Al-Mustaqbal University
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Nursing Care of Women with Complications After Birth

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KEY TERMS:

atony (ĂT-ŏ-nē,):

curettage (KYŪ-rĕ-tăhzh:

endometritis (ĕn-dō-mē-TRĪ-tĭs,)

hematoma (hē-mă-TŌ-mă)

hypovolemic shock (hī-pō-vō-LĒ-mĭk shŏk,)

involution (ĭn-vō-LŪ-shŭn,)

mania (MĀ-nē-ă,)

mastitis (măs-TĪ-tĭs,)

mood)

psychosis (sī-KŌ-sĭs,

puerperal sepsis (pū-ĔR-pŭr-ăl SĔP-sĭs,

subinvolution (sŭb-ĭn-vō-LŪ-shŭn,

After childbirth, women may experience complications that generally fall into six categories:

1.Shock: A life-threatening condition caused by severe blood loss or infection, leading to low blood pressure, rapid heart rate, and organ failure. Treatment involves fluids, blood transfusions, and medications.

2.Hemorrhage: Excessive bleeding after childbirth, often due to uterine atony or trauma. It requires prompt medical management, including uterine massage, medications, and possibly surgery or blood transfusions.

3.Thromboembolic Disorders: Blood clots that can form and travel to the lungs, heart, or brain. Risk factors include pregnancy-related changes in blood clotting. Treatment may include anticoagulants and compression stockings.

4.Puerperal Infections: Infections after childbirth, such as endometritis or wound infections, often caused by bacteria entering during delivery. Treatment includes antibiotics and supportive care.

5.Subinvolution of the Uterus: A condition where the uterus doesn't return to its normal size after delivery, leading to prolonged bleeding. It may be treated with medications or surgery.

6.Mood Disorders: Postpartum depression, anxiety, and psychosis can affect new mothers due to hormonal changes and stress. Treatment may involve therapy, medications, and support from family or professionals.

These complications require prompt recognition and management to ensure maternal health and recovery after childbirth.

Shock after childbirth is a serious and potentially life-threatening condition in which the cardiovascular system fails to deliver enough oxygen and nutrients to the body's cells. In the postpartum period, shock can be caused by several factors, including:

Types of Postpartum Shock:

1.Cardiogenic Shock:

1. **Causes**: Pulmonary embolism, anemia, hypertension, or underlying cardiac disorders.
2. **Pathophysiology**: The heart is unable to pump sufficient blood to meet the body's needs, leading to oxygen deficiency in tissues.

2.Hypovolemic Shock:

1. **Causes**: Postpartum hemorrhage (severe bleeding) or blood clotting disorders.
2. **Pathophysiology**: A significant loss of blood volume reduces the amount of circulating blood, leading to inadequate tissue perfusion.

3.Anaphylactic Shock:

1. **Causes**: Severe allergic reaction to drugs or medications administered during or after childbirth.
2. **Pathophysiology**: A severe immune response leads to widespread vasodilation and increased vascular permeability, causing a drop in blood pressure.

4- Septic Shock:

1. **Causes**: Puerperal infection (such as endometritis, wound infection, or urinary tract infection).
2. **Pathophysiology**: Infection leads to systemic inflammation and vasodilation, reducing the ability of blood vessels to maintain adequate pressure and perfusion.

Danger of Obstetric Shock:

The key danger of **obstetric shock** is that the body may initially compensate for the shock (e.g., by increasing heart rate, constricting blood vessels) which can mask early signs. By the time symptoms are fully apparent, the condition can be life-threatening.

Importance of Vigilance:

•**Early detection** is crucial, as the symptoms can be subtle at first.

•Nurses and healthcare providers should monitor for signs like increased heart rate, low blood pressure, changes in respiratory rate, and altered mental status.

•**Prompt intervention** (e.g., fluid resuscitation, blood transfusions, antibiotics, or medications) is vital to improve outcomes and prevent progression to more severe stages of shock.

In summary, **postpartum shock** can result from various causes and requires careful monitoring for early signs, as well as swift medical intervention to prevent serious complications or death.

Postpartum Hemorrhage (PPH) is excessive blood loss after childbirth, defined as more than 500 mL after vaginal birth or 1000 mL after cesarean birth, accompanied by symptoms of hypovolemia.

- **Timing**:
  - **Primary (early)** hemorrhage occurs within 24 hours of birth.
  - **Secondary (late)** hemorrhage occurs after 24 hours, up to 6 weeks postpartum.
- **Risk and Impact**:
  - Major risks include **hypovolemic shock**, which occurs when blood loss reduces the circulatory volume, impairing oxygen and nutrient delivery to cells.
  - **Anemia** can also result from blood loss, leading to fatigue and weakness.
- **Causes**: The most common cause is **uterine atony** (failure of the uterus to contract), but trauma, retained placenta, and clotting disorders can also contribute.
- **Management**: Early detection and interventions such as uterine massage, medications (e.g., oxytocin), and blood transfusions are key to preventing shock and improving outcomes.

Postpartum hemorrhage remains a leading cause of maternal death worldwide, highlighting the importance of timely intervention and care.

Body's Response to Hypovolemia (Reduced Blood Volume):

When blood volume decreases, the body activates compensatory mechanisms to maintain vital functions:

1.Increased Heart and Respiratory Rates:

1. The body increases heart rate (tachycardia) and breathing rate to enhance oxygen delivery to tissues, trying to compensate for the reduced blood volume.

2.Tachycardia:

1. **Tachycardia** (rapid heart rate) is usually the **first sign** of hypovolemia, as the heart works harder to circulate the remaining blood.

3.Changes in Blood Pressure:

1. **Narrowed pulse pressure** occurs early—**systolic pressure drops**, and **diastolic pressure rises**.
2. As blood loss continues, **blood pressure** falls further and may eventually become **undetectable**.

4.Reduced Blood Flow to Non-Essential Organs:

1. Blood is redirected to **vital organs** like the heart and brain.
2. **Non-essential organs** (such as the skin and gastrointestinal system) receive less blood, causing the skin and mucous membranes to become **pale**, **cold**, and **clammy**.

5.Mental Changes:

1. Reduced blood flow to the **brain** leads to mental symptoms such as **anxiety**, **confusion**, **restlessness**, and **lethargy**.

6.Decreased Kidney Function:

1. As blood flow to the kidneys decreases, they attempt to **conserve fluid**, leading to **reduced urine output** and, eventually, **no urine production**.

These responses help preserve blood flow to the **vital organs** (heart and brain) but, if untreated, can lead to **organ failure** and death. Early detection of these signs is critical for intervention and preventing further complications.

Medical Management of Hypovolemic Shock Due to Hemorrhage:

1.Stopping the Blood Loss:

2. The first priority is to control the source of bleeding, which may involve procedures like uterine massage, surgical interventions, or removal of retained placenta.

2- Intravenous (IV) Fluids:

1. **IV fluids** are given to restore circulating volume and prevent further dehydration. Common fluids include saline or lactated Ringer's solution.
2. This helps maintain blood pressure and improve perfusion to vital organs.

3- Blood Transfusions:

1. **Blood transfusions** replace lost **erythrocytes** (red blood cells), improving oxygen-carrying capacity and addressing anemia.
2. Packed red blood cells (PRBCs) or whole blood may be transfused depending on the severity of blood loss.

4- Oxygen Therapy:

1. **Oxygen** is administered to increase oxygen saturation in the blood, helping improve the oxygenation of tissues.
2. A **pulse oximeter** is used to monitor oxygen levels and guide oxygen therapy.

5- Indwelling (Foley) Catheter:

1. A **Foley catheter** is inserted to **monitor urine output**, which is a key indicator of kidney function and systemic perfusion.
2. A decrease or absence of urine output can signal worsening shock or organ failure.

6- Uterine Massage and Medication:

1. **Uterine massage** stimulates uterine contraction, which helps reduce bleeding by promoting the uterus to clamp down on blood vessels.
2. **Oxytocin** and other uterotonic drugs (e.g., misoprostol, methylergonovine) may be administered to **contract the uterus**, reducing bleeding.)

Nursing Care for Postpartum Hemorrhage & Hypovolemic Shock:

1.Vital Signs Monitoring:

1. Assess **vital signs** every **15 minutes** until stable to detect early signs of **postpartum hemorrhage** or **shock**.

2.Signs of Shock:

1. Monitor for **early signs of shock**, such as:
    1. **Tachycardia** (rapid heart rate)
    2. **Pallor** (paleness)
    3. **Cold, clammy skin**
    4. **Decreased urine output**
2. **Decreased blood pressure** may be a **late sign** of shock.

3.Lochia Assessment:

1. **Frequent assessment** of **lochia** (vaginal bleeding) is critical to detect early **postpartum hemorrhage**.
2. **Normal lochia** and a **firm uterus** with signs of hypovolemia could indicate a **large hematoma**.
3. **Excessive bright red bleeding** despite a firm fundus suggests a **cervical or vaginal laceration**.

5- Clotting Disorders Signs:

1. **Petechiae**, bleeding from **venipuncture sites**, or **oliguria** (low urine output) may suggest a **clotting problem**.

