

# OB Emergencies



Pea Ridge Fire Department  
EMS refresher

# Introduction

- Pregnancy is not a disease needing treatment.
- The number of patients increases from one to a minimum of two.

# Anatomy and Physiology Review

- Female reproductive organs include:
  - Two ovaries
  - Two fallopian tubes
  - Uterus
  - Cervix
  - Vagina
  - Mammary glands
  - External genitalia

# Anatomy and Physiology Review

- Ovaries
  - Each ovary contains about 200,000 follicles, with each one containing an oocyte.
  - Each month, about 20 of the follicles begin the maturation process.
  - Only a single follicle releases an ovum.

# Anatomy and Physiology Review

- The cycle continues with the release of hormones throughout various stages.
  - The anterior pituitary gland releases:
    - Follicle-stimulating hormone
    - Luteinizing hormone
  - At the end of pregnancy, prostaglandins and oxytocin signal uterine contractions and labor.

# Anatomy and Physiology Review

- The ovum travels from the ovaries into the uterus through the fallopian tubes.
  - Ciliary motion sweeps the egg into the fallopian tube.
  - Smooth muscle contractions and inner mucosa move the ovum through the tube to the uterus.

# Anatomy and Physiology Review

- A fertilized egg will develop into an embryo and then a fetus.



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# Anatomy and Physiology Review

- Uterus: organ that lies between the urinary bladder and the rectum
  - The uterus is where:
    - The fertilized ovum implants.
    - The fetus develops.
    - Labor takes place.

# Anatomy and Physiology Review

- Three layers of tissues in the uterus:
  - Perimetrium
  - Myometrium
  - Endometrium
- Cervix
  - Opens into the vagina

# Anatomy and Physiology Review

- Functions of the vagina include:
  - Receptacle for penis during sexual intercourse
  - Passage for exit of menstrual flow
  - Passage for childbirth

# Anatomy and Physiology Review

- The vagina is the lower portion of the birth canal.
  - Stretches to accommodate fetus delivery
  - If it doesn't stretch enough:
    - Tissues in and around the perineum can tear.
    - Significant pain and bleeding may occur.

# Anatomy and Physiology Review

- Primary purpose of mammary glands: lactation
  - Signs that a woman is most likely pregnant:
    - Breast enlargement
    - Tenderness
    - Milk excretion

# Conception and Fetal Development

- Once the egg has been fertilized and implanted, major changes occur.
  - Cells multiply on the outside of the egg surface, forming layers that will generate:
    - Fetal membrane
    - Placenta
    - Embryo

# Conception and Fetal Development

- Blastocyst migrates to the endometrial wall and becomes implanted a week after conception.
  - Implantation triggers the development of placental tissues.
  - The corpus luteum produces hormones to support pregnancy until the placenta develops.

