whether booked or unbooked attending our antenatal OPD with history of bleeding p/v. Total no. of deliveries conducted during this period were 4800 of which 300 cases were APH ,120 cases out of 300 were of third trimester bleed.

**Results**

Incidence of APH (third trimester bleed) in our study was: 2.5%

3rd trimester bleed constituted 40% of total APH cases.

No.of patients with placenta previa =50 (.41.67%)  
 No.of patients with abruptio placentae = 70 (58.33%).

**Distribution of Patients According to Age**

Age group	Abruptio placentae	Placenta previa	Total
<20 yrs	10(14.3%)	10(20%)	20(16.67%)
20-30yr	35(50%)	30(60%)	65(54.1%)
30-40yr	25(35.7%)	10(20%)	35(29.16%)

Thus APH was more in age group of 20-30 yr (54.1%)

**Distribution of Patients according to Parity**

Parity	Abruptio placentae	Placenta previa	Total
Primi	10(14.2%)	10(20%)	20(16.67%)
Multi	50(71.4%)	25 (50%)	75 (62.5%)
Grandmulti	10 (14.2%)	15 (30%)	25 (20.83%)

Thus APH was more in multiparous (62.5%)

**Distribution of Patients According to Booking Status**

Booking status	Abruptio placentae(70)	Placenta previa(50)
Registered	25	15
Unregistered	45	35

Thus no. of patients attending our OPD were mostly unregistered (80) patients

**Distribution of Patients according to mode of Delivery**

Mode of delivery	Abruptio placentae	Placenta previa	Total
Vaginal delivery	48(68.5%)	4(8.%)	52(43.33%)
Lscs	19(27%)	40(80%)	59(49.16%)
C.Hysterectomy	3(4%)	6(12%)	9 (7.5%)

Thus lscs (49.16%) was more in APH (3rd trimester bleed)

**Distribution of Patients according to risk factors**

Out of 120 patients only 50 patients presented with risk factors

Risk factors	Abruptio placentae. (30)	Placenta previa(20)	Total(50)
Previous lscs	3(10%)	7 (35%)	10(20%)
PIH in present pregnancy	14(46.66%)	2 (10%)	16(32%)
Previous abortion	1(3.3%)	3( 15%)	4(8%)
Malpresentation	1(3.3%)	2 (10%)	3(6%)
Anemia	6 (20%)	4 (20%)	10(20%)
Recurrence	5 (16.6%)	2 (10%)	7(14%)

Thus history of PIH was imp risk factor for abruptio placentae and history of previous lscs was imp risk factor for placenta previa.

**Fetal Outcome in Placenta Previa**

Parameter	Term delivery	Preterm delivery	Total
Live births	22	8	30(60%)
IUD'S	6	3	9(18%)
Stillbirth	5	0	5(10%)
Early neonatal death	2	4	6(12%)

Thus perinatal mortality in placenta previa was 40%

### Fetal Outcome in Abruptio Placentae

Parameter	Term delivery	Preterm delivery	Total
Live births	32	3	35(50%)
IUD'S	17	3	20(28.57%)
still births	8	0	8(2.8%)
Early neonatal death	2	5	7(18.57%)

Thus perinatal mortality rate in abruptio placentae was 50%

### Perinatal Mortality in Terms of Birth Weight

Birth weight	Abruptio placentae	Placentae previa
<2.5kg	13(37.14%)	12(60%)
2-2.5kg	8(22.85%)	6(30%)
>2.5kg	14(40%)	2(10%)

Thus perinatal mortality is increased with birth weight <2.5kg

### Discussion

APH is one of the important obstetric emergencies, a pregnant lady may become exsanguinated within minutes due to vaginal bleeding. That is why APH is regarded alarming and requires evaluation.

Incidence of APH in our study was 2.5%. This incidence is same as study done by Arora and coworkers from Pondicherry<sup>(10)</sup>. Total no. of cases of APH (third trimester bleed) in our study were 120, out of which 70 cases were of abruptio placentae (58.33%) and 50 cases were of placenta previa (41.66%). Thus abruptio placentae was common cause of 3rd trimester bleed followed by placenta previa. Out of 120 patients 40 cases were registered and 80 cases were unregistered. This shows lack of awareness, education and poor antenatal follow up in our Kashmir belt. If we will see that maximum incidence of APH was in age group of 20-30 yr (54.16%). This was because of highest fertility in age group of 20-30yr. If we will go towards parity we can see that APH was in multigravida (62.5%). This is similar to study done by S Singhal, 2013<sup>(11)</sup> who also reported increased incidence of APH in multigravida. Incidence of placenta previa increased with age Biro, 2012<sup>(12)</sup>

Of 120 patients of APH 50 (41.6%) patients were those that presented with risk factors. History of PIH in present pregnancy was major risk factor for abruptio (46.6%) while as previous lscs increases the risk of placenta previa and this risk

increases with the no. of previous scars. Patients with placenta previa had 15% association with previous abortion while as in abruptio association was only 3.3% PIH is major risk factor for abruptio. Fetal mortality in abruptio is determined by presence or absence of HTN. Another factor for abruptio is presence of abruptio in previous pregnancy. This was quantified by Ananth and colleagues in meta analysis<sup>(13)</sup>. Risk of recurrence for abruptio in present study was 16.6% that correlates with Ananth and colleagues<sup>(13)</sup>. Abnormal presentation was seen in 6.6% of abruptio and 10% of placenta previa. This is because presence of placenta in lower uterine segment prevents engagement. However anemia was a risk factor that was same in abruptio placentae and placenta previa (20%). This shows low hemoglobin content of antenatal patients of Kashmir belt especially in those who don't have regular antenatal follow up. If we will go for the mode of delivery we will see that 80% of patients of placenta previa are delivered by lscs while as 68.5% of patients with abruptio were delivered by normal vaginal delivery. cesarean hysterectomy was done in 9 cases of APH(7.5%).

If we have look towards perinatal outcome in placenta previa we can see that live birth rate was 60% and perinatal mortality was 40% in which there were 9 IUD'S, they had absent fetal heart sound at the time of admission. Most of these IUD'S were from patients that were referred to our tertiary hospital as unregistered. there were 5 stillbirths and 6 neonatal death's. Most of early neonatal deaths were seen in ICU of paediatric department of Skims soura that were born prematurely and died because of septicemia and intracranial hemorrhage.

In Abruptio placentae live birth rate was 50% while as there were 20 IUD'S, 8 still births and 7 early neonatal deaths. this high perinatal mortality in Abruptio placentae was because it (abruptio placentae) occurred just at 34- 36 weeks that accounted for increased stillbirths and IUD'S. Early neonatal deaths were because of prematurity.

If we see perinatal mortality in terms of birth weight it is seen that perinatal mortality increases with decrease in birth weight.(birth weight <, 2.5kg). In Abruptio placentae increased perinatal mortality even with birth weight >2.5kg is explained on account of increased rate of abruption at 34- 36 .weeks<sup>(2,8-11)</sup>

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