6- Weighing Perineal Pads:

1. In the first postpartum hours, **weigh perineal pads** to estimate blood loss (1 g = 1 mL of blood).

7- Intake and Output:

1. Monitor and record **intake and output**, including **IV fluids**, to assess fluid balance.

8- Oxygen Saturation Monitoring:

1. **Monitor oxygen saturation levels** to ensure proper oxygenation, especially during **early postpartum hemorrhage**.

These nursing actions help identify and manage complications like **hypovolemic shock** and **postpartum hemorrhage** early, ensuring prompt interventions for optimal maternal care.

Safety Alert for Postpartum Care:

1.Peripad Saturation:

1. If a **peripad becomes saturated within 15 minutes to 1 hour** after delivery, it must be **promptly reported**. This may indicate excessive bleeding or hemorrhage.

2.Communication and Emotional Support:

1. Provide **careful explanations** to the mother and her family regarding the situation.
2. Offer **emotional support** and help maintain the integrity of the woman's **support system**, which is essential for her recovery.

3.Information Access for the Infant:

1. Even if the mother is separated from her baby, ensure that **information about the infant's condition** is easily accessible to the mother. Keeping her informed is crucial for emotional well-being.

4.Rooming-In:

1. As soon as the woman's condition allows, **rooming-in** with the infant should be established to promote bonding and maternal well-being.

5.Intensive Care:

1. In cases of severe complications, **intensive care** may be required to allow for **invasive hemodynamic monitoring** of the woman's circulatory status to ensure stable recovery.

These safety measures ensure early detection of potential complications, promote the mother's emotional well-being, and provide critical support during recovery.

Nursing Care Plan for Postpartum Hemorrhage

Patient Data:

•A woman in the postpartum unit is **anxious and frightened** with **excessive blood loss** (saturating three perineal pads in 1 hour).

Nursing Diagnosis:

•**Risk for hypovolemic shock** related to excessive blood loss.

Goals:

•Prevent or minimize hypovolemic shock and support recovery.

Nursing Interventions:

1.Monitor Vital Signs:

1. Assess every 15 minutes for signs of shock (tachycardia, low blood pressure).

2.Assess Lochia and Uterine Tone:

1. Monitor bleeding and massage the uterus if it's not firm.

3.Weigh Perineal Pads:

1. Accurately measure blood loss to guide interventions.

4.Administer IV Fluids and Medications:

1. Provide IV fluids for volume restoration and uterotonics (e.g., oxytocin) to control bleeding.

5.Monitor Urine Output:

1. Use a Foley catheter to track kidney function and detect oliguria.

6.Oxygen Therapy:

1. Administer oxygen to support organ oxygenation, especially if shock is present.

7- Provide Emotional Support:

1. Offer reassurance and clear explanations to reduce anxiety and fear.

8- Collaborate with Healthcare Team:

1. Report abnormal findings and prepare for further medical interventions.

Evaluation:

•**Short-Term**: Stable vital signs, controlled bleeding, and reduced anxiety.

•**Long-Term**: Prevention of hypovolemic shock and stable recovery.

This care plan emphasizes **early intervention**, **accurate monitoring**, and **emotional support** to manage excessive postpartum blood loss and reduce shock risk.

Early (Primary) Postpartum Hemorrhage:

Definition:

Early postpartum hemorrhage occurs within **24 hours** of childbirth and is primarily caused by one of three factors:

1.Uterine Atony (Most Common Cause):

1. Failure of the uterus to contract effectively after delivery, leading to continued bleeding from the placental site.
2. Contributing factors may include prolonged labor, overdistension of the uterus (e.g., large baby or multiple gestation), or use of certain medications (e.g., magnesium sulfate).

2.Lacerations:

1. **Tears** in the cervix, vagina, or perineum that can result in significant blood loss, often with a **firm uterus**.
2. Lacerations may occur during the delivery process, especially with instrumental assistance or rapid delivery.

3.Hematomas:

1. Blood collections (hematomas) within the reproductive tract, often in the **vulva**, **vagina**, or **cervix**, caused by the rupture of blood vessels during delivery.
2. Hematomas can grow in size and become painful, requiring surgical intervention.

Management:

•Early recognition and prompt treatment (e.g., uterine massage, suturing lacerations, surgical drainage of hematomas) are crucial to prevent **hypovolemic shock** and other complications.

Uterine Atony:

Definition:

Uterine atony refers to the **lack of normal muscle tone** in the uterus, which impairs its ability to contract and compress blood vessels after delivery.

Normal Uterine Function:

- The **postpartum uterus** is a large, hollow organ with three layers of muscle.
- The **middle layer** contains interlacing **figure-eight fibers** that help compress blood vessels, particularly those at the site where the placenta was attached.
- After the placenta detaches, the uterus **contracts** to clamp down on these blood vessels, preventing excessive bleeding.

Pathophysiology of Uterine Atony:

- In **uterine atony**, the muscle fibers are **flaccid** and do not contract properly, resulting in **uncontrolled bleeding** at the site where the placenta was attached.
- **Massive bleeding** occurs because the blood vessels at the placental site remain open and uncompressed.

Causes of Uterine Atony:

1.Uterine Overdistention:

1. Conditions such as **multiple gestation**, **large baby**, or **polyhydramnios** (excess amniotic fluid) can stretch the uterus, making it less able to contract effectively.

2.Retained Placental Fragments:

1. If pieces of the placenta remain in the uterus after delivery, they prevent the uterus from fully contracting.

3- Prolonged Labor:

1. A prolonged or **difficult labor** can tire the uterine muscles, reducing their ability to contract effectively after delivery.

4- Medications During Labor:

1. The use of **drugs** such as **magnesium sulfate** or **oxytocin** to relax or stimulate the uterus during labor can also contribute to uterine atony, especially if overused or mismanaged.

Management:

•**Uterine Massage**: Stimulating the uterus to contract.

•**Oxytocin**: Administering uterotonics like **oxytocin** to stimulate uterine contractions.

•**Surgical Intervention**: In severe cases, surgical procedures such as **manual removal of retained placental fragments** or **hysterectomy** may be needed.

Uterine atony is the most common cause of postpartum hemorrhage, and prompt intervention is crucial to prevent **hypovolemic shock** and other complications.

Characteristics of uterine atony

When uterine atony occurs, the woman's uterus is difficult to feel and, when found, feels boggy (soft). The fundal height is high, often above the umbilicus. If the bladder is full, the uterus is higher and pushed to one side rather than located in the midline of the abdomen (Fig. 10.1). The uterus may or may not be soft if the bladder is full. A full bladder interferes with the ability of the uterus to contract and, if not corrected, eventually leads to uterine atony.

