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ORIGINAL RESEARCH

Maternal and Fetal outcome in Third Trimester Bleeding

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ABSTRACT

Objective - To evaluate maternal and foetal outcome in third trimester bleeding with the aim to reduce maternal and foetal morbidity and mortality.

Methods– It is prospective and descriptive study from 1st November 2021to 30 November 2022. Study included all cases of Third trimester bleeding (120 cases) in which 88 Live Birth, 20 Perinatal Mortality and 2 Maternal Mortality. Clinical features, complications and maternal mortality were evaluated. Data was analysed as percentage of total cases studied.

Results –Incidence of third trimester bleeding was 1 in 298 deliveries, being higher with increased age and parity. Most common risk factor is previous caesarean section for placenta previa and hypertension for abruptio placentae. Maternal mortality was 1.49% and perinatal mortality was 16%.

Conclusion– Abruptio placentae and placenta previa remain important causes of perinatal mortality and maternal mortality in third trimester bleeding

INTRODUCTION

Bleeding in third trimester pregnancy is an obstetric emergency associated with high maternal and perinatal morbidity and mortality .Third trimester bleeding is when a women experiences vaginal bleeding during last part of pregnancy i.e. from 28 weeks to delivery. Placenta previa, plancental abruption and local causes are among the causes of APH.

METHODS AND STUDY DESIGN

1. This study was carried out in the Department of Obstetrics & Gynaecology,NALANDA MEDICAL COLLEGE Hospital ,Patna after approval from ethical committee. It is prospective study.
2. The cases included all pregnant women coming with a complaint of amenorrhoea more than 28 weeks and bleeding per vagina. The total days of study were 395 days from 1 November2021 to 30 November 2022.
3. During study period total number of deliveries conducted was 4025. Of which 120 had third trimester bleeding.

OBSERVATIONS

Table No. 1: Age Wise Distribution of Cases of Third Trimester Bleeding

			PLACENTA PREVIA		ABRUPTIO PLACENTAE	
AGE	TOTAL	%	No.	%	No.	%
15-20years	8	6.66	2	5.26	9	10.97
21-25years	52	43.3	16	42.10	35	42.68
26-30years	38	31.66	12	31.57	19	23.17
31-35years	14	11.66	7	18.42	10	12.19
36-40years	8	6.6	1	2.63	9	10.97
TOTAL	120		38		82	

Table No. 2 Distribution of Cases According to Gravida in Third Trimster Bleeding

	Primigravida		Multigravida P(2-4)		Grand multigravida (P>5)	
APH	No.	%	No.	%	No.	%
Placenta Previa	3	2.5	25	20.8	10	8.33
Abruptio Placentae	16	13.3	47	39.1	19	15.8
Total	18	15	72	60	29	24.1

Table No. 3 Risk Factor Associated With Placenta Previa / Abruptio Placentae

	Placenta Previa		Abruptio Placentae	
Various Risk Factor	No.	%	No.	%
Previous Caeserean section	22	57.8	13	15.8
PIH in Present Pregnancy	8	21	48	58.8
History Of Abortion	4	10	12	14.6
Recurrent Cases	4	10	9	10.9
Total	38		82	

Table No. 4 Analysis of Management of Cases of Third trimester Bleeding

	Percentage Of Mode Of Delivery		Placenta Previa		Abruptio Placentae	
Mode Of Delivery	No.	%	No.	%	No.	%
Normal Delivery	18	15	2	3.92	16	23.18
Caeserean Section	98	81.6	44	86.27	50	72.46
Caeserean Hysterectomy	4	3.33	5	9.80	3	4.34

Table No. 5 Foetal Out Come in Patients with Placenta Previa

Foetal Outcome	Full Term	Preterm	Total	%
Alive	22	14	36	70.58
Neonatal Death	2	4	6	29.41
Still Birth	1	0	1	
IUD	5	3	8	

Table No. 6 Foetal Out Come in Patients with Abruptio Placentae

Foetal Outcome	Full Term	Preterm	Total	%
Alive	31	5	36	48.75
Neonatal Death	4	2	6	12.50
Still Birth	1	2	3	3.75
IUD	10	7	17	24.6

DISCUSSION

Antepartum haemorrhage still ranks one of the gravest obstetric emergency. Even with the best obstetric care due to dramatic suddenness, a pregnant woman can become exsanguinated due to bleeding in third trimester of pregnancy. It is one of the major cause of maternal and foetal mortality throughout the world, occurring in 2 to 4 percent of all pregnancies. All vaginal bleeding in later month is alarming and warrant immediate evaluation. Second trimester bleeding though very common is seldom discussed due to low foetal salvage rate (25.32). Thus the present study was exclusively focused on third trimester bleeding.

1. Total 4025 patients delivered during this period. Third trimester bleeding constituted 120 cases (2.98%of total deliveries).
2. Total cases of third trimester bleeding were 120, out of which 51 cases (42.55%) were due to placenta previa, 69 cases (57.50%) of abruptio placentae . Thus accidental haemorrhage was commonest cause of third trimester bleeding followed by placenta previa(Table-3).
3. It was observed that out of total 120 cases only 19 were booked and 101 were unbooked, reporting in emergency due to vaginal bleeding. This shows lack of education, unawareness and ignorance regarding antenatal care.
4. Maximum number of cases were between age group 20-30 years in both group i.e. 90 (75%) cases out of 120 because of highest fertility is in this age group(Table-1).
5. The majority (66.66%) of third trimester bleeding patients were multigravida (Table-2).
6. Of the total 120 cases of third trimester bleeding, 67 cases (55.83%) presented with various risk factors. Previous caesarean section was most common risk factor for placenta previa and hypertension for abruption placentae(Table-3)

Risk of placenta previa is highest in the pregnancy immediately following caesarean section. Failure of appropriate lower segment development, because scar tissue could be cause and

raw area favourable for implantation. Incidence of placenta previa increases in a linear way with increasing number of previous caesarean section.

