Original Research Article

Evaluation of the cases of third trimester bleeding per vagina

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Abstract

About 8.7 million cases of severe maternal bleeding occurred in 2015 resulting in 83,000 deaths. Between 2003 and 2009, bleeding accounted for 27% of maternal deaths globally. Vaginal bleeding during pregnancy has many causes. Some are serious. Causes of bleeding before and during childbirth include cervicitis, placenta previa, placental abruption and uterine rupture. **Methods:** This study was carried out in the Department of Obstetrics and Gynaecology, ANMMCH. Gaya. Bihar, after approval from ethical committee. It is prospective and descriptive study. Period of the study was April 2018 to November 2018. **Results:** Total 3458 patients delivered during this period. The number of antepartum haemorrhage (131 cases) in total deliveries was 3.78 percent in present study. Third trimester bleeding constituted 65 cases (1.87%) of total deliveries and 48.50% of total antepartum haemorrhage cases. **Conclusion:** In spite of that awareness through antenatal classes, better socioeconomic status, good neonatal intensive care facilities is obviously required for the foetal perinatal and maternal outcome in our developing country.
Key Word: Third Trimester.

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INTRODUCTION

Antepartum bleeding, also known as antepartum haemorrhage or prepartum hemorrhage, is genital bleeding during pregnancy after the 20th to 24th week of pregnancy up to delivery[1,2]. It can be associated with reduced fetal birth weight.[3] Use of aspirin before 16 weeks of pregnancy to prevent pre-eclampsia also appears effective at preventing antepartum bleeding.[4]The total amount of blood loss and signs of circulatory shock due to blood determine the severity of the antepartum haemorrhaging. There are 4 degrees of antepartum haemorrhaging:[5]

Placenta previa

Placenta praevia refers to when the placenta of a growing foetus is attached abnormally low within the uterus. Intermittent antepartum haemorrhaging occurs in 72% of women living with placenta praevia.[6] The severity of a patient's placenta praevia depends on the location of placental attachment;

Type: 1. Lower segment of uterus, no attachment to the cervix.

Type: 2. Touching but not covering the internal orifice of the cervix.

Type: 3. Partially covering the internal orifice of the cervix.

Type: 4. Completely covering the internal orifice of the cervix

Types 1 and 2 are classified as minor placental praevia as these typically result in minor antepartum haemorrhaging. Types 3 and 4 are referred to as major placental praevia due to the risk of heavy haemorrhaging in the case of a rupture due to the location of placental attachment.[7] During the third trimester of pregnancy, thinning of the lower uterine segment or contractions caused by cervical dilation can increase the amount of stress placed on the placental attachment to the uterine wall. In patients with placenta praevia, these stresses can

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cause detachment of the placenta from the uterine wall causing haemorrhaging. To prevent further haemorrhaging patients with major placental praevia are recommended to have a caesarean delivery.[8]

Placental abruption

Placental abruption occurs when the placenta detaches from the endometrium. Detachment causes antepartum haemorrhaging at the location of abruption. Depending on the site of detachment, haemorrhaging may or may not be apparent. If abruption occurs behind the placenta where blood cannot escape through the cervix, blood will pool and form a retroplacental clot. Only when the site of detachment occurs on the side facing the cervical opening can the total amount of haemorrhaging be measured by vaginal bleeding. Using vaginal bleeding as a measurement of the severity of the placental abruption is therefore ineffective. The scale of haemorrhaging depends on the degree to which the placenta has separated from the uterine wall. In the case of partial placental separation, haemorrhaging can be minor. However, in the case of total placental separation haemorrhaging will be major and emergency delivery will typically be the course of action.[9] Placental abruption causes blood loss from the mother and loss of oxygen and nutrients to the placenta occasionally leading to preterm labour.[10] Other causes of placental abruption can be abdominal trauma or sudden decompression of amniotic fluid, however it is not uncommon for the cause of placental abruption to be unknown.[11]

Vasa praevia

Vasa praevia is the presence of unprotected foetal blood vessels running along the placenta and over the internal cervical opening. Vasa praevia is a very rare, presenting only 4:10,000 cases from the largest study of the condition.[12] Risks of antepartum bleeding due to vasa praevia greatly increase during the third trimester of pregnancy during cervical dilation or placenta praevia. Vessel rupture is very likely in the event of a membranous rupture as foetal blood vessels aren't protected by the umbilical cord of the placenta. In the event of foetal vessel rupture, antepartum haemorrhaging occurs however blood is lost from the foetal blood supply. If the foetus is developed enough caesarean sections are often recommended.[13]

METHODS

Study Type: It was prospective and descriptive study.

Study Period: April 2018 to November 2018.

Study Place: This study was carried out in the Department of Obstetrics and Gynaecology, ANMMCH. Gaya. Bihar.

Study sample: During study period total number of deliveries conducted was 3458. Of this 131 women had antepartum haemorrhage of which 65 had third trimester bleeding.

Inclusion Criteria: The cases included all pregnant women were coming with a complaint of amenorrhoea more than 28 weeks and bleeding per vagina.

RESULTS

Table 1: Age distribution of study population (n=65)

Age group	Placenta praevia		Abruptio Placenta	
	No of Patients	(%)	No of Patients	(%)
18 -20 Years	10	15.38	11	16.92
21-30 Years	12	18.46	19	29.23
31- 40 years	6	9.23	7	10.76
Total	28	43.07	37	56.92

Table 2: Distribution of cases according to gravida (n=65).