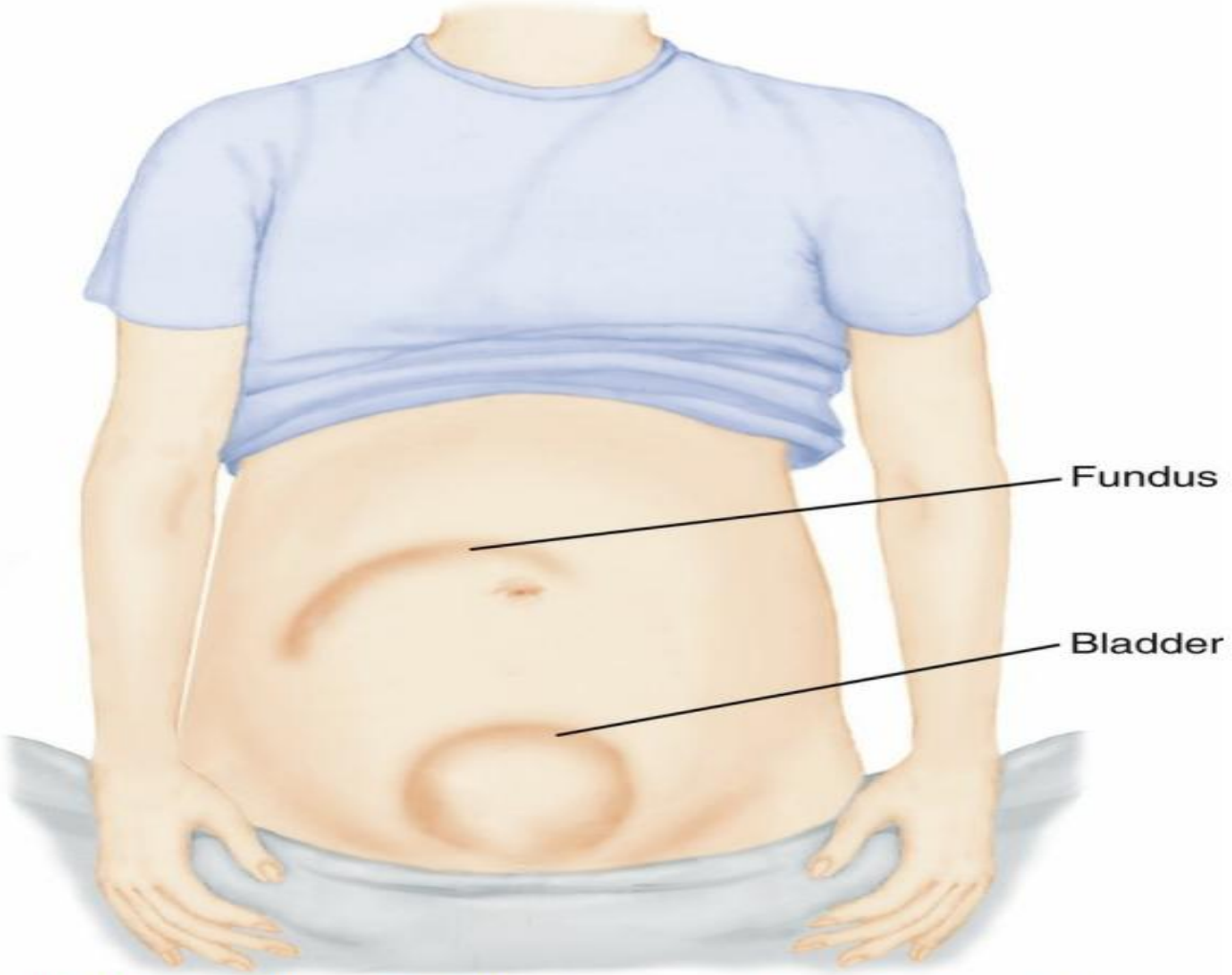

FIG. 10.1 A distended bladder pushes the uterus upward and usually to one side of the abdomen. The fundus may be boggy or firm. If not emptied, a distended bladder can result in uterine atony and hemorrhage, because it interferes with normal contraction of the uterus. (From McKinney ES, James SR,

Normal Postpartum Changes:

After a full-term birth, several changes occur in the uterus and lochia during the postpartum period. These changes are part of the **recovery and healing process**:

1.Uterine Involution:

1. Immediately after birth, the uterus is **firm** and should feel like a mass about the size of a grapefruit when palpated through the abdominal wall.
2. After the **placenta is expelled**, the **fundus** (top of the uterus) is initially at the level of the **umbilicus** (belly button).
3. The uterus then begins to contract and descend **1 finger's width (1 cm)** each day until it returns to its pre-pregnancy size.

2.Lochia:

1. **Lochia rubra** (the first stage of postpartum bleeding) is **dark red** in color and typically lasts for the first 3–4 days after birth.
2. The **amount of lochia** should not exceed the saturation of **one perineal pad per hour** during the first few hours after delivery.
3. Small **clots** may be present, but **large clots** are **not normal** and may indicate excessive bleeding or complications such as uterine atony or lacerations.

These changes indicate that the body is adjusting and healing after childbirth, and regular monitoring is essential to ensure that the process proceeds normally. **Excessive bleeding** or **larger clots** should be promptly assessed to rule out potential complications.

Characteristics of Uterine Atony

Uterine atony occurs when the uterus fails to contract effectively after childbirth, leading to excessive bleeding. Key characteristics include:

1.Boggy Uterus:

1. The uterus feels **soft** or **boggy** on palpation, indicating lack of firm contractions.

2.High Fundal Height:

1. The **fundus** (top of the uterus) is **higher** than expected, often above the umbilicus, showing that the uterus isn't returning to its normal size.

3.Shifted Uterus (if Bladder is Full):

1. A **full bladder** can push the uterus to one side and elevate it, interfering with uterine contractions and contributing to atony.

4.Increased Lochia:

1. **Lochia** (postpartum discharge) is **increased** and may contain **large clots**, indicating excessive bleeding.

5.Retained Lochia:

1. Due to the relaxed uterus, some lochia may remain in the uterine cavity, leading to underestimation of blood loss and complicating the assessment of hemorrhage severity.

Implications:

•**Uterine atony** is a leading cause of **postpartum hemorrhage** and requires **immediate intervention** (e.g., uterine massage, oxytocin administration, or surgical intervention) to prevent complications like **hypovolemic shock**.

Impact of Blood Collection in the Uterus & Nursing Considerations

Impact of Blood Collection:

•**Blood Accumulation**: When blood collects in the uterus (due to uterine atony or retained placenta), it **interferes with uterine contractions**, worsening uterine atony and increasing the risk of postpartum hemorrhage.

•**Cycle of Worsening Hemorrhage**: As the uterus fails to contract, **blood vessels at the placental site remain open**, causing continued bleeding. This prevents the uterus from fully expelling the blood, worsening the hemorrhage.

Nursing Considerations for Women at Risk:

1.Frequent Postpartum Assessments:

1. **Uterus**: Monitor for **firmness** (to ensure contractions) and position (especially if shifted due to a full bladder).
2. **Lochia**: Track the **amount**, **color**, and **consistency** to detect excessive bleeding or large clots.
3. **Vital Signs**: Regularly monitor heart rate, blood pressure, and respiratory rate to spot early signs of **hypovolemic shock**.

2.Close Observation:

1. Women with **risk factors** (e.g., uterine atony, retained placenta, or overdistended uterus) require **frequent assessments** to detect early postpartum hemorrhage.

3.Early Intervention:

1. Early identification of uterine atony or excessive bleeding allows for prompt interventions, such as **uterine massage**, **oxytocin administration**, or **manual removal of retained placenta**, to control the hemorrhage and prevent further complications.

Medical Management and Nursing Care for Uterine Atony

Care of the Woman with Uterine Atony:

1.Uterine Massage:

1. **Initial Action**: If the uterus is **boggy** (soft), it should be **massaged** gently until it becomes firm.
2. **Avoid Over-Massaging**: **Excessive stimulation** of the uterus can **tire** it, worsening the atony. Once the uterus is firm, it should be left alone.

2.Bladder Distention:

1. A **full bladder** can interfere with uterine contraction and contribute to atony.
2. **Catheterization**: If the woman is unable to urinate on her own, the nurse should **catheterize** her to empty the bladder, which is an easily correctable cause of uterine atony.
3. **Clot Removal**: After massaging the uterus, the nurse should **press toward the vagina** to expel any **clots** or pooled blood from the vaginal cavity.

3.Oxytocin Administration:

1. **Oxytocin**: If uterine atony persists, a dilute **oxytocin (Pitocin) IV infusion** is often administered to stimulate uterine contractions and control bleeding.

4.Breastfeeding:

1. **Infant Suckling**: Encouraging the **infant to suckle** at the breast helps stimulate the **posterior pituitary gland** to release oxytocin naturally, which promotes uterine contractions and reduces bleeding.

Nursing Care Plan:

- **Massage** the uterus gently to stimulate contraction and maintain firmness.
- **Monitor** for signs of excessive bleeding or signs of shock.
- **Catheterize** if necessary to relieve bladder distention and improve uterine tone.
- **Administer medications** (e.g., oxytocin) as prescribed to promote uterine contractions.
- **Encourage breastfeeding** as it naturally stimulates oxytocin release and helps with uterine contraction.

By **early intervention**, **careful monitoring**, and **prompt actions** like massage, catheterization, and oxytocin administration, uterine atony can be managed effectively, reducing the risk of postpartum hemorrhage and improving recovery.

Other Medical Interventions for Uterine Atony and Postpartum Hemorrhage:

1.Medications to Increase Uterine Tone:

1. **Methylergonovine (Methergine)**:
    1. This drug stimulates uterine contractions and helps control postpartum bleeding.
    2. **Caution**: It **increases blood pressure** and should **not** be used in women with **hypertension**.
2. **Prostaglandins**:
    1. **Hemabate** (carboprost) and **Cytotec** (misoprostol) are prostaglandin medications that can also be used to promote uterine contractions and reduce bleeding.

2.Uterine Tamponade:

1. **Packing** the uterus or using an **intrauterine balloon** can provide **pressure** to control bleeding by compressing blood vessels in the uterus.

3.Selective Arterial Embolization:

1. A procedure where a catheter is inserted into the **uterine arteries** to block the blood flow to the bleeding site, thereby controlling hemorrhage.

4.Surgical Options:

1. **Surgical Ligation**: The healthcare provider may perform a **surgical ligation** of the uterine arteries to control bleeding.
2. **Hysterectomy**: In rare and severe cases, where other interventions fail, a **hysterectomy** (removal of the uterus) may be necessary.

5- Calcium Gluconate:

1. **Intravenous calcium gluconate** can be used to **counteract** the effects of **tocolytic drugs** (medications used during labor to relax the uterus) if they cause uterine relaxation after delivery.

6- Assessment and Monitoring:

1. The healthcare provider may examine the woman in the **delivery or operating room** to directly assess and correct the source of the bleeding.

7- NPO Status:

1. The woman should be kept **nothing by mouth (NPO)** until bleeding is controlled, especially if surgical intervention or anesthesia is required.

Key Points:

•A range of pharmacological and surgical interventions can be used to manage **uterine atony** and **postpartum hemorrhage**.

•**Methylergonovine** and **prostaglandins** are common uterotonic drugs, while surgical methods like **uterine tamponade** and **embolization** may be necessary for severe cases.

