Original Research Article

A Study of various clinical presentations and manifestation of ante partum hemorrhage at tertiary health care centre

Pratibha Sanjay Patil¹, Sanjay Patil^{2*}

¹Associate Professor, ²Professor and HOD, Department of OBGY, Raipur Institute of Medical Sciences, Raipur, Chhattisgarh, INDIA. **Email:** drpatils@hotmail.com

Abstract

Background: Antepartum hemorrhage (APH) is a major cause of maternal and perinatal morbidity and mortality even in modern day obstetrics and is one of the most frequent emergencies in obstetrics Aims and Objectives: To Study various clinical presentations and manifestation of ante partum hemorrhage at tertiary health care centre. Methodology: This study was conducted in Tertiary Medical college in the Department of Obsterics and Gynecology. A Total no. of 104 cases of antepartum hemorrhage admitted in hospital were studiedand analyzed. In the present study all patients who had bleeding from genital tract after 20 weeks of gestation and before second stage of labor were included . The data was entered in excel sheets and analyzed and presented in tabular form expressed in percentages. Result: In our study we have seen that The majority of the patients were in the age group of 21-25 were -37.50%, 26-30 - 28.84%, 16-20-20.20%, 31-35-9.62%, 35 and above were 2.84%. The most common clinical features of APH was Vaginal bleeding was 90.38% followed by Pain in abdomen in 50.96%, Dead fetus in 33.65%. The most common type of praevia was Type III was 46.00%, Type II Anterior 20.00%, Type I was 15.00%, Type II Posterior was 10.00%, Type IV was 8.33%. The most common etiology of Abruptio placenta was Non -hypertensive in 60.00%, Hypertensive in 32.50%, External trauma in 5.00%, Sudden uterine decompression In 2.50%. The type of Abruptio placenta was mixed in 70.00%, Concealed and Revealed in 15%. As per the abdominal examination the most common presentation was as per the abdominal examination Breech -13.46%, Not made out in 7.69%, Transverse in 5.77%. The most common Mode of delivery was Vaginal without instrumentation was 65.38%, Caesarean section in 34.62%, Forceps and Caesarean hysterectomy not required to anybody. Conclusion: it can be concluded from our study that In our study we have seen that The majority of the patients were in the age group of 21-25, The most common clinical features of APH was Vaginal bleeding, Pain in abdomen, Dead fetus, The most common type of praevia was Type III, Type II Anterior, The most common etiology of Abruptio placenta was Non -hypertensive, Hypertensive, External trauma, The type of Abruptio placenta was mixed Concealed, Revealed, The most common Mode of delivery was Vaginal.

Key Word: Antepartum hemorrhage (APH), Abruptio placenta, Placenta praevia.

*Address for Correspondence:

Dr. Sanjay Patil, Professor and HOD, Department of OBGY, Raipur Institute of Medical Sciences, Raipur, Chhattisgarh, INDIA.

Email: drpatils@hotmail.com

Received Date: 22/11/2018 Revised Date: 16/12/2018 Accepted Date: 02/01/2019

DOI: https://doi.org/10.26611/1012913



INTRODUCTION

Antepartum hemorrhage (APH) is a major cause of maternal and perinatal morbidity and mortality even in modern day obstetrics and is one of the most frequent emergencies in obstetrics.^{1,2} APH is defined as bleeding from the genital tract from the time of viability of pregnancy for extrauterine survival to the delivery of the baby.³ APH complicates 0.5–5% of pregnancies which varies with sociodemographic variables.^{1,4,5} The main causes of APH are placenta previa and abruptio placentae; however, the exact cause of bleeding in some cases may be undetermined.⁵ In a small proportion where placenta previa and abruption have been excluded, the

