Chapter 34, Obstetrics and Neonatal Care

1. Introduction to Obstetrics and Neonatal Care

- This chapter focuses on **obstetrics and neonatal care**.
- It covers the anatomy and physiology of the female reproductive system during pregnancy.
- You will learn emergency treatment for childbirth.
- This includes the stages of labor and normal delivery.
- Complications of pregnancy and neonatal evaluations are also covered.

2. Anatomy and Physiology of the Female Reproductive System in Pregnancy

- The female reproductive system includes several key organs.
- The ovaries are two glands containing thousands of follicles.
- Each follicle contains an egg.
- Ovulation happens about two weeks before menstruation.
- The fertilized egg implants in the endometrium.

Organ	Description	Function During Pregnancy
Ovaries	Two glands, one on each side of the uterus.	Contain thousands of follicles, each with an egg. Ovulation occurs.
Fallopian Tubes	Extend laterally from the uterus, one per ovary.	Fertilization usually occurs here.
Uterus	A muscular organ that encloses and protects the fetus.	Produces contractions during labor, pushes fetus through birth canal.
Birth Canal	Made up of the vagina and the lower third of the uterus (cervix).	Passageway for the newborn to the outside world.

Vagina	Outermost cavity of the female reproductive system, lower part of birth canal.	Completes the passageway for the newborn.
Perineum	The area between the vagina and the anus.	N/A
Breasts	Produce breast milk carried through ducts to the nipple.	Provide nourishment to the newborn.

3. The Placenta, Umbilical Cord, and Amniotic Sac

- The **placenta** is a disc-shaped structure.
- It is attached to the uterine wall.
- The placenta provides nourishment to the fetus.
- It keeps the woman's and fetus's circulation separate.
- Substances can pass between them.
- Anything the woman ingests can affect the fetus.
- The **umbilical cord** connects the woman and fetus through the placenta.
- The umbilical vein carries oxygenated blood to the fetus's heart.
- The umbilical artery carries deoxygenated blood to the placenta.
- The umbilical cord is the fetus's lifeline.
- The fetus develops inside the **amniotic sac**.
- This sac is fluid-filled and bag-like.
- It contains about 500 to 1,000 milliliters of amniotic fluid.
- The fluid isolates and protects the fetus.
- The amniotic fluid is released in a gush when the sac ruptures.
- This usually happens at the start of labor.

4. Normal Physiological Changes During Pregnancy

- Four major body systems change during pregnancy.
- These are the respiratory, cardiovascular, musculoskeletal, and reproductive systems.
- Hormone levels increase to support fetal development.

- Hormones prepare the body for childbirth.

Body System	Changes During Pregnancy
Respiratory	Increased respiratory rates. Decreased minute volumes.
Cardiovascular	Overall blood volume increases up to 50%. Heart rate increases up to 20%. Cardiac output significantly increased. Speed of clotting increases.
Musculoskeletal	Hormones make joints looser or less stable in the third trimester. Center of gravity changes, increasing fall risk.
Reproductive	Uterus is displaced, increasing risk of direct fetal injury from trauma. Rapid uterine growth in second trimester. Uterus pushes up on the diaphragm.
Gastrointestinal	Increased risk for gastroesophageal reflux, nausea, vomiting, and aspiration.

5. Complications of Pregnancy

- Most pregnant women are healthy, but complications can occur.
- **Diabetes** can develop during the second half of pregnancy.
- This is called **gestational diabetes**.
- It usually resolves after delivery.
- **Hypertensive disorders** include gestational hypertension.
- Gestational hypertension is high blood pressure without systemic effects.
- Systolic pressure is over 140, diastolic over 90.
- Severe gestational hypertension has systolic over 160, diastolic over 110.
- **Preeclampsia** can develop after 20 weeks.
- Signs include severe hypertension and persistent headache.
- Visual abnormalities like seeing spots can occur.
- Swelling in the hands and feet is common.
- Upper abdominal or gastric pain may be present.
- Anxiety or altered mental status can happen.