•**Calcium gluconate** can reverse uterine relaxation caused by tocolytics, and in extreme cases, a **hysterectomy** may be required to save the woman's life.

•**NPO** status is critical to ensure readiness for possible surgical procedures.

Postpartum Hemorrhage and Lacerations

- **NPO Status for Hemorrhagic Complications**:
  - Women with **hemorrhagic complications** should remain **NPO (nothing by mouth)** until evaluated by the healthcare provider, as they may require **general anesthesia** for surgical correction.
- **Lacerations of the Reproductive Tract**:
  - **Types**: Perineal, vaginal, cervical, and periurethral.
  - **Causes**: Lacerations are more likely with **rapid labor**, or the use of **forceps** or a **vacuum extractor**. Vascular engorgement during pregnancy increases the risk of bleeding.
  - **Bleeding Characteristics**: Blood from lacerations is typically **bright red** and flows in a **continuous trickle**, with the **uterus remaining firm**.
- **Treatment**:
  - **Prompt Notification**: If a laceration is suspected (e.g., bleeding with a firm uterus), the healthcare provider should be **notified immediately**.
  - Lacerations are usually **sutured** in the **delivery or operating room** to stop the bleeding.

By staying vigilant and acting quickly, lacerations can be addressed, and hemorrhagic complications can be managed effectively.

Nursing Care for Postpartum Bleeding and Lacerations

•**Signs and Symptoms of a Bleeding Laceration**:

- **Continuous trickle of blood** should be **reported immediately**, as it can result in significant blood loss, potentially as much as or more than the bleeding seen with **uterine atony**.

•**NPO Status**:

- The woman should be kept **NPO** (nothing by mouth) until further instructions are given, as she may require **general anesthesia** for the repair of the laceration.

•**Long-Term Effects of Genital Trauma**:

- **Genital trauma**, such as lacerations, can lead to **long-term complications**, including:
  - **Cystocele** (bladder prolapse)
  - **Prolapsed uterus**
  - **Urinary incontinence**

Key Points:

•Prompt recognition and reporting of bleeding lacerations are critical to prevent excessive blood loss.

•**NPO status** ensures the woman is prepared for potential surgical intervention.

•**Long-term effects** from genital trauma should be monitored and addressed as needed for recovery.

Hematomas of the Reproductive Tract

•**Definition**: A hematoma is a collection of blood within tissues, often resulting from **birth trauma**. Hematomas are most commonly found on the **vulva** or inside the **vagina**.

•**Visible vs. Deep Hematomas**:

- **Visible hematomas** appear as **bluish or purplish masses** on the vulva or vagina.
- **Deep hematomas** inside the vagina are not visible externally.

•**Symptoms**:

- **Severe pain** that does not respond to typical pain relievers.
- **Pressure** in the **vulva**, **pelvis**, or **rectum**, which may cause difficulty urinating.
- **Normal lochia** unless the hematoma is large, which can lead to **concealed blood loss**.

•**Signs of Concealed Blood Loss**:

- **Increased pulse and respiratory rate**
- **Decreased blood pressure**

Key Points:

•Hematomas may cause significant discomfort and **pressure**.

•**Large hematomas** can lead to **concealed blood loss**, requiring urgent intervention.

Hematomas and Nursing Care

- **Hypovolemic Shock**:
  - Large hematomas can lead to **hypovolemic shock** due to significant blood loss into the tissues.
- **Risk Factors and Treatment**:
  - **Small Hematomas**: Usually resolve on their own with **conservative care**.
  - **Larger Hematomas**: May require **incision and drainage**, **ligation of the bleeding vessel**, or **packing** with hemostatic material.
- **Nursing Care**:
  - **Ice Pack**: Used for small hematomas on the perineum, without requiring a physician's order.
  - **Pain Monitoring**: Look for **severe, unrelieved pain**, a key symptom of hematomas.
  - **Signs to Report**:
    - **Severe pain**, **vaginal/perineal pressure**, and **difficulty voiding** should be reported promptly.
    - **Signs of concealed blood loss** should be addressed immediately.
  - **NPO Status**: The woman should be **NPO** until evaluated by the healthcare provider.
- **Medication**:
  - **Tranexamic Acid**: Used to support clot formation by inhibiting clot breakdown; it must be given **within 3 hours** of delivery to control hemorrhage.

Key Points:

- **Small hematomas** typically resolve with **ice**.
- **Larger hematomas** may

Summary: Hematomas and Nursing Care

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Treatment for Postpartum Hemorrhage

- **Medications**:
  - **Oxytocin**, **methylergonovine**, and **prostaglandins** (e.g., carboprost) are used to **contract the uterus** and stop bleeding.
  - **Firm uterine contractions** may expel retained placental fragments, resolving the issue without further intervention.
- **Ultrasonography**:
  - Used to identify any **remaining placental fragments** if bleeding persists.
- **Dilation and Curettage (D&C) or Dilation and Evacuation (D&E)**:
  - If bleeding continues despite uterine contraction, **D&C or D&E** is performed to remove **small blood clots** and **placental fragments**.
- **Antibiotics**:
  - Prescribed if **infection** is suspected during or after the procedure.

Key Points:

- **Oxytocin and other uterotonics** help the uterus contract and expel retained tissue.
- **Ultrasonography** and **D&C/D&E** may be needed if bleeding persists.
- **Antibiotics** are given if infection is a concern.

Nursing Care for Postpartum Hemorrhage

- **Patient Education**:
  - The nurse should educate the postpartum woman about **normal changes in lochia** (vaginal discharge) after childbirth.
- **Signs to Report**:
  - The woman should be instructed to report the following signs of **late postpartum hemorrhage**:
    - **Persistent bright red bleeding**.
    - **Return of red bleeding** after it has changed to a pinkish or white color.
- **Assisting with Treatment**:
  - If **late postpartum hemorrhage** occurs, the nurse assists in implementing **pharmacological** and **surgical** treatments as prescribed by the healthcare provider.

Key Points:

- **Education** is essential for helping women recognize abnormal bleeding.
- **Early reporting** of persistent or unusual bleeding helps prevent complications.
- The nurse plays a key role in supporting **treatment interventions** for postpartum hemorrhage.

Subinvolution of the Uterus

•**Involution**:

- Involution refers to the process by which the uterus returns to its pre-pregnancy size and condition after childbirth.
- Uterine muscles contract to **close blood vessels** at the placental site, stopping postpartum bleeding.

•**Normal Postpartum Uterine Changes**:

- The uterus **descends** at a rate of about **1 cm (1 finger's width) per day** and becomes **non-palpable** by **12 days postpartum**.
- The **placental site** heals within **6 weeks postpartum**.

•**Subinvolution**:

- Subinvolution is the **slower-than-normal** return of the uterus to its pre-pregnancy state.
- Common causes of subinvolution include **infection** and **retained placental fragments**.

Key Points:

•**Normal involution**: Uterus shrinks 1 cm per day and heals in 6 weeks.

•**Subinvolution** occurs when the uterus fails to return to normal size, often due to **infection** or **retained placental tissue**.

Signs and Treatment of Subinvolution

Signs of Subinvolution:

- **Fundal height greater than expected** for the time since delivery.
- **Persistent lochia rubra** (bright red bleeding) or a **slowed progression** through the three phases of lochia.
- **Pelvic pain**, **heaviness**, and **fatigue**.

Treatment for Subinvolution:

- **Methylergonovine (Methergine)**: Used to promote **firm uterine contractions** and control bleeding.
- **Antibiotics**: Prescribed if infection is the cause of subinvolution.
- **Dilation and Curettage (D&C)**: Performed to remove **retained placental fragments** from the uterine wall if present.

Key Points:

- **Subinvolution** can be indicated by abnormal uterine height, persistent bleeding, and pelvic discomfort.
- Treatment is aimed at addressing the underlying cause, such as promoting contractions, treating infection, or removing retained tissue.

Nursing Care for Subinvolution of the Uterus

- **Education for New Mothers**:
  - **Normal postpartum changes** should be explained to all new mothers to help them recognize abnormal signs and symptoms, such as **fever**, **persistent pain**, **persistent red lochia**, or **foul-smelling vaginal discharge**.
- **Signs to Report**:
  - Women should be instructed to report:
    - **Persistent pain** or **fever**.
    - **Persistent or returning red lochia**.
    - **Foul-smelling discharge**.
- **Fundal Palpation**:
  - The mother should be taught how to **palpate the fundus** and understand what normal changes should be expected.
- **Hospital Admission**:
  - The woman may be **admitted to the hospital** for treatment, possibly to the **gynecology unit** if subinvolution is suspected.
- **Nursing Care**:
  - Nursing care involves assisting with **medical therapy** (e.g., medications or procedures) and providing **comfort measures** like **analgesics** for pain relief.
  - Specific care depends on whether the subinvolution is caused by **infection** or other factors.

Key Points:

- **Education** is key to early identification of subinvolution.
- **Signs of infection** or abnormal bleeding should be reported promptly.
- **Nursing care** includes assisting with medical treatment and providing comfort measures based on the underlying cause of subinvolution.