# Conception and Fetal Development

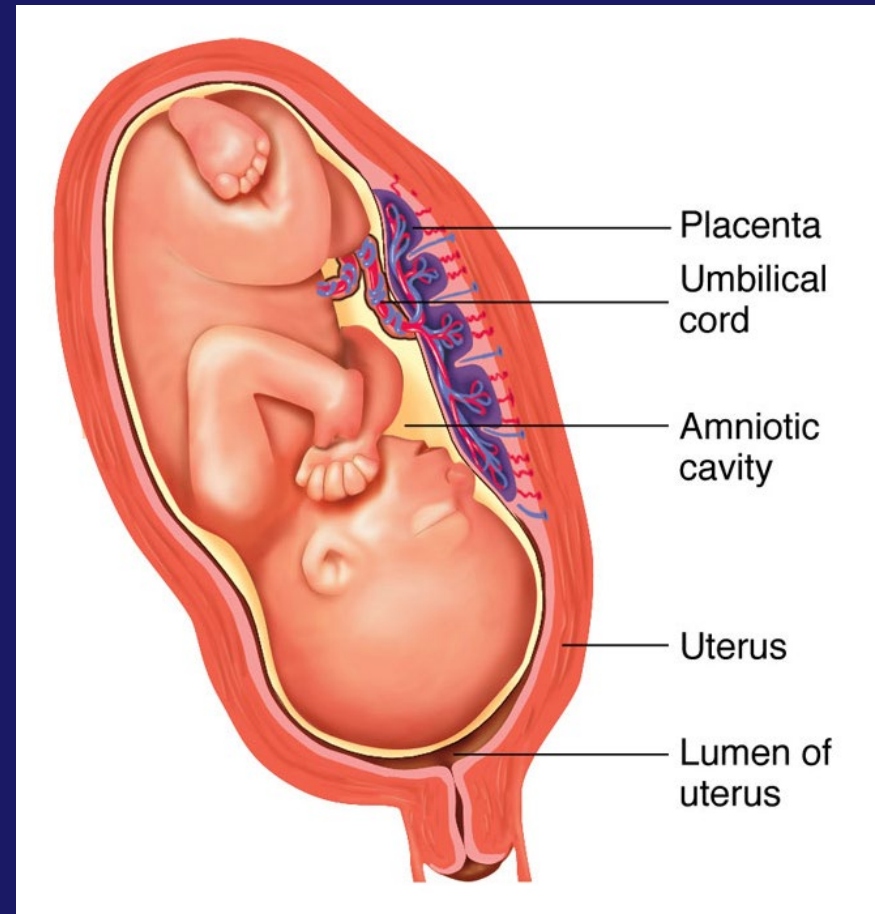
- Two weeks after conception:
  - The blastocyst evolves into an embryonic disc.
  - The embryo begins to draw on maternal circulation.
- Three weeks after conception:
  - The blastocyst officially becomes an embryo.
  - Body systems form.
  - The heart beats.
  - Blood cells circulate.

# Conception and Fetal Development

- In the fourth week of pregnancy, the placenta develops.
  - Serves as an early liver
  - Produces antibodies
  - Functions as fetal lungs
  - Transports nutrients and excretes wastes
  - Transfers heat from the mother to the fetus
  - Forms a barrier against harmful substances

# Conception and Fetal Development

- The umbilical cord connects the fetus and placenta.
  - Umbilical vein
  - Umbilical arteries



# Cultural Value Considerations

- Some cultures have a value system that affects their pregnancy.
- Some do not permit a male health care provider to examine a pregnant patient.
- Different cultures view pregnancy differently.

# Adolescent Pregnancy

- The United States has one of the highest teenage pregnancy rates among developed countries.
- Pregnancy is a possibility when assessing all female teenagers.

# Patient Assessment

- Special terminology:
  - Gravidity: number of times pregnant
  - Parity: delivery of an infant who is alive
  - Primigravida: woman who is pregnant for the first time
  - Primipara: a woman with only one delivery
  - Multigravida: a woman who has had two or more pregnancies

# Patient Assessment

- Special terminology (cont'd):
  - Multipara: a woman who has had two or more deliveries
  - Grand multipara: a woman with more than five deliveries
  - Nullipara: a woman who has never delivered

# Scene Size-Up

- Take standard precautions.
- Consider calling for specialized resources.
- Determine the mechanism of injury or nature of illness.

# Primary Assessment

- Form a general impression.
  - Determine if there is time for further evaluation.
  - Perform a rapid scan for ABCDE problems.
  - Evaluate trauma or other medical problems first.
  - Use the AVPU scale to determine the level of consciousness.

# Primary Assessment

- Airway and breathing
  - Danger is generally not an issue in an uncomplicated birth.
  - If there is trauma, assess for airway and breathing.
- Circulation
  - Assess early for internal and external bleeding.
  - Assess for signs of shock and control bleeding.

# Primary Assessment

- Transport decision
  - If delivery is imminent, prepare to deliver at the scene.
  - If delivery is not imminent, transport the woman lying on the left side when possible.