- **Eclampsia** is characterized by seizures due to hypertension.
- To treat seizures, lay the patient on her side.
- Maintain her airway and give oxygen.
- Suction if vomiting occurs.
- Provide rapid transport and call for ALS.
- Transporting on the left side prevents **supine hypotensive syndrome**.
- This syndrome is caused by uterine compression of the aorta and vena cava.
- **Bleeding** can indicate various issues.
- Sudden severe abdominal pain and vaginal bleeding in the first trimester might be an **ectopic pregnancy**.
- An ectopic pregnancy develops outside the uterus, often in the fallopian tube.
- Hemorrhage before labor can be serious.
- In early pregnancy, it may be a **spontaneous abortion** (miscarriage).
- In later pregnancy, it might be **abruptio placentae** or **placenta previa**.
- Abruptio placentae is premature placental separation from the uterine wall.
- Hypertension or trauma often cause it.
- Placenta previa is when the placenta covers the uterus opening.
- Any vaginal bleeding in pregnancy is serious.
- Treat for shock if signs are present.
- Place a sterile pad over the vagina; do not insert anything.
- An **abortion** can be spontaneous or induced.
- Spontaneous abortion is pregnancy loss before 20 weeks without intervention.
- Induced abortion is elective termination before viability.
- Serious complications are bleeding and infection.
- If a woman is in shock, treat and transport promptly.
- Bring any passed tissue to the hospital.
- Never pull tissue from the vagina.
- **Abuse** during pregnancy is common.
- It increases the chance of spontaneous abortion and premature delivery.
- Low birth weight is also more likely.
- The woman risks bleeding, infection, and uterine rupture.
- Pay attention to signs of abuse.

- Abused patients may not be honest about injuries.
- Talk to the patient privately away from a potential abuser.
- **Substance abuse** affects the fetus.
- Effects include low birth weight and prematurity.
- Severe respiratory distress or death can occur.
- **Fetal alcohol syndrome** affects infants of women who abused alcohol.
- Be cautious when dealing with addicted patients.
- Clues include drug paraphernalia or alcohol bottles.
- Statements from family or the patient can indicate addiction.
- The newborn may need immediate resuscitation.

6. Special Considerations for Trauma and Pregnancy

- Trauma involving a pregnant woman means two patients: the woman and fetus.
- Pregnant women have an increased fall risk.
- Hormonal changes loosen joints.
- Increased uterine weight affects balance.

Risk/Consideration	Details	Assessment Points
Increased risk of falling	Hormonal changes loosen joints; increased uterine weight affects balance.	Assess for signs of falls and related injuries.
Blood volume changes	Increased total blood volume and heart rate. Can lose significant blood before shock signs appear.	Be alert for subtle signs of shock.
Fetal distress before shock	Fetus may be in trouble before maternal shock signs.	Assess fetal movement and report changes.

Vulnerability of uterus	Uterus vulnerable to penetrating trauma and blood injuries. Trauma can be life-threatening due to rich blood supply.	Suspect uterine injury with blunt or penetrating abdominal trauma.
Abruptio placentae risk	Trauma is a leading cause. Especially with blunt trauma to the abdomen.	Suspect with blunt abdominal trauma, vaginal bleeding, and severe abdominal pain.
Seatbelt injuries	Improper positioning can injure mother and fetus.	Carefully assess abdomen and chest for seatbelt marks, bruising, or trauma.
Cardiac arrest in pregnancy	Focus on CPR and transport. Compressions may be higher on the sternum in late pregnancy.	Perform CPR according to protocols; adjust hand placement in late pregnancy.
Assessment and Management	Focus on assessing and managing the woman. Suspect shock based on mechanism. Be prepared for vomiting.	Maintain open airway, anticipate vomiting, administer high-flow oxygen, ensure adequate ventilation, assess circulation, control external bleeding.
Transport considerations	Transport on her left side. Call for ALS early. Transport to specialty center if available.	Ensure proper patient positioning for transport. Request additional resources as needed.
Gestational age determination	Helps determine fetus size and uterus position.	Attempt to determine gestational age during history taking.