How to cite this article: Pratibha Sanjay Patil, Sanjay Patil. A Study of various clinical presentations and manifestation of ante partum hemorrhage at tertiary health care centre. *MedPulse – International Journal of Gynaecology*. January 2019; 9(1): 10-13. http://medpulse.in/Gynaecology/index.php

cause may be related to local lesions of the cervix and vagina, e.g., cervicitis, cervical erosion, genital tumors, vulvar varicosities, ruptured vasa previa, and heavy show.^{5,6} In a comparison of maternal risk factors, research reports⁵ concluded that abruption is more likely to be related to conditions occurring during pregnancy (preeclampsia, abdominal trauma, intrauterine infections, prelabor rupture of membranes, polyhydramnios elevated maternal serum alpha-fetoprotein, smoking, and substance abuse) and placenta previa related to conditions existing prior to the pregnancy (uterine scar, manual removal of placenta, curettage, advanced maternal age, multi parity, and previous placenta previa).⁵ The precise cause of abruption is unknown; however, hypertension is the most consistent predisposing factor.⁷ In a study conducted at the University of Oslo, age was studied as a significant sociodemographic characteristic, with mothers over the age of 40 years being significantly more likely to have severe hemorrhage. We have studied various clinical presentations and manifestation of ante partum hemorrhage at tertiary health care centre.

METHODOLOGY

A Total no. of 104 cases of antepartum hemorrhage admitted in hospital were studied and analyzed in a tertiary care hospital. In the present study all patients who had bleeding from genital tract after 20 weeks of gestation and before second stage of labor were included. The data was entered in excel sheets and analyzed and presented in tabular form expressed in percentages.

RESULT

Table 1: Distribution of the patients as per the age

3			
Age (years)	No. of cases (n=104)	Incidence (%)	
16-20	21	20.20	
21-25	39	37.50	
26-30	30	28.84	
31-35	10	9.62	
35 and above	4	2.84	
Total	104	100.00	

The majority of the patients were in the age group of 21-25 were -37.50%, 26-30 - 28.84%, 16-20- 20.20%, 31-35- 9.62%, 35 and above were 2.84%.

Table 2: Distribution of the patients as per the various clinical features

Clinical signs	Ante partum Hemorrhage	Placenta praevia	Abrptio placenta	Local cause
and Symptoms	(n=104)	(n=60)	(n=140)	and unclassified
Vaginal bleeding	94 (90.38%)	60(100.00%)	34(85.00%)	4 (100%)
Uterine tenderness	22(21.15%)	0 (0.00%)	22(55.00%)	-
Pain in abdomen	53(50.96%)	24(40.00%)	29(72.50%)	-
Dead fetus	35 (33.65%)	11(18.33%)	24(60.00%)	1(25%)

The most common clinical features of APH was Vaginal bleeding was 90.38% followed by Pain in abdomen in 50.96%, Dead fetus in 33.65%.

Table 3: Distribution of placenta praevia according to type of praevia

No. of Cases	Percentages (%)
9	15.00
12	20.00
6	10.00
28	46.00
5	8.33
	9 12 6 28

The most common type of praevia was Type III was 46.00%, Type II Anterior 20.00%, Type I was 15.00%, Type II Posterior was 10.00%, Type IV was 8.33%.

Table 4: Etiology of Abruptio placenta

33		
Etiology	No. of cases (n=40)	Incidence (%)
Non –hypertensive	24	60.00
Hypertensive	13	32.50
Sudden uterine decompression	1	2.50
External trauma	2	5.00

The most common etiology of Abruptio placenta was Non –hypertensive in 60.00%, Hypertensive in 32.50%, External trauma in 5.00%, Sudden uterine decompression In 2.50%.

Table 5: Type of Abruptio placenta

Туре	No. cases (n=40)	Incidence (%)
Concealed	6	15.00
Revealed	6	15.00
Mixed	28	70.00
Total	40	100.00

The type of Abruptio placenta was mixed in 70.00%, Concealed and Revealed in 15%.

Table 6: Distribution of the patients as per the abdominal examination

Presentation	No.	Incidence (%)
Vertex	76	73.08
Breech	14	13.46
Transverse	6	5.77
Not made out	8	7.69

As per the abdominal examination the most common presentation was as per the abdominal examination Breech - 13.46%, Not made out in 7.69%, Transverse in 5.77%.

Table 7: Distribution of the patients as per the mode of delivery in APH

Mode of delivery	No.	Incidence (%)
Vaginal without instrumentation	68	65.38%
Caesarean section	36	34.62%
Forceps	Nil	-
Caesarean hysterectomy	Nil	-
Total	104	100.00

The most common Mode of delivery was Vaginal without instrumentation was 65.38%, Caesarean section in 34.62%, Forceps and Caesarean hysterectomy not required to anybody.