Hypertensive disorder during pregnancy has accounted for a relatively high incidence of cases of abruptio placentae. Presence of hypertension can double the foetal mortality from abruption. The greatest determinant of abruptio is hypertension in pregnancy. The risk increased 15 to 20 fold in subsequent pregnancies when an earlier pregnancy was complicated by abruption. In present study 16% of pregnancies again complicated by abruptio placenta which co-relates with the same. Hence, again it is stress on regular antenatal care and BP monitoring of all pregnant patients, attending antenatal clinic.

There was high percentage (98cases i.e 81.66%) of Caesarean section in third trimester bleeding; vaginal delivery was only in 18 cases (15.67%). Four cases (3.33%) had Caesarean hysterectomy because of atonic PPH and placenta accrete (Table-4).Majority of the operations were done as a desperate attempt to save the mother and foetus. Hence the higher incidence of caesarean section in present series.

The perinatal loss was higher in patients who delivered vaginally as compared to those delivered by Caesarean Section. In present series 98cases delivered by caesarean section and the perinatal loss of 18cases (18.36%) as compared with vaginal delivery in which perinatal loss was 100%. It is found to reason that if the low lying placenta is the most likely source of bleeding in pregnancy, there may exist some compromise with uteroplacental perfusion and those pregnancies may not tolerate the stress of labour. Also saying that vaginal delivery can lead to 100% perinatal death, would be incorrect. A large multicentric analysis is required to see the outcome in vaginal birth.

In the placenta previa 70.58% of the female had live baby at the time of discharge. The perinatal mortality was high accounting of 29.41; of them there was 1 still birth and 6 neonatal deaths. The high incidence of perinatal mortality is due to the fact that 8 cases were having absent foetal heart sound at the time of admission, 6 cases required an ICU admission due premature babies. Two term baby were lost in neonatal period of the patients who were unbooked referred from periphery with pre-existing anemia, cause of death in these neonates were septicemia. The most common cause of neonatal death was prematurity.

The signs and symptoms with abruptio placentae can vary considerably, the typical initial presentation in 16% cases (19.04%) there was bleeding per vagina without pain, 61 cases (76.19%) bleeding with pain abdomen and 4 cases (4.765) also had added headache and vertigo, eclampsia was associated with 4.76% of cases of third trimester bleeding.

The total number of third trimester bleeding 120 patients, 69 pregnancy of abruptio placenta, 38% were fatal to fetus with 3 (3.75%) still birth, 17 (24.6%) IUD, there were 6 neonatal death contributing to increased perinatal mortality of 37.6% as shows in table no.6

Maternal mortality in present series was 1.49%. Maternal death in ante partum haemorrhage Quoted by Dutta's[1] (2011) < 1 to as high as 5% and according to william (2007) it is 1-3% of total delivery, which is nearly similar.

The case of central placenta previa with previous caesarean section taken for emergency caesarean due to 1 bout of bleeding during expectant treatment, after 3-4 hours of caesarean section patient developed atonic PPH , in spite of all preventive measures uterus remained relaxed and flabby, so patient was taken for re-laparotomy and total abdomen hysterectomy done.

CONCLUSION

Present study was done at Nalanda Medical College Hospital, Patna in which total number of delivery was 4025[during period 1 November 2021 to 30 November 2022]. Out of total delivery 120 cases had Third Trimester Bleeding.

Out of 120 cases, 101patients (84.1%) were referred from outside . Antenatal care was provided only in 19cases (14.17%).

- Parity and age: Frequency of placenta previa and abruptio placentae increases remarkably with increasing parity and age. The ratio of primigravida to multigravida was found to be 1:4 in cases of placenta previa and 1:2 in cases of abruption placentae. Hence age with high parity should be considered as independent risk factor for third trimester bleeding.
- Risk Factor: In patients with placenta previa most common risk factor was previous caesarean section seen in 40% of cases followed by abortion in 16% of cases. While PIH was the risk factor contributing 40.54% of third trimester bleeding in abruptio placentae.
- 52.58% of patients had gestational age less than 36 week with malpresentation in26.6% cases of Placenta previa and 15% cases of abruption.
- Mode of delivery: In placenta previa was by caesarean section in 44 cases (86.27%) in which 4 cases (5.97%) required caesarean hysterectomy. Vaginal delivery was conducted in 4 cases (7.54%). Perinatal mortality in operative and vaginal delivery was 73.46 % and 100% receptively. In abruptio placentae 63 cases (78.75%) caesarean section and 17 cases (21.25%) were normal delivered. Thus concluding that third trimester bleeding increases the risk of operative delivery.
- There were 2 maternal deaths in the present series- 1 in placenta previa due to PPH caused by placenta accereta and 1 in abruption placenta with eclampsia.
- In present series the perinatal mortality was 29.41% in placenta previa and 51.25% in abruption.

COMPLICATIONS

Postpartum haemorrhage was the major complication in patients with placenta previa and accidental haemorrhage. Primary PPH was found in 14.92% and 20.14% of patient with placenta previa and abruptio placentae respectively. Eight cases (5.97%) were in shock on admission and 4 (5.97%) patients went in DIC. Couvelaire uterus was seen in 1 case (0.83%) of patients. Nevertheless awareness through antenatal check up , better socioeconomic status, efficient referrals system, good neonatal intensive care facilities is obviously required for the foetal perinatal and maternal outcome in developing country.

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