Thromboembolic Disorders in Postpartum Women

What is a Thromboembolic Disorder? A **venous thrombosis** is a blood clot that forms in a **vein**, occurring in **1 in 1500 pregnancies**.

•**Thromboembolic disorders** can result in **inflammation** of the vessel wall as the clot grows by attracting more platelets, fibrin, and cells.

Risk Factors During Pregnancy and Postpartum:

•**Venous stasis** (slowed blood flow) is common in pregnancy, particularly due to:

- **Compression of blood vessels** by the growing uterus.
- **Pressure behind the knees** from leg stirrups during **episiotomy repairs**.
- **Blood vessel injury** during a **cesarean section**.

•Pregnancy also naturally leads to **increased clotting factors** (e.g., fibrinogen) and decreased **clot-dissolving factors** (e.g., plasminogen activator, antithrombin III), creating a state of **hypercoagulability** (an increased tendency to form blood clots).

•**Varicose veins** or **prolonged bed rest** can further increase the risk for **thrombus formation**.

Prevention:

•**Pneumatic compression devices** on the lower extremities and **prophylactic heparin** may be used for women at high risk, such as those undergoing **cesarean sections** or those on **extended bed rest.

Key Points:

•**Thromboembolic disorders** occur due to **venous stasis**, **hypercoagulability**, and **blood vessel injury**.

•Preventive measures like **pneumatic compression** or **heparin** are important for high-risk women (e.g., cesarean delivery, prolonged bed rest).

Types of Thromboembolic Disorders:

1.Superficial Venous Thrombosis (SVT):

1. **Location**: Typically involves the **saphenous vein** of the lower leg.
2. **Symptoms**:
    1. Painful, hard, **reddened** and **warm** vein.
    2. **Visible** on the skin.
    3. Localized swelling and tenderness.
3. **Treatment**: Often resolves with conservative measures such as **elevation** and **warm compresses**. Severe cases may need anti-inflammatory medication.

2.Deep Venous Thrombosis (DVT):

1. **Location**: Involves veins deeper in the leg, from the **feet** to the **femoral area**.
2. **Symptoms**:
    1. **Pain**, especially in the **calf**.
    2. **Calf tenderness**, **leg edema**, **color changes** (redness or pallor).
    3. **Pain when walking**.
    4. Sometimes a **positive Homans' sign** (pain when the foot is dorsiflexed), but this is **not reliable** postpartum.
    5. **Increase in leg circumference** (>2 cm) accompanied by **redness**, **tenderness**, and **edema** should be reported immediately.
3. **Diagnosis**: Confirmed through **ultrasound** (with or without Doppler assistance).
4. **Treatment**: Anticoagulants (e.g., **heparin**, **warfarin**), and in severe cases, **thrombectomy** or **inferior vena cava filter**.

3- Pulmonary Embolism (PE):

1. **Cause**: A blood clot (embolus) from **DVT** or **SVT** travels to the lungs, obstructing the **pulmonary artery**.
2. **Symptoms**:
    1. **Sudden chest pain**, **cough**, **dyspnea** (difficulty breathing), **decreased level of consciousness**, and signs of **heart failure**.
    2. **Small PE**: Nonspecific signs such as **shortness of breath**, **palpitations**, **hemoptysis** (bloody sputum), faintness, or **low-grade fever**.
3. **Treatment**: Immediate anticoagulation therapy (e.g., **heparin** or **warfarin**) and potentially **thrombolytics**. In severe cases, **embolectomy** may be required.

Key Nursing Considerations:

•**DVT and SVT**: Watch for **increased leg circumference**, pain, tenderness, and color changes.

•**PE**: Prompt recognition of **respiratory distress** and **cardiac symptoms** is crucial; immediate treatment is necessary.

•**Preventive Measures**: Use of **compression stockings**, **pneumatic compression devices**, and **early mobilization** after delivery can help reduce the risk of thromboembolic disorders.

•**Monitoring**: Patients with suspected thromboembolic conditions should be carefully monitored, especially for signs of **hypoxia**, **shock**, or **severe pain**.

By understanding the symptoms and treatment of thromboembolic disorders, healthcare providers can intervene early to prevent complications such as **pulmonary embolism** or **chronic venous insufficiency**.

Treatment of Thromboembolic Disorders:

1.Superficial Venous Thrombosis (SVT):

1. **Treatment**:
    1. **Analgesics** to relieve pain.
    2. **Local heat application** to reduce discomfort and promote blood flow.
    3. **Elevation of the legs** to aid venous drainage and decrease swelling.

2.Deep Venous Thrombosis (DVT):

1. **Similar treatment to SVT**, but with the addition of **anticoagulation therapy**:
    1. **Subcutaneous or IV anticoagulants**, such as **heparin**.
    2. **Low-Molecular-Weight Heparin (LMWH)** (e.g., **Lovenox**) may be preferred because it is **long-acting** and requires **less frequent dosing** and **lab testing**.
    3. **LMWH** is contraindicated in women receiving **regional anesthesia** (e.g., epidurals or spinal blocks), as it can increase the risk of bleeding.

3.Medication Safety Alert:

1. **Warfarin Overdose**: The antidote for a **warfarin** overdose is **vitamin K**.

Summary:

•**SVT**: Managed with pain relief, heat, and leg elevation.

•**DVT**: Anticoagulation (e.g., heparin, LMWH) along with supportive care. Be cautious with regional anesthesia in patients on LMWH.

•**Medication Safety**: **Vitamin K** is the antidote for warfarin overdose, ensuring quick reversal in case of excessive bleeding.

Nursing Care for Thromboembolic Disorders:

1.Observation and Monitoring:

1. **Pre- and Postpartum Assessment**:
    1. The woman should be closely observed for signs and symptoms of **venous thrombosis** (SVT or DVT), such as leg swelling, redness, and pain.
    2. **Pulmonary Embolism (PE)**: Signs like **dyspnea (difficulty breathing)**, **coughing**, and **chest pain** must be **reported immediately**, as they are signs of PE, which is a medical emergency.

2.Prevention:

1. **Avoid Crossing Legs**: Pregnant women should be instructed not to cross their legs, as this **impedes venous blood flow**.
2. **Proper Leg Elevation**: When elevating the legs, ensure there is no sharp flexion at the groin or pressure in the **popliteal space** (behind the knee), as these positions restrict venous flow.
3. **Venous Flow Promotion**:
    1. Measures to promote venous return should be maintained during and after delivery, as clotting factors remain elevated in the postpartum period for several weeks.

3.Postpartum Measures to Prevent Thrombus Formation:

1. **Early Ambulation**: Encourage early walking or **range-of-motion exercises** to improve circulation and reduce the risk of blood clot formation.
2. **Antiembolic Stockings**: These may be used, particularly for women with **varicose veins**, to support circulation and prevent venous stasis.

Summary:

- **Monitor for signs of thrombosis** and **PE**.
- **Prevent thrombus formation** by avoiding leg crossing, promoting proper leg positioning, and encouraging ambulation.
- **Use antiembolic stockings** when indicated (e.g., with varicose veins) to improve venous return.
- Preventative measures are critical, as the risk of thromboembolic disorders remains elevated postpartum due to high clotting factor levels.

Nursing Care for Thromboembolic Disorders (Continued):

1.Proper Use of Antiembolic Stockings:

1. **Education**: Teach the woman how to **properly put on antiembolic stockings** to avoid **rolling or kinking**, which can further impede blood flow and decrease their effectiveness.

2.Use of Stirrup Supports:

1. If stirrups are used during labor or **episiotomy repair**, they should be **padded** to prevent **pressure** on the **popliteal angle** (behind the knee), which can restrict venous return and contribute to thrombosis.

3.Anticoagulant Therapy at Home:

1. **Self-Administration of Anticoagulants**: Women who will be on **anticoagulant therapy** at home (e.g., heparin or warfarin) should be taught how to **administer the medication** to themselves properly.
2. **Signs of Excess Anticoagulation**: Educate the woman to recognize signs of **excessive anticoagulation**, which include:
    1. **Prolonged bleeding from minor injuries**
    2. **Bleeding gums**
    3. **Nosebleeds**
    4. **Unexplained bruising**

4- Prevention of Trauma: Advise the woman to use a **soft toothbrush** to avoid gum bleeding and **avoid minor trauma** that could cause **prolonged bleeding** or lead to a **large hematoma**.

5- Home Nursing Visits:

1. **Laboratory Monitoring**: Home nursing visits may be prescribed to assist with **blood draws for clotting studies** and to monitor the woman's condition while on anticoagulant therapy.
2. **Emotional Support**: Nurses can help the woman **cope with the emotional and practical challenges** of ongoing anticoagulant therapy.

Summary:

•**Teach proper application of antiembolic stockings** to prevent blood flow restriction.

•**Pad stirrups** during procedures to avoid pressure on the legs.

•**Self-administration of anticoagulants** should be taught along with signs of excess anticoagulation.

•**Home visits** can provide ongoing **monitoring** and **emotional support** for women undergoing anticoagulant therapy.