7. Cultural and Social Considerations in Pregnant Patient Care

- **Cultural sensitivity** is important when assessing a pregnant patient.
- Cultural values can affect self-care choices during pregnancy.

- They can also influence birth process plans.
- Some cultures may not allow male healthcare providers to examine female patients.
- Respect these differences and honor patient requests.
- The United States has a high **teenage pregnancy** rate.
- Pregnant teenagers may not know or may deny their pregnancy.
- Remember pregnancy is a possibility when assessing female teenagers.
- Respect the teenager's privacy and need for independence.

8. Patient Assessment in Childbirth Emergencies

- Childbirth can become an emergency.
- **Scene size-up** includes standard precautions.
- Standard precautions include gloves, face protection, and eye protection.
- A gown should be used if time permits.
- Consider calling for additional resources.
- Determine the mechanism of injury or nature of illness.
- Avoid tunnel vision during a call.
- **Primary assessment** starts with a general impression.
- Determine if delivery is imminent.
- Address other life threats.
- Perform a rapid exam.
- Assess **airway and breathing**.
- In uncomplicated births, these are usually not an issue.
- Trauma or medical conditions can cause life threats.
- Provide airway management and high-flow oxygen if needed.
- Assess **circulation**.
- Blood loss is expected after delivery, but not significant bleeding.
- Quickly assess for life-threatening bleeding.
- Begin treating immediately for shock signs.
- Control bleeding, give oxygen, and keep the patient warm.
- The **transport decision** is opposite of load and go if delivery is imminent.
- If delivery is intimate, prepare to deliver at the scene.
- The ideal place is the ambulance or the woman's home.

- The area should be warm, private, and have room to move.
- If delivery is not intimate, transport the patient.
- Perform the rest of the assessment en route.
- Transport women in the second and third trimesters on their left side.
- Rapidly transport patients with significant bleeding, pain, or hypertension.
- Transport if they are seizing or have altered mental status.
- **History taking** includes a thorough obstetric history.
- Ask for her expected due date.
- Inquire about any complications.
- Ask if she has received prenatal care.
- Determine if a complicated delivery is expected.
- Get the patient's complete medical history.
- Obtain a SAMPLE history.
- Ask about prenatal care specifically.
- Identify complications during pregnancy.
- Determine the due date, fetal movement, and contraction frequency.
- Get a history of previous pregnancies and complications.
- Determine the possibility of multiple births.
- Ask about drug or medication use.
- If her water has broken, ask about the fluid color.
- Green fluid may indicate meconium.
- Meconium is fecal stool.
- Meconium can indicate newborn distress.
- Aspiration of meconium during delivery is possible.
- **Secondary assessment** includes a physical examination.
- If the patient is in labor, focus on contractions and possible delivery.
- Check for crowning if you suspect imminent delivery.
- Do not visually inspect the vagina if delivery is not imminent.
- Obtain a complete set of vital signs and pulse oximetry.
- Be alert for tachycardia, hypo- or hypertension.
- Hypertension, even mild, can mean a serious problem.
- **Reassessment** involves repeating the primary assessment.
- Focus on ABCs and vaginal bleeding, especially after delivery.

- Obtain another set of vitals and compare them.
- Recheck interventions and treatment effectiveness.

9. Communication and Documentation in Childbirth Emergencies

- Notify the receiving hospital if delivery is imminent.
- Provide an update on the woman's and newborn's status after delivery.
- Include the patient's pregnancy status in your radio report.
- This is for pregnant patients with unrelated complaints.
- If delivery happens in the field, you will have two patients.
- Complete two patient care reports.

