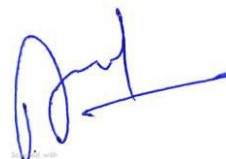


VALUE ADDED COURSE

COURSE NAME	ACUTE POSTPARTUM HEMORRHAGE
COURSE CODE	VACNKK
DURATION	30 HR

Objectives:

- ☐ Identify the etiology of postpartum hemorrhage.
- ☐ Describe the presentation of a patient with postpartum hemorrhage.
- ☐ Outline the management options available for postpartum hemorrhage.
- ☐ Review inter professional team strategies for improving care coordination and communication to advance the treatment of postpartum hemorrhage and improve outcomes.

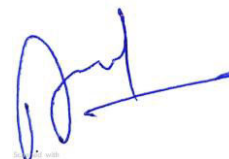



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UNIT I INTRODUCTION

Acute postpartum hemorrhage (PPH) is a serious and potentially life-threatening condition that occurs shortly after childbirth, characterized by excessive bleeding. It is defined as the loss of more than 500 ml of blood after vaginal delivery or more than 1000 ml after a cesarean section within the first 24 hours postpartum. PPH can result from a variety of causes, often categorized into the "four Ts": Tone, Tissue, Trauma, and Thrombin.

- ☐ **Tone:-** Uterine atony, where the uterus fails to contract effectively after delivery, is the most common cause. This lack of contraction prevents the compression of blood vessels, leading to continued bleeding.
- ☐ **Tissue:-** Retained placental tissue can cause ongoing bleeding. If parts of the placenta or membranes remain in the uterus, it can prevent normal uterine contraction and cause significant hemorrhage.
- ☐ **Trauma:-** Lacerations or tears of the cervix, vagina, or perineum, as well as uterine rupture, can lead to substantial bleeding. Surgical interventions or assisted deliveries may increase the risk of such trauma.
- ☐ **Thrombin:-** Coagulopathies or blood clotting disorders, whether pre-existing or acquired during pregnancy or labor, can impede normal clot formation and exacerbate bleeding.
- ☐ Management of PPH involves prompt and effective interventions to control the bleeding and stabilize the patient. This can include:
 - ☐ Uterine massage and administration of uterotonic medications to stimulate uterine contractions.
 - ☐ Removal of retained placental tissue, either manually or surgically.
 - ☐ Repair of lacerations or tears.
 - ☐ Blood transfusions and administration of clotting factors if necessary.



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UNIT II ETIOLOGY OF APH

Cute postpartum hemorrhage (PPH) is a major cause of maternal morbidity and mortality. The etiology of PPH can be summarized using the "Four Ts" mnemonic:

- ☐ Tone (Uterine Atony)
- ☐ Tissue (Retained Placental Tissue)
- ☐ Trauma(Genital Tract Trauma)
- ☐ Thrombin(Coagulopathy)

Effective management of PPH often requires prompt identification of the underlying cause, followed by appropriate interventions such as uterotonic medications, manual removal of retained tissue, surgical repair of lacerations, and correction of coagulopathies.

UNIT - III EPIDEMIOLOGY OF APH

Acute postpartum hemorrhage (PPH) is a significant cause of maternal morbidity and mortality worldwide. Here's an overview of its epidemiology.

☐ **Definition**

Acute PPH is defined as blood loss of 500 ml or more within the first 24 hours after birth. Severe PPH involves blood loss of 1,000ml or more.

☐ **Risk Factors** Uterine

Atony Trauma

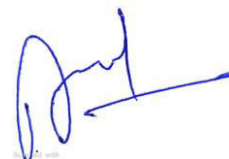
Retained Placental Tissue, Other Factors Uterotonics

Surgical Interventions Training and Protocols

☐ **Prevention and Management**

Active Management of Third Stage of Labor (AMTSL) Uterotonics

Surgical Interventions Training and Protocols



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UNIT - IV Patho physiological Mechanisms

- ☐ Impaired Myometrial Contractions:-The myometrium must contract strongly and effectively to compress blood vessels and control bleeding. Any condition impairing these contractions can lead to PPH.
- ☐ Vascular Integrity Disruption:-Trauma or surgical interventions can disrupt the integrity of the vasculature in the reproductive tract, leading to significant blood loss.
- ☐ Coagulation Pathway Dysfunction:- Conditions affecting the coagulation pathway can prevent the formation of stable clots, exacerbating bleeding.

UNIT - V TREATMENT AND MANAGEMENT OF APH

- ☐ Assess vital signs
- ☐ Ensure IV access
- ☐ Administer oxygen

Identify and Treat the Cause

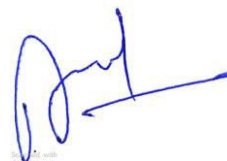
- ☐ Tone (Uterine Atony) Uterine massage

Medications:

- ☐ Oxytocin: Administer intravenously or Intra muscularly Methyl ergonovine: Administer intramuscularly (contraindicated in hypertension).
- ☐ Carboprost: Administer intramuscularly (contraindicated in asthma).
- ☐ Misoprostol: Administer orally, sublingually, or rectally
- ☐ Thrombin (Coagulopathy)

-Assess coagulation status:- Check for signs of coagulopathy and order appropriate laboratory tests (e.g., PT, aPTT, fibrinogen, platelet count).

-Transfusions:-Administer blood products as needed (e.g., packed red blood cells, fresh frozen plasma, platelets, cryoprecipitate).



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Supportive Care

- ☐ Fluid resuscitation
- ☐ Blood transfusion
- ☐ Monitor urine output

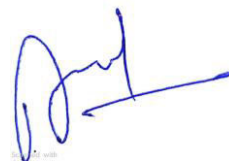
Follow-up and Monitoring

- ☐ Monitor closely
 - ☐ Emotional support Provide psychological support to the patient and family.
- Education.

UNIT - VI ENHANCING HEALTH CARE AND TEAM OUTCOMES

Postpartum hemorrhage is one of the surgical emergencies in obstetrics. The condition is best managed by an inter professional team that also includes laboratory personnel and labor and delivery nurses.

The treatment and management of postpartum hemorrhage are focused on resuscitation of the patient while identifying and treating the specific cause. However, in many cases, the cause is surgical. Maintaining the hemodynamic stability of the patient is important to ensure continued perfusion to vital organs. Ample intravenous (IV) access should be obtained. Careful direct assessment of cumulative blood loss is important, and a focus should be on the early initiation of protocols for the release of blood products and massive transfusion protocols. Rapid identification of the cause of postpartum hemorrhage and initiating treatment should be made simultaneously. To improve outcomes, the resuscitation should be done in an operating department setting as anesthesia assistance may be indicated for help with a difficult laceration repair, to correct uterine inversion, to help provide analgesia if needed for removal of retained products, or if surgical exploration is indicated.



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