Puerperal Sepsis: Definition:

•**Puerperal Sepsis**: An infection or septicemia occurring after childbirth. It is the **fourth leading cause of maternal mortality**.

Risk Factors:

•**Tissue trauma during labor** (e.g., tears, episiotomy)

•**Open wound** of the placental insertion site

•**Surgical incisions**

•**Nipple cracks** during breastfeeding

•**Increased vaginal pH** after birth

•**Retained placenta/clots**, which block the lochial flow

Common Causes and Pathophysiology:

•**Endometritis**: Inflammation of the inner lining of the uterus, often causing fever.

•**Ascension of infection**: Infection can spread from localized areas (perineum, vagina, cervix) to the uterus, fallopian tubes, and peritoneum, potentially causing **peritonitis**, a life-threatening condition.

Concerns:

•Local infections may escalate and spread, becoming more serious (e.g., peritonitis).

•Blocked lochial flow increases infection risk due to retained placental tissue or blood clots.

Manifestations of Puerperal Sepsis (Postpartum Infection)

Postpartum Fever:

- **Definition**: A fever is defined as a temperature of **38°C (100.4°F)** or higher after the first 24 hours and lasting for at least **2 days** during the **first 10 days** postpartum.
- **Note**: Slight temperature elevations in the **first 24 hours** can be normal, often due to **dehydration**, and may not be associated with infection.
- **Important**: If a woman's temperature is elevated, the nurse should **assess for other signs of infection** regardless of the timing post-delivery.

Other Key Signs of Infection:

- **Increased Pulse Rate**: Often seen in conjunction with fever, especially when an infection is present.
- **Localized Symptoms**: Infections may be limited to a specific area (e.g., wound infections).
- **Systemic Symptoms**: Infections may spread throughout the body, presenting with more generalized symptoms (e.g., chills, malaise, increased heart rate, or low blood pressure).

Wound Assessments:

•**C-section or Episiotomy Wounds**: Nurses should assess surgical and perineal wounds using the **REEDA criteria**:

- **R**edness
- **E**dema (swelling)
- **E**cchymosis (bruising)
- **D**ischarge (any abnormal secretion)
- **A**pproximation (edges of the wound coming together properly)

•**Abnormal Findings**: Promptly report and document any abnormalities such as:

- **Fever**
- **Pain**
- **Foul odor**
- **Hardening or swelling** of the wound site

These manifestations should be closely monitored to detect early signs of infection and initiate appropriate treatment.

Safety Alert and Treatment for Puerperal Sepsis

- **Proper Hand Hygiene**:
  - The most **important method** to prevent the spread of infections is **proper hand hygiene**.
- **Use of Gloves**:
  - Gloves must be worn when coming into contact with **blood**, **body fluids**, or any other **potentially infectious materials** to minimize the risk of infection transmission.

Treatment Goals for Puerperal Sepsis:

1. **Limit the Spread of Infection**:
   1. Prevent infection from worsening or spreading to other areas, particularly the bloodstream and organs.
2. **Prevent Systemic Involvement**:
   1. The aim is to **prevent the infection from reaching the blood** or spreading to other organs like the uterus, fallopian tubes, or peritoneum.
3. **Eliminate the Infection**:
   1. Eradicate the infection through appropriate medical interventions, including **antibiotics**.

Medical Treatment:

- **Culture and Sensitivity Testing**:
  - A **culture and sensitivity** sample is taken from the suspected site of infection (e.g., uterus, perineum, or surgical wound).
  - This test identifies the **specific pathogen** causing the infection and helps determine which antibiotics will be most effective.
- **Antibiotics**:
  - **IV antibiotics** may be prescribed to treat the infection. The choice of antibiotics is based on the culture results.
- **Bed Rest**:
  - The woman may be placed on **bed rest** to reduce physical strain and allow for recovery while receiving treatment.

These steps aim to **control the infection** and prevent serious complications such as sepsis or peritonitis.

Nursing Care Objectives for Puerperal Sepsis

The primary nursing care goals are to **prevent infection**

Key Nursing Interventions:

1.Hygienic Measures:

1. **Promote Proper Hygiene**: Teach and practice hygiene measures to reduce the number of infectious organisms.
    1. **Hand Hygiene**: Proper hand washing before and after contact with the patient or any potentially infectious materials.
    2. **Perineal Care**: Educate the woman on proper **perineal hygiene** to avoid contamination or infection.

2.Promote Rest and Nutrition:

1. **Adequate Rest**: Ensure the woman gets enough **rest** to support her body's healing process.
2. **Nutrition**: Encourage **adequate nutrition**, including a balanced diet that supports immune function and healing.

3.Monitor for Signs of Infection:

1. **Observe the Woman**: Monitor for any signs of infection, including fever, changes in wound appearance, or symptoms of systemic illness (e.g., chills, increased heart rate).

4.Teach Post-Discharge Care:

1. **Signs of Infection**: Teach the woman the **signs of infection** she should watch for after discharge, such as fever, foul-smelling discharge, increased pain, or swelling.
2. **When to Seek Medical Help**: Instruct the woman to contact a healthcare provider if any of these signs develop.

5- Antibiotic Education:

1. **Full Course of Antibiotics**: Educate the woman about the importance of completing the full course of antibiotics, even if symptoms improve. Stopping antibiotics early can lead to antibiotic resistance or recurrence of the infection.

6- Perineal Pad Application:

1. **Proper Pad Use**: Teach the woman the correct technique for applying **perineal pads** (always wiping from **front to back**) to prevent contamination and reduce infection risk.

Summary of Nursing Care:

•Prevent infection through hygiene education (hand washing, perineal care).
•Promote rest, nutrition, and proper self-care to facilitate healing.
•Monitor for infection and educate the woman on signs to report after discharge.
•Ensure full adherence to prescribed antibiotics and proper perineal pad application.

These interventions are crucial in **preventing and managing puerperal sepsis**, ensuring the safety and recovery of postpartum women.

Additional Nursing Care for Postpartum Women

In addition to preventing infection, promoting healing, and ensuring proper nutrition, nurses should focus on further enhancing the recovery process for postpartum women. Here are key areas of nursing care:

Hand Hygiene and Self-Care:

•**Hand Hygiene**:

- **Teach the woman** to wash her hands **before and after performing self-care** that may involve contact with bodily secretions (e.g., perineal care, breastfeeding, or handling any post-delivery items).
- This helps reduce the risk of cross-contamination and infection.

Promoting Rest:

•**Facilitating Rest**:

- Nurses should **explore and support** ways for the woman to get adequate rest, such as arranging for help with newborn care, managing household tasks, or ensuring quiet, uninterrupted time for rest.
- **Rest is critical** for the body's recovery and immune function during the postpartum period. period.

Nutrition for Healing:

•**Importance of Nutrition**:

- Nutrition plays a central role in the body's ability to heal and fight infection.
- The nurse should **teach the woman** (and involve a dietitian, if necessary) about foods that will help support recovery:
  - **High-Protein Foods**: Necessary for tissue repair and immune function. Include:
    - **Meats**, **cheese**, **milk**, and **legumes**.
  - **Vitamin C-Rich Foods**: Important for immune support and wound healing. Include:
    - **Citrus fruits** (oranges, grapefruits), **strawberries**, **cantaloupe**.
  - **Iron-Rich Foods**: Essential for combating postpartum anemia and supporting oxygen delivery to tissues. Include:
    - **Meats**, **enriched cereals**, **dark green leafy vegetables** (e.g., spinach, kale), and **iron-fortified breads**.

Mastitis and Breastfeeding:

- **Mastitis**:
  - **Definition**: Mastitis is a **breast infection**, commonly occurring in the **first few weeks** after childbirth (typically 2–3 weeks postpartum).
  - **Causes**: It is often caused by **blocked milk ducts**, bacteria entering through cracked or sore nipples, or poor breastfeeding technique.
  - **Symptoms**:
    - Redness, pain, and swelling in the breast.
    - Fever and flu-like symptoms.
  - **Nursing Considerations**:
    - Encourage frequent breastfeeding to help clear milk ducts.
    - Teach proper **breastfeeding techniques** to prevent nipple damage.
    - Warm compresses and **gentle massage** can help relieve discomfort.
    - **Antibiotic treatment** may be required for bacterial mastitis.

Summary:

- **Hand hygiene** before and after self-care tasks is vital in preventing infection.
- **Adequate rest** should be prioritized to allow the body to heal and fight infection.
- **Nutrition**: Emphasize **protein**, **vitamin C**, and **iron** to support the body's immune response and repair process.

Mastitis and Breastfeeding

Definition:

•**Mastitis** is a **breast infection** that typically occurs **2 to 3 weeks after childbirth**.

Causes and Risk Factors:

•**Infection Pathway**: Mastitis occurs when **bacteria** (often from the skin or the infant's mouth) enter the **small cracks or fissures** in the **nipples or areolae**.

- These cracks may be **microscopic** and not easily visible to the naked eye.

•**Breast Engorgement**:

- **Engorged breasts** (overfull with milk) can increase the risk of mastitis if milk is not adequately emptied from the breast.