10. Stages of Labor

- There are three stages of labor.
- The first stage is **dilation of the cervix**.
- The second stage is **delivery of the fetus**.
- The third stage is **delivery of the placenta**.
- The first stage begins with contractions.
- It ends when the cervix is fully dilated.
- The first stage is usually the longest.
- It averages 16 hours with the first delivery.
- Other signs of labor include bloody show.
- Uterine rupture of the amniotic sac can occur.
- In true labor, contractions increase in frequency and intensity.
- Labor is longer in a primigravida (first pregnancy).
- It is shorter in a multigravida (multiple pregnancies).
- A woman may experience **false labor** (Braxton Hicks contractions).
- The table on the slide distinguishes true from false labor.
- Some women experience **premature rupture of membranes**.
- The amniotic sac ruptures too early.
- The fetus may not be developed.
- The patient may or may not go into labor.
- Provide supportive care and transport.

- Toward the end of the third trimester, the fetus's head descends into the pelvis.
- This positions the fetus for delivery.
- This descent into the pelvis is called **lightening**.
- The sensation may accompany the descent.
- The second stage begins when the fetus enters the birth canal.
- It ends with the newborn's delivery.
- Decide whether to deliver at the scene or transport.
- Uterine contractions are usually closer and last longer.
- The perineum will bulge significantly.
- The fetus's head may appear at the vaginal opening.
- This is called **crouching**.
- The third stage begins after the newborn's birth.
- It ends with the placenta's delivery.
- The placenta must completely separate from the uterine wall.
- This can take up to 30 minutes.

11. Normal Delivery Management

- Consider scene delivery when it is intimate.
- This means it will happen within minutes.
- Prepare for delivery if reaching the hospital is impossible.
- Natural disaster or weather can make transport impossible.
- To determine imminence, ask specific questions.
- Ask about pregnancy duration and due date.
- Ask if it's her first pregnancy.
- Inquire about contractions: frequency and duration.
- Ask about spotting or bleeding.
- Ask if her water has broken.
- Ask if she feels the need for a bowel movement or to push.
- Ask about previous C-sections or pregnancy problems.
- Ask about drug, alcohol, or medication use.
- Determine the possibility of multiple deliveries.
- Ask if the physician expects complications.

- If the patient feels the need to push or move her bowels, prepare for delivery.
- Visually inspect the vagina for crowning.
- Do not touch the vaginal area until delivery is imminent.
- Once labor starts, it cannot be stopped.
- Never hold the patient's legs together.
- Do not let her go to the restroom.
- Reassure her the bowel movement sensation is normal.
- This sensation means she is about to deliver.
- You are only assisting the woman with delivery.
- Help guide and support the baby as it is born.
- Your vehicle should have a sterile OB kit.
- Position the patient by removing or pushing up clothing.
- Pants and undergarments should be removed.
- Preserve her privacy as much as possible.
- Place her on a firm surface padded with blankets or towels.
- Elevate her hips 2 to 4 inches with a pillow or blanket.
- Support her head, neck, and upper back.
- Have her keep legs and hips flexed with feet flat.
- Her knees should be spread apart.
- When preparing in the field, put on a face shield and gown.
- Place towels or sheets on the floor to soak up fluids.
- Open the OB kit carefully to maintain sterility.
- Use sterile sheets from the kit to make a delivery field.
- Your partner should be at the patient's head to comfort her.
- Administer oxygen if the patient allows.
- Nausea is common during delivery.
- Some patients will vomit.
- Continually check for crowning.
- Some patients have precipitous labor and birth (very fast).
- Position yourself to see the perineal area.
- Time the patient's contractions.
- Remind her to take quick, short breaths during contractions.
- She should not strain between contractions.

