A Case Study on Antepartum Haemorrhage

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***Abstract*—Antepartum hemorrhage (APH) is one of the deadliest complications in obstetrics. It can complicate about 2-5% of pregnancies. It contributes significantly to maternal and perinatal mortality and morbidity during pregnancy and childbearing worldwide. The aim of this case study was to determine maternal and fetal outcomes in patients presenting with APH.**

***Index Terms*—Abruption, placenta accreta, antepartum hemorrhage, obstetrics**

I. INTRODUCTION

Antepartum hemorrhage (APH) has been a leading cause of maternal mortality worldwide, especially in developing countries like India. Its early diagnosis and timely management can reduce the associated maternal and fetal mortality and morbidity. APH is defined as bleeding from the genital tract after 28 weeks of gestation to delivery of the baby. The major etiologies of APH are placenta previa and abruptio placentae. Nowadays, with increasing incidence of cesarean delivery, placenta accreta spectrum (PAS) disorders contribute a fair chunk of causes. The other causes are cervical polyps, varicosities (vaginal, vulvar and cervical), cancer of the cervix, cervical/endocervical erosions, cervicitis, vasa previa, vaginal infections, bloody show, genital lacerations, degenerating uterine myomata, foreign bodies, marginal placental separation, and so on. However, in some cases, the exact cause cannot be ascertained and remains of undetermined origin. It can complicate about 2 -5% of pregnancies, with an incidence of placenta previa and abruptio placentae of about 0.33% to 0.55% and 0.5 to 1%, respectively. APH can lead to a range of complications like preterm labor, malpresentation, postpartum hemorrhage, higher rates of cesarean section, massive transfusions, coagulation and renal failure, pulmonary edema, and infective complications like sepsis, shock, and death. Although it is difficult to prevent APH and maternal and neonatal mortality, morbidity can be improved by timely diagnosis and treatment, correcting underlying and associated comorbidities like hypertension and anemia, with timely referral of patients if there are complicated pregnancies like PAS disorders, and delivering those patients at a tertiary care center with better available facilities and multi-department coordination. This study aimed to determine maternal and fetal outcomes in patients with antepartum hemorrhage.

Chief Complaint:
A 28-year-old unregistered female Gravida 3 Para 2 Living 2 at 35 weeks of gestation presents to the emergency room with sudden onset, severe, continuous abdominal pain accompanied by heavy bleeding per vagina (P/V) for the past 2 hours.

History of Present Illness:
The patient notes a sudden drop/absence of fetal movements over the last few hours. She has a background history of poorly controlled Gestational Hypertension (a major risk factor for abruption).

II. CLINICAL EXAMINATION:

General Physical Examination:
Vitals: Tachycardia (Pulse: 118 bpm), Hypotension (BP: 120/100 mmHg), and Tachypnea (RR: 24 breaths/min) - indicating hypovolemic shock.
Appearance: Severe pallor, cold extremities, and marked anxiety

Abdominal (Obstetric) Examination:
Palpation: Fundal height is greater than gestational

age (suggesting a large concealed retroplacental hematoma). The uterus is woody-hard (hypertonic), tense, and exquisitely tender to touch.

Auscultation: Fetal Heart Sounds (FHS) are completely absent via Doppler or stethoscope.

Pelvic/Speculum Examination:
Per Speculum: Dark red blood clots are seen coming through the cervical os.
Note: Digital Vaginal Examination is strictly avoided until an urgent ultrasound rules out placenta previa to prevent catastrophic worsening of bleeding.

III. URGENT INVESTIGATIONS: BEDSIDE ULTRASOUND

Confirms Intrauterine Fetal Demise (IUFD) (no cardiac activity or somatic movements). A large retroplacental hematoma is also visualized.

Laboratory Workup:
Hemoglobin (Hb): 6.8 g/dL (Severe anemia).
Coagulation Profile: Prolonged PT/aPTT,
decreased platelets, and low fibrinogen levels (indicating early/established DIC).
Blood Grouping & Cross-matching: Performed immediately for 4–6 units of Packed Red Blood Cells (PRBCs) and Fresh Frozen Plasma (FFP).

1. Immediate Resuscitation & Stabilization:
Two large-bore IV cannulas are secured. Rapid infusion of crystalloids alongside immediate initiation of Massive Transfusion Protocol (MTP) using cross-matched blood and clotting factors to correct DIC.

2. Decision for Emergency LSCS Indication:
Even though the baby is dead, an emergency LSCS is advised because the mother is hemorrhaging severely, her vitals are deteriorating, and the cervix is completely closed/unfavorable for a rapid vaginal induction.