# Primary Assessment

- Transport decision (cont'd)
  - Provide rapid transport for patients:
    - With significant bleeding and pain
    - Who are hypertensive
    - Who are having a seizure
    - Who have an altered mental status

# History Taking

- Determine chief complaint using OPQRST.
- Obtain the SAMPLE history.
- Determine previous complications or gynecologic problems.

# History Taking

- Was an ultrasound done recently, and what were the findings?
- Determine the general impression of the patient's health.
- Determine if there is any vaginal bleeding.

# History Taking

- Determine if the woman's water has broken.
  - Does she need to move her bowels or push?
    - If so, delivery is imminent.
  - What are the contractions like, and how frequent are they?
- Inspect the woman for crowning.

# Secondary Assessment

- Base the exam on the chief complaint.
  - The exam should include fetal heart tones and rate.
- Inspect for crowning or vaginal bleeding.
- If the water has broken, ask about the color of the fluid.

# Secondary Assessment

- Imminent delivery
  - Assess the woman's vital signs.
  - Estimate the gestational age.
  - Listen for fetal heart tones.

# Secondary Assessment

- If there is time to reach the hospital:
  - Place the patient in the lateral recumbent position.
  - Remove clothing that might obstruct delivery.
  - Begin transport.
- If there is not time:
  - Try to find a private and clean area.
  - Keep nervous bystanders busy.
  - Be calm and professional.

# Reassessment

- Perform ongoing examination, including:
  - Serial vital signs
  - Fetal heart rate and heart tones
- Time contractions and perform exam.
- Check interventions and transport.

# Reassessment

- If delivery is imminent:
  - Notify staff at hospital.
  - Provide an update on the status after delivery.
- If delivery does not occur within 30 minutes or a complication occurs:
  - Notify staff.
  - Provide rapid transport.

# Substance Abuse

- Illicit drugs pass through the placenta barrier and enter fetal circulation.
  - Birth defects
  - Addiction
  - Withdrawal signs
- Treatment should concentrate on cardiorespiratory support.

# Supine Hypotensive Syndrome

- Uterus may compress the inferior vena cava.
  - May diminish or occlude venous blood return to the heart
  - Can result in significant hypotension and fetal distress

# Supine Hypotensive Syndrome

- Management includes:
  - Placing the patient in the left lateral recumbent position.
  - Treating underlying causes.
  - Monitoring blood pressure and other vital signs.
  - Obtaining an ECG.

# Cardiac Conditions

- Determine the nature and treatment of any heart condition.
  - Cardiac medications
  - Diagnosed with dysrhythmias or heart murmurs
  - History of rheumatic fever
  - Born with congenital heart defect
  - Episodes of dizziness, light-headedness

# Hypertensive Disorders

- Chronic hypertension
  - Blood pressure equal to or greater than 140/90 mm Hg
  - Increased risk for stroke or other cardiovascular problems
- Gestational hypertension
  - Develops after the 20th week of pregnancy
  - Resolves spontaneously

# Hypertensive Disorders

- Preeclampsia
  - Risk factors include:
    - First pregnancy before age 20 years
    - Women with advanced maternal age
    - History of multiple pregnancies
    - Hypertension
    - Renal disease
    - Diabetes

# Hypertensive Disorders

- Preeclampsia (cont'd)
  - Manifests after 20th week with a triad of symptoms including:
    - Edema
    - Gradual onset of hypertension
    - Protein in the urine

# Hypertensive Disorders

- Preeclampsia (cont'd)
  - May require emergency hypertensive medications
  - Other conditions that may accompany preeclampsia:
    - Liver or renal failure
    - Cerebral hemorrhage
    - Abruptio placenta
    - HELLP syndrome

# Seizures

- Treatment is difficult because drugs may cause fetal distress.
  - Magnesium sulfate is recommended.
- Potential complications may include:
  - Abruptio placenta
  - Hemorrhage
  - Disseminated intravascular coagulation

# Pathophysiology of Bleeding Related to Pregnancy

- Abortion
  - Expulsion of the fetus before the 20th week of gestation
  - Classified as:
    - Spontaneous abortion (miscarriage)
    - Elective (intentional) abortion

# Pathophysiology of Bleeding Related to Pregnancy

- Habitual abortions: three or more consecutive miscarriages
  - Causes include:
    - Ovarian issues
    - Uterine malformations
    - Cervical conditions
    - Infections

# Pathophysiology of Bleeding Related to Pregnancy

- Threatened abortion: abortion attempting to take place
  - It is characterized by vaginal bleeding in the first half of pregnancy.
  - It can progress, or it may subside.
  - The prehospital role is transport and support.