- Encourage her to rest and breathe deeply through her mouth.
- Follow the steps in skill drill 34-1 to deliver the newborn.
- When delivering the head, observe it exiting the vagina.
- Provide support as it emerges.
- Place your sterile gloved hand over the head's bony parts.
- Control the delivery of the head.
- Continue to support the head as it rotates.
- Do not poke your fingers into the newborn's eyes or fontanels.
- An **unruptured amniotic sac** should be noted.
- Usually, it ruptures at the start of labor.
- If not ruptured by crowning, it appears as a fluid-filled sac.
- The sac will suffocate the fetus if not removed.
- Puncture the sac with a clamp or tear it.
- Twisting it between your fingers can tear it.
- Puncture away from the fetus's head or face.
- Only do this procedure when the head is crowning.
- Clear the newborn's mouth and nose with a bulb syringe if required.
- Wipe the mouth and nose with gauze.
- Check for the **umbilical cord around the neck** (nuchal cord).
- Feel for it with one finger as soon as the head delivers.
- Usually, you can gently slip the cord over the head.
- If not, you must cut it.
- When delivering the body, the head is the largest part.
- Once the head is born, the body usually delivers easily.
- Support the head and upper body as the shoulders deliver.
- Do not pull the fetus from the birth canal.
- The newborn will be slippery.
- They may be covered with **vernix caseosa**, a white cheesy substance.

12. Post-Delivery Care and Placenta Delivery

- For post-delivery care, if the mother is able, hand the newborn to her.
- Place the newborn on her abdomen for skin-to-skin contact.

- Dry off the newborn.
- Wrap him or her in a warm blanket or towel.
- Ensure the top of the head is covered.
- Keep the newborn's neck in a neutral position.
- Wipe the newborn's mouth with sterile gauze as needed.
- Clamp and cut the umbilical cord approximately 60 seconds after birth.
- Obtain the first minute Apgar score.
- The **placenta delivers itself** usually within minutes after birth.
- It can take as long as 30 minutes.
- After placenta delivery and before transport, place a sterile pad over the vagina.
- Straighten the woman's legs.
- Gently massage the woman's abdomen with a firm, circular motion.
- This helps slow bleeding.
- Place one hand cupped over the fundus and the other above the pubic bone.
- Record the time of birth in your report.
- Emergency situations include if more than 30 minutes pass without placenta delivery.
- Excessive bleeding (more than 500 ml) before placenta delivery is an emergency.
- Significant bleeding after placenta delivery is also an emergency.
- If any of these occur, transport the woman and newborn promptly.

13. Neonatal Assessment and Resuscitation

- The first minute after birth is the **golden minute**.
- Perform initial steps of newborn care during this minute.
- These include airway positioning and suctioning if needed.
- Dry and warm the patient.
- Provide tactile stimulation.
- Normally, a newborn breathes within 30 seconds.
- The heart rate should be 100 beats per minute or higher.
- Many newborns need stimulation to breathe and circulate blood.
- Position the airway in the normal or sniffing position.

- Suction the mouth and then the nose if necessary.
- Vigorously dry the head, body, and back.
- Rub the newborn's back.
- Gently flick or slap the soles of the feet.
- This is tactile stimulation.
- If good tone and ventilation signs are absent after 30 seconds, use positive pressure ventilations.
- Use a mask for ventilations.
- The table shows newborn resuscitation steps.
- For additional resuscitation, observe respiration, skin color, and movement.
- Evaluate heart rate by palpating the umbilical cord base or brachial artery.
- Listen to the chest with a stethoscope.
- Heart rate is the most important measure for further resuscitation.
- If chest compressions are needed, use the hand circling technique for two people.
- Perform bag valve mask ventilation after every third compression.
- Use a compression to ventilation ratio of 3 to 1.
- Hands-on CPR is not as effective as ventilation with CPR.
- The figure shows chest compressions using the hand circling technique.
- If you see meconium and the newborn is not breathing, quickly suction.
- Suction the mouth then nose after delivery.
- Do this before providing rescue ventilations.
- The **Apgar score** assesses a newborn's status.
- It is a standard scoring system.
- A number (0, 1, or 2) is assigned to five areas.