•**Inadequate Milk Emptying**:

- If the milk is not fully removed during breastfeeding or pumping, it can lead to **blocked milk ducts**, contributing to infection.

Clinical Features:

•**Unilateral**: Mastitis typically affects **only one breast**.

•**Symptoms**:

- **Pain, redness**, and **swelling** in the affected breast.
- **Fever** and flu-like symptoms (e.g., chills, body aches).
- **Warmth** in the area of the infection.
- The breast may feel **lumpy** or **hard** due to milk accumulation in the duct.

Treatment and Nursing Care:

1.Breastfeeding:

1. Encourage the woman to continue **breastfeeding** or **pumping** the affected breast to **drain the milk** and help resolve the blockage.
2. **Positioning**: Ensure the infant is **latched properly** to avoid further nipple damage.

2.Warm Compresses:

1. Apply **warm compresses** to the affected area before breastfeeding to help with milk flow and comfort.

3.Massage:

1. Gently **massage** the breast to help **clear blocked ducts**.

4.Antibiotics:

1. If the infection is bacterial, **oral antibiotics** are prescribed to treat the infection. It's important for the woman to **complete the full course** of antibiotics even if symptoms improve.

5.Pain Relief:

1. Over-the-counter **pain relievers** (e.g., acetaminophen or ibuprofen) can help manage pain and inflammation.

6.Monitor for Abscess:

1. In rare cases, if mastitis is left untreated or worsens, it can lead to the formation of an **abscess** (a pocket of pus) that may require drainage.

Prevention Tips:

- **Proper Latch**: Ensure the infant has a **proper latch** during breastfeeding to avoid nipple trauma.
- **Frequent Feeding**: Encourage **frequent breastfeeding** or **pumping** to ensure that milk is emptied effectively.
- **Breast Care**: Keep nipples clean and dry, and treat any **nipple cracks or soreness** promptly.
- **Rest and Hydration**: Adequate **rest** and **hydration** support the immune system in fighting infections.

By recognizing the signs early and following proper breastfeeding techniques, mastitis can typically be treated successfully without complications. If symptoms persist or worsen, prompt medical intervention is necessary.

FIG. 10.2 Mastitis typically occurs several weeks after birth in the woman who is breastfeeding. Bacteria usually enter the breast through small cracks in the nipples. Breast engorgement and milk stasis increase the risk for mastitis. (From Swartz MH: *Textbook of physical diagnosis: history and examination*, ed 6, Philadelphia, 2009, Saunders.)

Signs and Symptoms of Mastitis

Mastitis is an infection of the breast that commonly affects postpartum women. The signs and symptoms include:

1.Localized Symptoms:

1. **Redness** and **heat** in the affected area of the breast.
2. **Tenderness** and **pain** in the breast, often worsening with touch.
3. **Edema** (swelling) and a feeling of **heaviness** in the affected breast.
4. **Purulent (pus-like) drainage** from the nipple, which may or may not be present.

2.Systemic Symptoms:

1. **Fever** and **chills**, indicating a systemic response to infection.
2. Other flu-like symptoms, such as **fatigue** and **malaise**.

Progression of Untreated Mastitis:

•If left untreated, the infection can become more severe:

- The infected area may become **encapsulated (walled off)**, forming an **abscess**.
- The infection typically affects tissue **outside the milk ducts**.
- The milk itself is **not contaminated** by the infection, meaning breastfeeding can usually continue, but it's still important to manage the infection properly.

Treatment for Mastitis

1.Antibiotics:

1. **Oral antibiotics** are prescribed to treat the bacterial infection.
2. It's essential that the woman **completes the entire course** of antibiotics, even if symptoms improve before the treatment is finished.

2.Continued Milk Removal:

1. **Breastfeeding or pumping** the affected breast is crucial for removing milk and relieving **milk stasis**, which can worsen the infection.
2. Encourage the woman to continue breastfeeding, as this helps keep the ducts open and reduces the risk of abscess formation.

3.Analgesics:

1. Mild **analgesics** (such as **acetaminophen** or **ibuprofen**) can help manage **pain** and **inflammation**, making the woman more comfortable during recovery.

4.Incision and Drainage:

1. If an **abscess** forms, the woman may need **incision and drainage** to remove pus and promote healing.
2. **IV antibiotics** may be required if the infection is severe or if an abscess forms.

5.Breastfeeding During Mastitis:

1. **Continue breastfeeding**: Most women can **continue breastfeeding** while being treated for mastitis, as the infection does not affect the milk itself.
2. **If breastfeeding is not possible** for any reason, the woman should **pump her breasts** regularly to prevent engorgement and maintain milk supply.
3. **Avoid weaning** during mastitis, as **weaning leads to engorgement**, milk stasis, and worsening of the condition. or further complications.

Summary of Key Points:

- **Signs**: Redness, heat, tenderness, edema, and sometimes pus drainage. Systemic symptoms include fever and chills.
- **Treatment**: Antibiotics, continued milk removal (via breastfeeding or pumping), and analgesics for comfort.
- **Abscess**: If an abscess forms, it may require incision and drainage, along with IV antibiotics.
- **Breastfeeding**: The mother can usually continue breastfeeding, but should avoid weaning, which can worsen mastitis.

By properly managing mastitis and continuing to breastfeed (or pump), most women recover without further complications. However, prompt treatment and attention are essential to prevent abscess formation

Nursing Care for Mastitis

The primary goals of nursing care for mastitis are to **relieve pain**, **maintain lactation**, and **prevent complications**. The following interventions and teaching points are essential in supporting the mother through treatment and recovery:

1. Teach Proper Breastfeeding Techniques:

•**Preventing Mastitis**:

- Proper **breastfeeding techniques** are essential to **reduce the risk of mastitis**. These include:
- Ensuring the baby is **latched on correctly** to prevent nipple damage or trauma.
- **Frequent breastfeeding** to ensure regular milk drainage and prevent engorgement.
- **Proper positioning** during breastfeeding to ensure complete emptying of the breast.

2. Pain Relief:

•**Comfort Measures**:

- **Pain relief** is a key focus in managing mastitis. Methods to alleviate pain and promote comfort include:
- **Heat application** to the affected breast to promote **blood flow**, comfort, and **milk drainage**.
- **Moist heat** can be applied using **chemical heat packs** or by creating an inexpensive warm compress:
- **Plastic bag method**: Place a **warm, wet cloth** in a **plastic bag** and apply it to the breast.
- **Warm shower**: Taking a **warm shower** before nursing can help relieve pain, provide **cleanliness**, and stimulate milk flow.

3. Continued Lactation:

•**Maintaining Milk Flow**:

- **Breastfeeding or pumping** is essential to **maintain lactation** and **empty the breast**, which helps reduce milk stasis and relieves the blocked ducts.
  - Encourage the woman to **continue breastfeeding**, even if it is uncomfortable, as this is the most effective way to **clear blocked ducts**.
  - If breastfeeding is too painful, the mother should **pump** the affected breast regularly to ensure the milk is fully expressed.

•**Proper Drainage**:

- Encourage the woman to **position the baby** in a way that allows for **optimal drainage** of the affected area (e.g., pointing the baby's chin toward the blocked duct).

4. Hydration and Rest:

•**Encourage Hydration**:

- Ensure the mother drinks plenty of fluids to stay **hydrated**, which aids in healing and milk production.

•**Adequate Rest**:

- Advise the mother to **rest as much as possible** to support her body’s immune response and recovery from infection.

5. Monitor for Complications:

•**Abscess Formation**:

- If the infection worsens or does not improve, watch for signs of **abscess formation** (such as increased pain, swelling, or fluctuation in the affected area).
- If an abscess develops, it may require **incision and drainage** along with **IV antibiotics**.

6. Encourage Continued Breastfeeding:

•**Do Not Wean**:

- It's crucial that the mother **does not stop breastfeeding** during mastitis. Weaning can lead to **engorgement** and **milk stasis**, which can worsen the condition.
- If the woman cannot breastfeed for any reason, she should **pump her breasts** regularly to prevent complications and maintain milk supply.

Summary of Nursing Care for Mastitis:

1.Breastfeeding Education: Teach the mother proper latching and positioning techniques to reduce the risk of mastitis.

2.Pain Relief: Use heat (moist packs, warm shower) for comfort and promote milk drainage.

3.Maintain Lactation: Encourage continued breastfeeding or pumping to relieve engorgement and ensure complete breast emptying.

4.Monitor for Abscess: Watch for signs of abscess formation and intervene if necessary.

5.Hydration and Rest: Promote adequate rest and hydration to support recovery.

By implementing these interventions, the nurse can help manage mastitis effectively, relieve symptoms, and prevent complications while ensuring that the mother can continue to breastfeed.

Patient Teaching for Mastitis:

1. **Hand Hygiene**: Wash hands thoroughly before breastfeeding.
2. **Breast Cleanliness**: Change breast pads frequently to maintain cleanliness.
3. **Expose Nipples to Air**: Air-dry nipples when possible to prevent further irritation.
4. **Proper Latch and Removal**: Ensure the newborn has a proper latch and remove the baby correctly to avoid nipple trauma.
5. **Encourage Milk Removal**: Breastfeed frequently and encourage the newborn to empty the breast to reduce the risk of bacterial growth.
6. **Engorgement Management**: Feed from the uninfected side first, massage tender areas during nursing, and use ice or heat for comfort.
7. **Monitor for Redness and Fever**: Report signs of infection progression (redness, fever) to the healthcare provider.
8. **Comfort Measures**: Apply ice packs or moist heat for relief of pain and swelling.