# Pathophysiology of Bleeding Related to Pregnancy

- Imminent abortion: spontaneous abortion that cannot be prevented
  - Signs and symptoms include:
    - Severe abdominal pain
    - Vaginal bleeding
    - Cervical dilation
  - Maintain blood pressure and prevent hypovolemia.

# Pathophysiology of Bleeding Related to Pregnancy

- Imminent abortion (cont'd)
  - Treatment includes:
    - Establishing an IV line of normal saline
    - Administering 100% supplemental oxygen
    - Obtaining an ECG
    - Providing emotional support with rapid transport
    - Watching for signs of shock

# Pathophysiology of Bleeding Related to Pregnancy

- Incomplete abortion: Part of the products of conception remains in the uterus.
  - Vaginal bleeding will be continuous.
  - Watch for signs and symptoms of shock.
  - Start an IV line of normal saline.
  - Consult medical control.
  - Collect all products of conception.

# Pathophysiology of Bleeding Related to Pregnancy

- Missed abortion: The fetus dies during the first 20 weeks of gestation but remains in utero.
  - Provide emotional support and transport.
  - On examination:
    - The uterus feels like a hard mass.
    - The fetal heartbeat cannot be heard.

# Pathophysiology of Bleeding Related to Pregnancy

- Septic abortion: The uterus becomes infected following abortion.
  - History includes fever and bad-smelling vaginal discharge after abortion.
  - Physical examination shows fever and abdominal tenderness.

# Pathophysiology of Bleeding Related to Pregnancy

- Septic abortion (cont'd)
  - Prehospital management includes:
    - Establishing an IV line of normal saline
    - Administering 100% supplemental oxygen
    - ECG monitoring
    - Rapid transport
    - Fluid administration

# Pathophysiology of Bleeding Related to Pregnancy

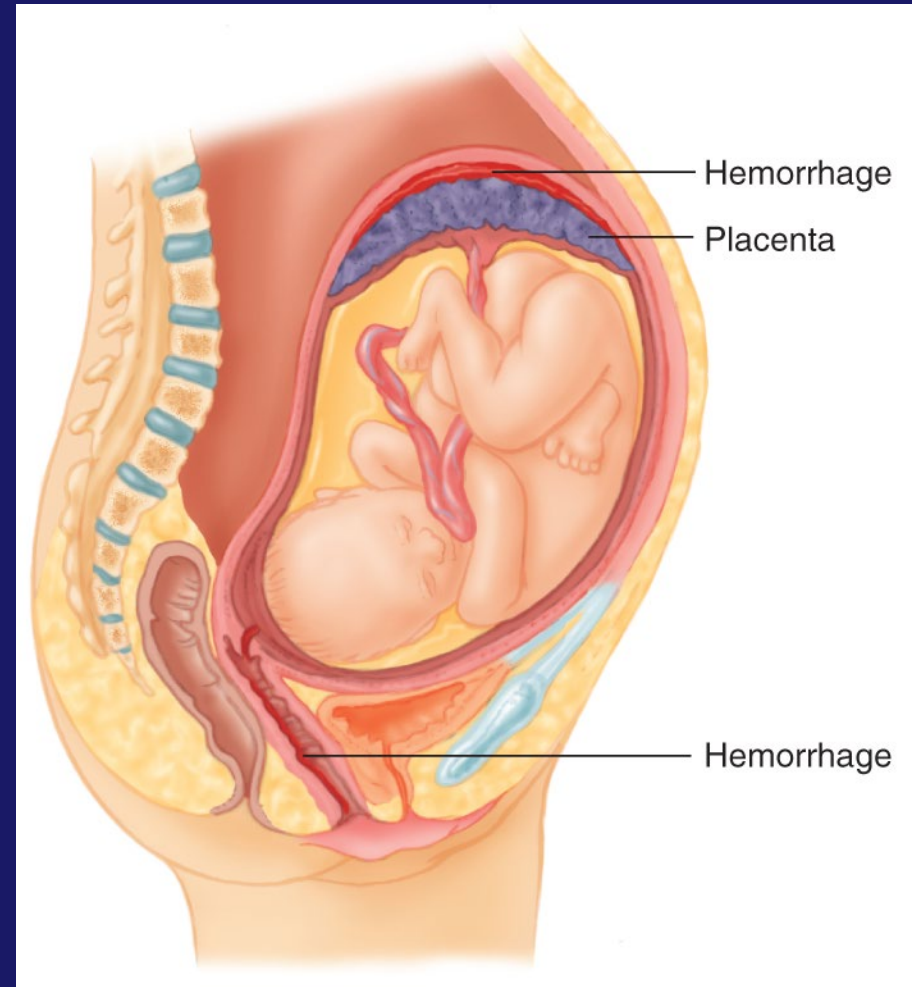
- Third-trimester bleeding
  - Greatest danger of hemorrhage
    - A large volume of blood is present.
    - Compensatory mechanisms function as a result of pregnancy.