DISCUSSION

Antepartum haemorrhage is defined as bleeding from or into the genital tract occurring from 24+0 weeks of gestation or after fetal viability and prior to birth of the baby. The most important causes of antepartum haemorrhage are placenta previa and placenta abruption. Antepartum haemorrhage complicates 3-5% pregnancies and is a leading cause of perinatal and maternal mortality worldwide8. Locally and for the purpose of this study the definition of antepartum haemorrhage will refer to bleeding from or into the genital tract occurring after 28 weeks of gestation prior to delivery of the baby. This is because our neonatal units are not well resourced to enable neonates born before 28 weeks to survive. The obstetric causes of antepartum haemorrhage include placenta abruption, placenta previa, heavy show, vasa previa and uterine rupture. Nonobstetric causes include cervicitis, cervical neoplasm, cervical polyp, trauma or other malignancies which are not very common in occurrence. Placenta previa is one of the major causes of antepartum haemorrhage and is defined as a placenta overlying or proximate to the internal os. It can be sub classified by ultrasonography into complete, partial, marginal and low-lying. Lowlying placentae are also associated with an increased risk of bleeding and possibly other adverse outcomes, although less than the true placenta previa^{9,10}. Practically, an abnormally located placenta is best described

sonographically as either completely covering os or the ultrasound scan report should indicate the 2 number of millimetres/centimetres between the inferior edge of the placenta and internal os of the cervix¹¹. Incidence of placenta previa at term is approximately 0.5% 12. Risk factors include prior caesarean delivery, previous uterine surgery (myomectomy, dilatation and curettage, hysteroscopy) involving the uterine cavity, prior placenta previa and multiparity^{13,14,15}. Characteristic clinical presentation is painless vaginal bleeding. This occurs in 70-80% of patients, while an additional 10- 20% of women present with uterine contractions with associated bleeding and less than 10% are incidentally detected by ultrasound and remain asymptomatic 16,17. Placenta abruption is defined as premature separation of a normally implanted placenta. Approximately 0.5-1% of all pregnancies is complicated by this condition¹⁸. Incidence in the United States has recently increased, especially in the AfricanAmerican population, the ethnic group at highest risk of severe- grade 3 placenta abruption¹⁹. Typically it presents with bleeding, painful uterine contractions and fetal demise. Aetiology is not completely understood but it appears to occur as a result of two mechanisms; mechanical separation or as a result of defective deep placentation²⁰. Placental separation occurring in association with mechanical trauma or rapid decompression of a distended uterus is believed to occur due to shearing forces resulting from a change in surface

area of a relatively elastic uterine wall in relation to an inelastic placenta. Evidence in support of a defective deep placentation mechanism comes from placental biopsies from cases of placental abruption which show an absence of physiologic trophoblastic invasion, dilated vessels and recent thrombosis of spiral arteries. In our study we have seen that The majority of the patients were in the age group of 21-25 were -37.50%, 26-30 - 28.84%, 16-20-20.20%, 31-35- 9.62%, 35 and above were 2.84%. The most common clinical features of APH was Vaginal bleeding was 90.38% followed by Pain in abdomen in 50.96%, Dead fetus in 33.65%. The most common type of praevia was Type III was 46.00%, Type II Anterior 20.00%, Type I was 15.00%, Type II Posterior was 10.00%, Type IV was 8.33%. The most common etiology of Abruptio placenta was Non -hypertensive in 60.00%, Hypertensive in 32.50%, External trauma in 5.00%, Sudden uterine decompression In 2.50%. The type of Abruptio placenta was mixed in 70.00%, Concealed and Revealed in 15%. As per the abdominal examination the most common presentation was as per the abdominal examination Breech -13.46%, Not made out in 7.69%, Transverse in 5.77%. The most common Mode of delivery was Vaginal without instrumentation was 65.38%, Caesarean section in 34.62%, Forceps and Caesarean hysterectomy not required to anybody.

CONCLUSION

It can be concluded from our study that In our study we have seen that The majority of the patients were in the age group of 21-25, The most common clinical features of APH was Vaginal bleeding , Pain in abdomen , Dead fetus, Themost common type of praevia was Type III , Type II Anterior , The most common etiology of Abruptio placenta was Non –hypertensive, Hypertensive , External trauma, The type of Abruptio placenta was mixed Concealed, Revealed, The most common Mode of delivery was Vaginal.