Third Trimster Bleeding	Primi gravida		Multi Gravida	
	No of Patients	(%)	No of Patients	(%)
Placenta praevia	11	16.92	17	26.1
Abruptio Placenta	14	21.53	23	35.38
Total	25	38.46	40	61.53

Table 3: Distribution of Risk Factors of cases

Risk factor	Placenta praevia		Abruptio Placenta	
	No of Patients	(%)	No of Patients	(%)
Hypertension	15	23.07	18	27.69
Multiple gestations	02	3.07	04	6.15
Older age	02	3.07	03	4.61
Previous cesarean delivery	07	10.76	06	9.23
Tobacco use	02	3.07	03	4.61
Uterine fibroids	00	00	02	3.07
Short umbilical cord	00	00	01	1.53

Table 4: Mode of Delivery and Management of Cases

Mode of Delivery	Placenta praevia		Abruptio Placenta	
	No of Patients	(%)	No of Patients	(%)
Normal Delivery	07	10.76	09	13.84
Caesarean Section	18	27.69	26	40.0
Caesarean Hysterectomy	03	4.61	02	3.07

Table 5: Foetal Out Come in Patients with Placenta Previa and Abruptio Placenta

Foetal Out Come	Pre Term of Placenta Previa	Full term of Placenta Previa	Total	Pre Term of Abruptio Placenta	Full term of Abruptio Placenta	Total
Alive	7 (25.0%)	12 (42.8%)	19 (67.8%)	7 (18.9%)	16 (43.2%)	23 (62.2%)
Still Birth	0 (0%)	1 (3.6%)	1 (3.6%)	1 (2.7%)	0 (0%)	1 (2.7%)
Neonatal Death	2 (7.1%)	1 (3.6%)	3 (10.7%)	2 (5.4%)	2 (5.4%)	4 (10.8%)
IUD	3 (10.7%)	2 (7.1%)	5 (17.9%)	4 (10.8%)	5 (13.5%)	9 (24.3%)
Total	**12 (42.8%)**	**16 (57.2%)**	**28 (100%)**	**14 (37.8%)**	**23 (62.1%)**	**37 (100%)**

DISCUSSION

This study was carried out in the Department of Obstetrics and Gynaecology, ANMMCH. Gaya. Bihar, after approval from ethical committee. It is prospective and descriptive study. Period of the study was April 2018 to November 2018. Total 3458 patients delivered during this period. The number of antepartum haemorrhage (131 cases) in total deliveries was 3.78 percent in present study. Third trimester bleeding constituted 65 cases (1.87%) of total deliveries and 48.50% of total antepartum haemorrhage cases. There were a variety of reasons for bleeding during the third trimesters of pregnancy, some of which are relatively harmless, and some with more serious implications to mother and baby. Maximum number of cases were between age group 20-30 years in both group i.e. 31 (47.69%) cases out of 65 because of highest fertility is in this age group. The majority (35.38%) of third trimester bleeding patients were multigravida Total 65 cases of third trimester bleeding, 33 cases (50.76%) presented with hypertension. Previous caesarean section was most common risk factor for placenta previa and abruption placentae. 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 abruption risk is an abruption in a prior pregnancy. This was quantified by Ananth and Colleagues in tometa-analysis. 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.12(42.8%) presented with preterm pregnancy and bleeding per vagina. The incidence of prematurity was higher in placenta previa contributing 42.8% as compare to, abruption where it was 37.8%. The patients had to be delivered due to life threatening haemorrhage. At the same time, it is generally accepted that during the delivery of pregnant women with complete placenta previa, the risk of adverse outcomes such as postpartum hemorrhage, infection, and even hysterectomy is significantly increased in pregnant women with relative placenta previa or marginal placenta previa [14] . There are reports in the literature at home and abroad that the type of placenta previa is related to the outcome of delivery. Compared with the marginal placenta previa, the clinical nature of the complete placenta previa may be different, and the pregnancy outcome of pregnant women is poor [15,16] . There was high percentage (44 cases i.e 67.69%) of Caesarean section in third trimester bleeding; vaginal delivery was only in 16 cases (24.61%). 05 cases (7.69%) had Caesarean hysterectomy because of atonic PPH and placenta accrete. 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. In the placenta previa 37(56.9%) of the female had live baby at the time of discharge. The perinatal mortality was high accounting of 42.1%; of them there was 2 still birth and 7 neonatal deaths. The high incidence of perinatal mortality is due to the fact that 14 cases were having absent foetal heart sound at the time of admission, 9 cases required an ICU admission due prematurity babies. Placenta previa is more likely to have

placental adhesions or implantation, and placental adhesion or implantation itself is a high risk factor for poor delivery outcomes. It is reported that 38.2% of pregnant women with placenta previa in the scar uterus have placenta implantation, and the proportion of placenta previa with a cesarean section is 10%, and 2 and 2 times before cesarean section occurs. The proportion of placenta with implants was as high as 59.2% [17] . According to the data of this study, when pregnant women were accompanied by placental adhesions or implantation, the success rate of vaginal delivery decreased significantly. Four pregnant women who had a cesarean section had placental adhesions or implantation. In addition, when the placenta attachment position is located in the anterior wall of the uterus, it will inevitably cross the uterine incision, which is more likely to cause poor adhesion of the placenta, leading to prenatal bleeding and reducing the success rate of vaginal delivery.

CONCLUSION

The initial management of significant bleeding in late pregnancy is similar regardless of the etiology. Visual estimates of blood loss should be recorded but may be inaccurate or fail to account for concealed hemorrhage. Hypotension, tachycardia, and maternal symptoms of hemodynamic instability are ominous indicators, and women with these signs require immediate intravenous access, fluid resuscitation, and the availability of blood products. Baseline laboratory tests include hematocrit, platelet count, fibrinogen level, coagulation studies, blood type, and antibody screen. Continuous fetal monitoring is recommended. Decelerations or loss of variability may resolve with adequate maternal resuscitation; however, a persistently no reassuring fetal heart rate tracing may require urgent cesarean delivery before the etiology of the hemorrhage is established.

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