# Pathophysiology of Bleeding Related to Pregnancy

- Ectopic pregnancy
  - The ovum implants somewhere besides uterus.
  - The patient usually presents with:
    - Severe abdominal pain
    - Hypovolemic shock
  - Should be considered for all female patients of child-bearing age with severe lower abdominal pain.
  - Treat for shock and provide rapid transport.

# Pathophysiology of Bleeding Related to Pregnancy

- Abruptio placenta
  - Premature separation of the placenta from the uterine wall



# Pathophysiology of Bleeding Related to Pregnancy

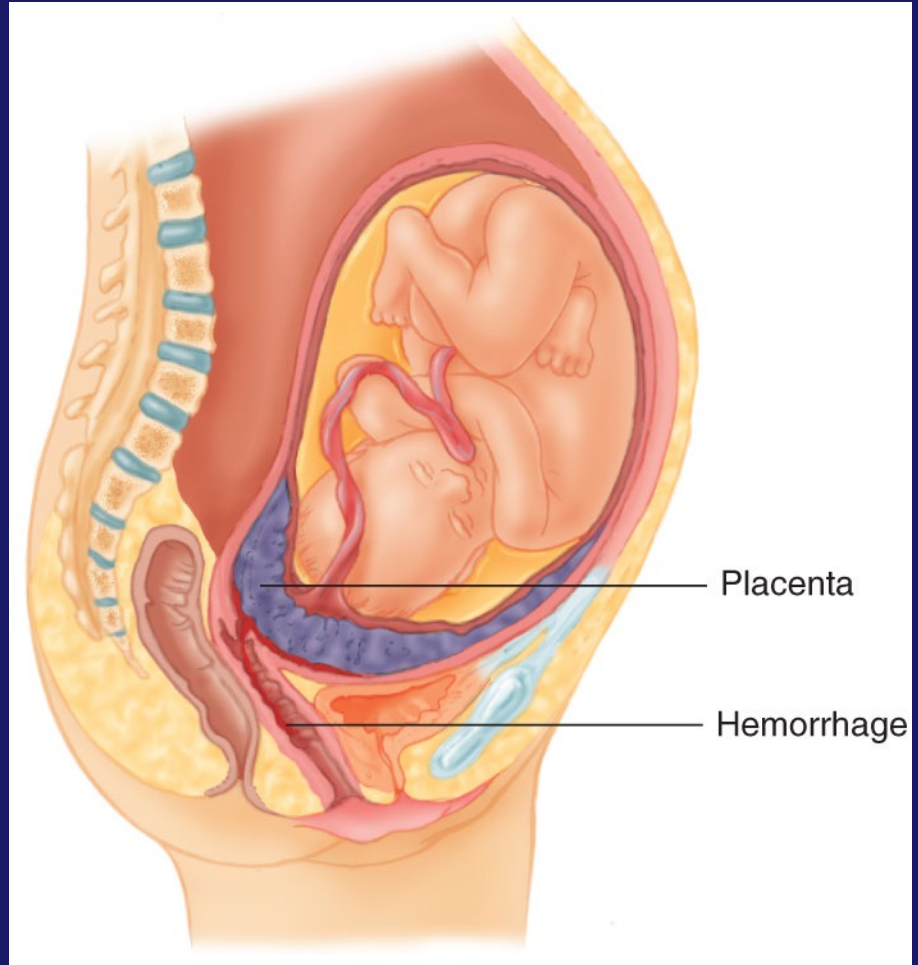
- Abruptio placenta (cont'd)
  - Patient will report:
    - Sudden onset of severe abdominal pain
    - No longer feeling the fetus moving
    - Vaginal bleeding with dark red blood