By following these guidelines, the mother can help manage mastitis more effectively, maintain a healthy breastfeeding routine, and prevent complications such as abscess formation.

Additional Nursing Measures:

1. **Regularly Empty Both Breasts**: Encourage frequent breastfeeding or pumping to reduce milk stasis and prevent abscess formation.
2. **Massage and Pumping**: Recommend gentle **massage** of the affected area and use of a **breast pump** if necessary.
3. **Nurse on the Unaffected Side First**: Start nursing on the unaffected breast to trigger let-down and relieve pain.
4. **Hydration**: Encourage adequate **fluid intake** to support healing and milk production.
5. **Supportive Bra**: Advise wearing a **supportive, well-fitting bra** to support the painful breast without causing tightness.
6. **Emotional Support**: Provide reassurance and **emotional support**, emphasizing that breastfeeding can continue and the infection is treatable.

By incorporating these measures, the nurse can help the mother manage mastitis more effectively, minimize discomfort, and continue breastfeeding while promoting healing.

Postpartum Mood Disorders

1.Postpartum Blues (Baby Blues):

1. Common, affecting **75% of women** after childbirth.
2. Symptoms include mood swings and feelings of being let down but generally enjoy life and motherhood.
3. Self-limiting, usually resolving by **day 10**.
4. Caused by **rapid hormonal changes** (drop in estrogen and progesterone).

2.Postpartum Depression (PPD):

1. A more **serious mood disorder** than baby blues.
2. Linked to **increased monoamine oxidase-A (MAO-A)** levels after childbirth.
3. Symptoms include **persistent sadness**, **loss of interest**, and difficulty coping.
4. Requires treatment, such as therapy or medication.

3.Postpartum Psychosis:

1. A **severe disorder** involving a **break from reality**.
2. Symptoms include **hallucinations** or **delusions** and requires **immediate medical attention**.

4.Nutritional Supplements:

1. **Tryptophan**, **tyrosine**, and **blueberry juice** may help counteract increased MAO-A levels, potentially preventing postpartum depression.

Postpartum Depression Overview

Postpartum depression (PPD) encompasses three types of depressive disorders after childbirth:

1. **Adjustment Disorder (Baby Blues)**:
    1. A **mild condition** with mood swings and feelings of being overwhelmed, typically resolving within **10 days**.
2. **Postpartum Mood Disorders**:
    1. Includes more persistent mood changes but does not reach the level of clinical depression.
3. **Postpartum Depression (PPD)**:
    1. A **depressive illness** that typically manifests within **2 to 4 weeks** after delivery.
    2. It can **interfere with bonding** and the mother's ability to respond to the baby's cues.
    3. **Risk factors** include:
        1. Inadequate social support
        2. Poor relationship with a partner
        3. Life and childcare stress
        4. Low self-esteem
        5. Unplanned pregnancy
    4. **Nurses can promote mental health** by supporting positive behaviors and offering encouragement.

PPD is more serious than the baby blues and requires appropriate treatment and support to ensure maternal well-being and effective mother-infant bonding.

Signs and Symptoms of Postpartum Depression (PPD)

Postpartum depression (PPD) affects the woman's mental health and can strain family dynamics. Key symptoms include:

1.Emotional and Psychological Symptoms:

1. **Lack of enjoyment in life**.
2. **Disinterest in others** and loss of normal relationships.
3. **Intense feelings of inadequacy**, **unworthiness**, **guilt**, and **inability to cope**.
4. **Loss of mental concentration** and difficulty making decisions.

2.Physical Symptoms:

1. **Disturbed sleep** and **appetite** changes.
2. **Constant fatigue** and a general feeling of **ill health**.

Impact on Family Dynamics:

•Postpartum depression can **strain the coping mechanisms** of the entire family, as everyone adjusts to the birth of a child.

•The woman may **withdraw socially**, causing **communication breakdowns** and **distancing herself** from her support system.

Nursing Considerations:

•Nurses should **observe for signs and symptoms** of PPD during clinic visits, especially since those close to the woman may first notice her depression.

•**Support and intervention** are crucial to prevent further isolation and to assist the woman in seeking appropriate treatment.

Treatment for Postpartum Depression (PPD)

1.Psychotherapy and Antidepressants:

1. **Combination of psychotherapy** and **antidepressants** is often recommended.
2. Treatment may take place in **outpatient** or **inpatient settings**, depending on the severity.

2.Screening and Observation:

1. **Screening tools** are available to assess the severity of depression.
2. Nurses should provide **support** and carefully **observe the woman's behavior** for any signs of **self-harm**.

3.Complementary and Alternative Therapies:

1. **Light therapy (phototherapy)** and **exercise** are **alternative treatments** that may help manage symptoms of postpartum depression.

4.Hormonal Influence:

1. Fluctuating **hormone levels** postpartum may contribute to mood changes, similar to hormonal effects seen during menstruation.

5.Follow-up Care:

1. Nurses should **refer** women to **community mental health support services** to ensure continued care and **ongoing support**.

Postpartum Psychosis Overview

•**Definition**:

Postpartum psychosis is a severe mental health condition where the woman has an impaired sense of reality. It is much less common than **postpartum depression**.

•**Associated Psychiatric Disorders**:

- **Bipolar Disorder**: Characterized by alternating episodes of **mania** (hyperactivity, euphoria, excitement, invulnerability) and **depression**.
- **Major Depression**: Features deep feelings of **worthlessness** and **guilt**, as well as **sleep** and **appetite disturbances**, sometimes including **delusions** (e.g., believing the baby is dead).

•**Risks**:

- Postpartum psychosis can be **fatal** for both the mother and infant.
- During **manic episodes**, the mother may engage in **poor judgment**, placing both herself and the baby at risk.
- **Suicide** and **infanticide** are possible, especially during **depressive episodes**.

•**Treatment**:

- **Inpatient psychiatric care** may be necessary, especially in severe cases.
- **Social workers** may refer the woman for **counseling** or other support services.

Key Points:

Postpartum psychosis requires immediate attention and intervention, as it poses significant risks to both the mother and infant. Prompt **psychiatric treatment** is crucial for safety and recovery.

Get Ready for the NCLEX® Examination! Key Points •

The nurse must be aware of women who are at higher risk for postpartum hemorrhage and assess them more often.

• A constant small trickle of blood can result in significant blood loss, as can a larger one-time hemorrhage.

• Pain that is persistent and more severe than expected is characteristic of a hematoma in the reproductive tract.

• It is essential to identify and limit a local infection before it spreads to the blood or other organs.

• The nurse should teach new mothers about normal postpartum changes and indications of problems that should be reported.

• Early ambulation can prevent thrombosis formation.

• Types of obstetric shock include cardiogenic (from anemia or cardiac disorders), hypovolemic (from hemorrhage), anaphylactic (from a drug response), and septic (caused by puerperal infection).

• Careful listening and observation can help the nurse identify a new mother who is suffering from postpartum depression.

• Postpartum psychoses are serious disorders that are potentially life-threatening to the woman and others, including her infant.

Review Questions for the NCLEX® Examination

1. The earliest finding in postpartum hypovolemic shock is usually:
1. low blood pressure.
2. rapid pulse rate.
3. pale skin color.
4. soft uterus.

2. A bleeding laceration is typically manifested by:
1. a soft uterus that is difficult to locate.
2. low pulse rate and blood pressure.
3. bright red bleeding and a firm uterus.
4. profuse dark red bleeding and large clots.

3. During the postpartum period the white blood cell (leukocyte) count is normally: 1. higher than normal.
2. lower than normal.
3. unchanged.
4. unimportant.

4. A postpartum mother who is breastfeeding has developed mastitis. She states that she does not think it is good for her infant to drink milk from her infected breast. The best response from the nurse would be to:

1. instruct her to nurse the infant from only the unaffected breast until the infection clears up.
2. suggest that she discontinue breastfeeding and start the infant on formula.
3. encourage breastfeeding the infant to prevent engorgement.
4. apply a tight breast binder to the infected breast until the infection subsides.

5. A woman delivered her newborn several hours previously, and her uterus remains soft and boggy. Which of the following medications should the nurse anticipate that the health care provider would prescribe to increase uterine tone and firm the uterus? (Select all that apply.)

1. Methylergonovine (Methergine)
2. Carboprost (Hemabate)
3. Magnesium sulfate
4. Oxytoxin (Pitocin)

6. The nurse should be alert to subinvolution of the uterus as a cause of late postpartum bleeding. Signs to report and document include (select all that apply): a. fundal height higher than expected for date
b. persistence of lochia rubra
c. low blood pressure
d. persistence of lochia alba
1. c and d
2. a and d
3. a and b
4. b and c

thanks