Area of Activity	**Score 0**	**Score 1**	**Score 2**
Appearance	Blue/pale body	Pink body, blue extremities	Pink body and extremities
Pulse	Absent	Below 100 bpm	100 bpm or higher

Grimace (Irritability)	No response	Grimace/weak cry when stimulated	Cries, pulls away, coughs
Activity (Muscle Tone)	Limp	Some flexion of extremities	Active movement
Respirations	Absent	Slow, irregular, weak cry	Strong cry, good breathing

- The five areas are appearance, pulse, grimace, activity, and respirations.
- The total of the five numbers is the Apgar score.
- Calculate the Apgar score at 1 minute and 5 minutes after birth.
- The highest possible score is 10.
- The table shows how to calculate the Apgar score.
- Steps for assessing a newborn: quickly calculate the Apgar score for a baseline.
- Stimulation should increase the respiration rate.
- If not, begin bag valve mask ventilations.
- If breathing well, check the pulse rate.
- Feel the brachial pulse or umbilical cord base.
- Auscultate the chest with a stethoscope.
- The pulse rate should be at least 100 bpm.
- If not, begin ventilations with a BVM.
- Reassess respirations and heart rate every 30 seconds.
- Assess oxygen via pulse oximetry, best at the right wrist.
- Observe for central cyanosis.
- If present, administer blow-by oxygen.
- Hold oxygen tubing at high flow close to the face.
- Set the flow rate at 5 liters per minute.
- Request a second unit if the newborn is in distress.
- This is needed if resuscitation is required.
- If ventilation is needed, use a newborn bag valve mask.
- Ensure a good mask-to-face seal.
- Use gentle pressure to make the chest rise with each ventilation.

- If the newborn does not breathe or have an adequate heart rate, continue CPR.
- Rapidly transport the newborn.
- Do not stop CPR until the newborn responds or is pronounced dead.

14. Complications of Delivery

- **Breech delivery** is when the buttocks are delivered first.
- Presentation is the position of the infant at birth.
- Most infants are born head first (vortex presentation).
- The fetus is at great risk for trauma in a breech delivery.
- Prolapsed cords are more common with breech deliveries.
- Breech deliveries usually take longer.
- You may have time to transport to the hospital.
- If the buttocks have passed through the vagina, delivery has begun.
- Prepare for a breech delivery the same as a normal one.
- Allow the buttocks and legs to deliver spontaneously.
- Support them to prevent rapid expulsion.
- Let the legs dangle while supporting the trunk and chest.
- The head is usually face down and should deliver spontaneously.
- Make a V with gloved fingers in the vagina.
- This keeps the vaginal walls from compressing the fetus's airway.
- A **limb presentation** is when an arm, leg, or foot is delivered first.
- The head or buttocks are not the presenting part.
- An infant with a limb presentation cannot be delivered in the field.
- Transport the patient immediately.
- If a limb protrudes, cover it with a sterile towel.
- Never try to push it back in or pull on it.
- Place the patient on her back with her head down and pelvis elevated.
- Alternatively, use the kneel-to-chest position.
- A **prolapsed umbilical cord** comes out before the fetus.
- This must be treated in the hospital.
- Do not attempt to push the cord back in.
- Try to keep the fetus's head from compressing the cord.

- Insert your gloved hand into the vagina.
- Gently push the fetus's head away from the cord.
- Place the woman supine with the foot of the stretcher raised.
- Elevate her hips on a pillow.
- Wrap a sterile, saline-moistened towel around the exposed cord.
- Give the patient high-flow oxygen.
- Transport rapidly.
- **Spina bifida** is a developmental defect.
- A portion of the spinal cord or meninges may protrude.
- It may protrude outside the vertebrae or body.
- Cover the exposed area with a sterile, moist dressing immediately after birth.
- This prevents potentially fatal infections.
- Maintain the newborn's body temperature.
- Moisture from the dressing can lower temperature.
- **Multiple gestations** (twins) occur once every 30 births.
- Twins are usually smaller than single fetuses.
- Delivery is typically not difficult.
- About 10 minutes after the first birth, contractions resume.
- The birth process repeats for the second twin.
- The procedure for delivering twins is the same as a single fetus.
- You will need supplies from additional OB kits.
- Clamp and cut the cord of the first newborn immediately after birth.
- Do this before the second delivery.
- Record the birth time of each twin separately.
- Twins may look premature due to their size.
- **Premature births** are before 8 months (36 weeks).
- A newborn weighing less than 5 pounds is premature.
- A premature newborn is smaller and thinner than a full-term one.
- The head is proportionally larger.
- Vernix caseosa is absent or minimal.
- There is less body hair.
- Premature newborns need special care.
- They often require resuscitation.