# Pathophysiology of Bleeding Related to Pregnancy

- Abruptio placenta (cont'd)
  - Physical examination may reveal:
    - Signs of shock
    - Tender abdomen and rigid uterus
    - Absent fetal heart sounds

# Pathophysiology of Bleeding Related to Pregnancy

- Placenta previa
  - Placenta is implanted low in the uterus and obscures the cervical canal.



# Pathophysiology of Bleeding Related to Pregnancy

- Placenta previa (cont'd)
  - Painless vaginal bleeding with bright red blood.
  - Uterus is soft and nontender.

# Assessment of Bleeding Related to Pregnancy

- Try to determine the nature of the bleeding.
- Use OPQRST to elaborate on the chief complaint of labor pain.
- Identify changes in orthostatic vital signs.
- Look for positive Grey Turner or Cullen sign.

# Management of Bleeding Related to Pregnancy

- Keep the woman lying on her left side.
- Administer 100% supplemental oxygen.
- Provide rapid transport.
- Start an IV line of normal saline.
- Obtain an ECG and baseline vital signs.
- Loosely place trauma pads over the vagina.

# Stages of Labor

- First stage
  - Begins with onset of labor pains
  - Lasts until the cervix is fully dilated
  - Rupture of the amniotic sac near the end of the stage

# Stages of Labor

- Second stage
  - This stage begins as the head descends to enter the birth canal.
  - Fetus will undergo several position changes.
  - Contractions are more intense and frequent.
  - The cervix becomes fully dilated.
  - Concludes when the newborn is fully delivered.

# Stages of Labor

- Third stage of labor
  - The placenta is expelled.
  - Uterine contractions squeeze shut the exposed blood vessels.