REFERENCES

- 1. Sheikh F, Khokhar S. A study of antepartum haemorrhage: Maternal and perinatal outcomes. Med Chan 2010; 16: 22.
- Paterson-Brown S. Obstetetric emergencies. In: Edmunds DK, editor. Dewhurst Textbook of Obstetrics and Gynaecology for Postgraduates. UK: Blackwell Science; 2007. p. 149-52.
- Arulkumaran S, Regan L. Antepartum haemorrhage. In: Obstetrics and Gynaecology. 1st ed. New York City, USA: Oxford University Press; 2011. p. 326-7.
- Singhal S, Nymphaea, Nanda S. Maternal and Perinatal Outcome In Antepartum Haemorrhage: A study At A

- Tertiary Care Referral Institute. The Internet Journal Of Gynaecology and Obstetrics 2007; 9: 1-4.
- Royal College of Obstetricians and Gynaecologists. Antepartum Haemorrhage. Green-top Guideline No. 63. London: RCOG; 2011.
- Kwakwume EY. Antepartum haemorrhage. In: Kwakwume EY, Emuveyan EE, editors. Comprehensive Obstetrics and Gynaecology in the Tropics. 1st ed. Accra, Ghana: Asante and Hitscher Printing Press; 2002. p. 140-50
- Giordano R, Cacciatore A, Cignini P, Vigna R, Romano M. Antepartum haemorrhage. J Prenat Med 2010;4: 12-6.
- 8. Calleja-Agius J, Custo R, Brincat MP, Calleja N.Placental abruption and placenta previa: European Clinical Obstetric and Gyneacology, 2006. 2:121-7.
- 9. Predamic M, Perni SC, BaergenRN.A sonographic assessment of different patterns of placenta previa "migration" in the 3rd trimester of pregnancy: Journal of ultrasound Med, 2005. 24: 773.
- Mogann EF, Doherty DA, Turner K et al. Second trimester placental location as a predictor of an adverse pregnancy outcome: Journal of perinatology, 2007. 27:9.
- Thurmond A, Mendelson E, Bohm-Velez et al.Role of imaging in second and third trimester bleeding: American College of Radiology ACR appropriateness Criteria Radiology, 2000. 215 Suppl:895.
- American College of Obstetritians and Gynaecologist.
 ACOG bulletin No. 55. Management of postterm pregnancy: ObstetGynecol, 2004. 104:639-646. [review]
- 13. Neilson JP. Ultrasound for fetal assessment in early pregnancy: Cochrane Database syst Review, 2005. (3) [meta-analysis:9 RCTs; n=>24000].
- 14. Myers ER, Blumrick R. Christian Al. Management of prolonged Pregnacy. Rockvile, MD: Agency for Healthcare research and quality (US), 2002. [review]
- Caughey AB, Washington AE, LarosRK. Neonatal complications of term pregnancies: rates by gestational age increase in a continuous, not threshold fashion: Am J Obj Gyne, 2005. 192:185-190.
- Cotton DB, Read SA, Paul RH, QuilliganEJ. The conservative aggressive management of placenta previa: Am J ObsGyne, 1980. 137: 687.
- 17. Silver R, Depp R, Sabbagha RE *et al.* Placenta aggressive expectant management: Am J ObsGyne, 1998. 150:15. 11 Ananth CV, Oyeless Y, Yeo L, *et al.* Placental abruption in the United States, 1979 through 2001: temporal trends and potential determinants: Am J ObstetGynecol, 2005. 192(1):191-198. [Epidemiological review]
- 18. Anath CV, Oyes Y, Yeo L *et al.* Placental abruption in the United States,1979 through to 2001. Temporal trends and potential determinants: Am J ObsGyne, 2005. 192(1): 191-198. [epidemiological review]
- Brosens I, Pinjenborg R, Vercrysse L *et al*. The great obstetrical syndromes are associated with disorders of deep placentation: Am J ObsGyne, 2011. 204(3); 193-201. [review]
- 20. Dommisse J, TiltamnAJ. Placental abruption: ObsGyne, 2006. 108:1005-1016. [review]

Source of Support: None Declared Conflict of Interest: None Declared