3. Critical Intraoperative Findings
Couvelaire Uterus (Uteroplacental Apoplexy): Upon opening the abdomen, the uterine myometrium appears purplish-blue and ecchymotic. This occurs because retroplacental blood has extravasated into the uterine muscle fibers.

Placental Delivery: A placental separation was noted. Blood clots weighing 190 grams were noted; placental weight was 945 grams.

Fetal Extraction: A male baby of weight 2500 grams delivered on 30/01/2026 at 9.16 am by vertex presentation. Baby did not cry after birth.

Complications
PPH- uterus sutured with vicryl 1-0 with continuous locking method; uterus was still flabby after administration of drugs

a) *Inj.Methargin 0.2 mg IM*
b) *Inj.Carboprost 250 mg IM*
c) *Both uterine artries ligated still uterus was not tonic*
d) *Belynch suture taken with catgut no. 2*
e) *Intraoperative 1 PCV and 4 FFP transfusion done.*

Postoperative management-

1)Higher antibiotic given
2)IV fluids given
3)2-point PCV transfusion done
4)4-point FFP transfusion done
5)Abdominal girth monitored 4 hourly
6)3-point PCV transfusion done on 2/2/26
7)Patient monitored throughout stay
8)All stitches removed on POD 8; patient discharged in good condition

IV. DISCUSSION

Antepartum haemorrhage (APH) has common causes like placenta previa and abruptio placentae. Placenta previa is due to the abnormal location of the placenta in the lower segment; abruption is more associated with PIH and has more dire consequences and associated morbidity. Placenta accreta syndrome is usually a complication associated with placenta previa with a previous history of surgical intervention, most commonly previous cesarean section.

V. CONCLUSION

Antepartum haemorrhage (APH) is an obstetrical emergency that requires timely diagnosis and early intervention. Though there are no reliable, sensitive tests for detection, with the advancement in imaging modalities, the diagnosis of placenta accreta spectrum

is increasing. Antenatal care should focus on educating the couple and avoiding penetrative sexual intercourse if placenta previa is diagnosed. Good antenatal care and initiation of massive transfusion protocol series as and when required remain the backbone of good maternal and perinatal outcomes in APH. Swift management involving a multi-disciplinary team is required to improve maternal and fetal outcomes.

ACKNOWLEDGEMENT:

I want to express my gratitude to the Department of Prasuti Tantra evam Streeroga and the Hospital Authority for providing me with this research opportunity. Special thanks are extended to the Maharashtra Arogya Mandal's Secretary, Hon. Mr. Anil Gujar sir, Joint Secretary, Hon. Mr. Arun Gujar sir, Principal and Medical Director, Dr. Sachinkumar S. Patil, and faculty members, Dr. Deepali Rajput, Dr. Priyanka Nikam, Dr. Padmaja Bhapkar, Dr. Deepali Tate, Dr. Prajakta Pardeshi for their cooperation during the research study. Many thanks to our Prasuti Tantra evam Streeroga Post Graduate Students, who helped us expand our knowledge of the subject and learn a lot of new things when evaluating the research articles.

Disclosure of conflict of interest: The authors declare that there was no conflict of interest regarding the publication of manuscript.
Statement of Informed Consent: Informed consent was taken from the patient.

REFERENCES

[1] *R. Kulkarni and A. S. Shirsath, "Study of antepartum hemorrhage at a tertiary care hospital," International Journal of Reproduction, Contraception, Obstetrics and Gynecology, 2021.*
[2] *P. Singh, S. Agarwal, and R. Najam, "Feto-maternal outcome in cases of antepartum hemorrhage at a tertiary care hospital—A retrospective study," International Journal of Reproduction, Contraception, Obstetrics and Gynecology, 2022.*
[3] *Royal College of Obstetricians and Gynaecologists (RCOG), RCOG Green-top Guideline No. 63: Antepartum Haemorrhage.*
[4] *D. C. Dutta, The Textbook of Gynaecology, 6th ed. New Delhi, India: Jaypee Brothers Medical Publishers (P) Ltd., 2013, p. 182.*
[5] *J. Himang, D. Bishan, and S. A. S. Verma, "Consequences of antepartum hemorrhage and its maternal and perinatal outcome, India," Int. J. Clin. Obstet. Gynecol. India, vol. 3, no. 3, pp. 155–159, 2019.*
[6] *S. M. G. Neeru, "Antepartum hemorrhage and its maternal and perinatal outcome at tertiary care hospital," Int. J. Health Clin. Res., vol. 4, no. 3, pp. 272–276, 2021.*
[7] *P. Mishra, "A prospective study to assess maternal and fetal outcome in patients with antepartum hemorrhage," 2020, vol. 3, no. 9, pp. 56–56.*