- Perform resuscitation unless physically impossible.
- Premature newborns as small as one pound have survived with care.
- They can develop normally.
- **Post-term pregnancy** lasts longer than 41 weeks.
- Postterm fetuses can be larger, sometimes 10 pounds or more.
- Larger size can cause problems for the woman and fetus.
- Labor and delivery can be more difficult.
- There's an increased chance of fetal injury.
- A C-section is more likely required.
- The woman risks perineal tears and infection.
- Postterm newborns risk meconium aspiration and infections.
- Being stillborn is also a risk.
- Newborns may not have developed normally due to uterine size restriction.
- Be prepared to resuscitate the newborn.
- Respiratory and neurologic functions may be affected.
- **Fetal demise** is when the fetus has died in utero.
- Labor onset may be premature but progresses normally.
- An extremely foul odor may indicate an inner uterine infection.
- The delivered fetus may have skin blisters and sloughing.
- Dark discoloration can be present.
- The head will be soft and perhaps grossly formed.
- Do not attempt to resuscitate an obviously dead neonate.

15. Postpartum Complications

- Postpartum complications can arise after childbirth.
- **Excessive bleeding** is when bleeding exceeds 100 milliliters.
- If bleeding continues after placenta delivery, massage the uterus.
- Treat signs and symptoms of shock.
- Excessive bleeding is usually because uterine muscles aren't fully contracted.
- It is potentially life-threatening.
- Cover the vagina with a sterile pad, changing it often.
- Consider oxygen if necessary.

- Monitor vital signs frequently.
- Transport the patient immediately.
- Never hold the woman's legs together to control bleeding.
- Do not pack anything into the vagina.
- Postpartum patients are at increased risk of a **venous emboli**.
- Most commonly, this is a **pulmonary embolism**.
- A pulmonary embolism is a clot that travels through the bloodstream.
- It lodges in the pulmonary circulation.
- This blocks blood flow to the lungs.
- It is potentially life-threatening.
- If a woman reports sudden difficulty breathing after delivery, consider pulmonary embolism.
- Suspect pulmonary embolism in women of childbearing age with respiratory complaints.
- Especially consider it if they recently delivered.
- Sudden onset of difficulty breathing or altered mental status is a sign.

16. Review Questions and Key Takeaways

- The first stage of labor ends when the presenting part of the baby is visible.
- A 23-year-old woman 24 weeks pregnant with hand edema, headache, and visual disturbances with high blood pressure is likely experiencing preeclampsia.
- Eclampsia is when a patient has seizures from high blood pressure.
- To prevent supine hypotensive syndrome in an 8-month pregnant woman, transport her on her left side.
- Immediately after the infant's head delivery, check the umbilical cord position for a nuchal cord.
- If the umbilical cord is around the neck, attempt to gently slip it over.
- The need for newborn resuscitation is based on respiratory effort, heart rate, and color.
- An Apgar score of 8 at one minute indicates a heart rate of 90 (1 point), pink body with blue hands (1 point), rapid respirations (2 points), and resistance to straightening legs (2 points), and active movement (2 points).
- The score is 1 point for heart rate <100, 1 point for acrocyanosis (pink body,

blue extremities).

- The most effective way to prevent cardiopulmonary arrest in a newborn is to ensure adequate oxygenation and ventilation.
- If you see an arm protruding from the vagina in a woman in labor, this is a limb presentation.
- Cover the limb and transport immediately.
- A newborn is considered term if born after 37 weeks and before 42 weeks.