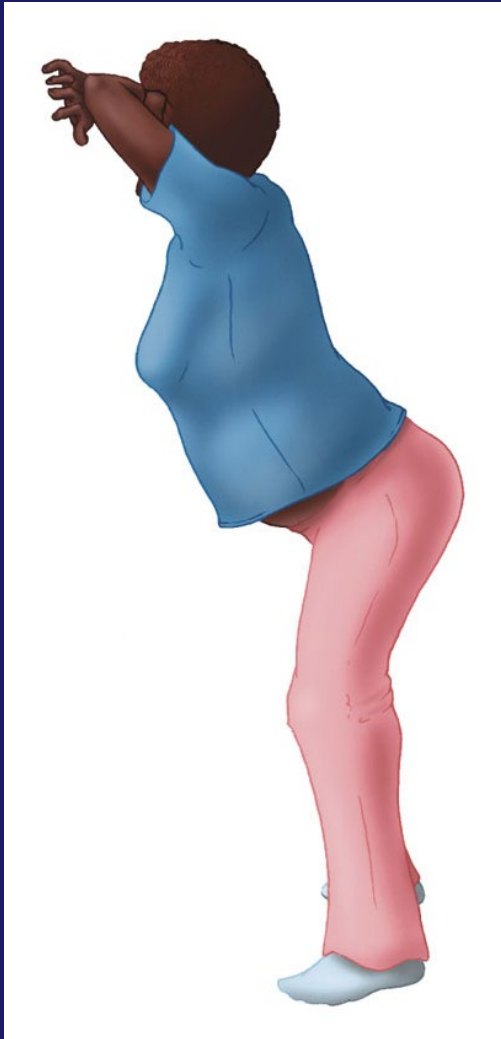
| <b>Table 41-2</b>     |  | <b>The Stages of Labor:<br/>Nullipara Versus<br/>Multipara</b> |                  |
|-----------------------|--|----------------------------------------------------------------|------------------|
| <b>Stage of Labor</b> |  | <b>Nullipara</b>                                               | <b>Multipara</b> |
| First stage           |  | 8 to 12 hours                                                  | 6 to 8 hours     |
| Second stage          |  | 1 to 3 hours                                                   | 5 to 30 minutes  |
| Third stage           |  | 5 to 60 minutes                                                | 5 to 60 minutes  |

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# Preparing for Delivery

- Birthing positions
  - Lying supine
  - Standing birth
  - Semi-Fowler position
  - Kneeling birth
  - Side-lying position

# Preparing for Delivery



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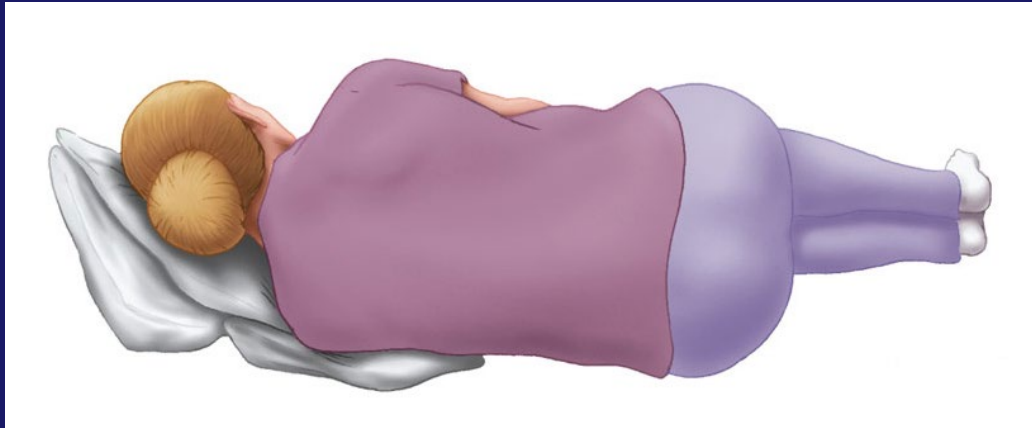


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# Preparing for Delivery



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# Preparing for Delivery

- Open the OB kit.
- Prepare for delivery.
- Drape the woman in sterile towels.



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# Preparing for Delivery

- A safe and controlled delivery takes precedence over the draping.
- Have your partner at the woman's head to help keep her calm and administer oxygen.
- Encourage the woman to rest between contractions and to resist bearing down.

# Assisting Delivery

- Control the delivery.
- Support the head as it emerges.
- Check for nuchal cord.
- Clear the airway by suctioning with a bulb syringe.



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# Assisting Delivery

- Gently guide the head downward so the upper shoulder can deliver.
- Gently guide the head upward to allow delivery of the lower shoulder.
  - The trunk and legs will follow rapidly.



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# Assisting Delivery

- Once delivered, maintain the newborn at the same level as the vagina.
- Wipe blood or mucus from the newborn's nose and mouth with sterile gauze.



# Assisting Delivery

- Dry the newborn with sterile towels and wrap in a dry blanket.
- Record the time of birth for the patient care report.

# Assisting Delivery

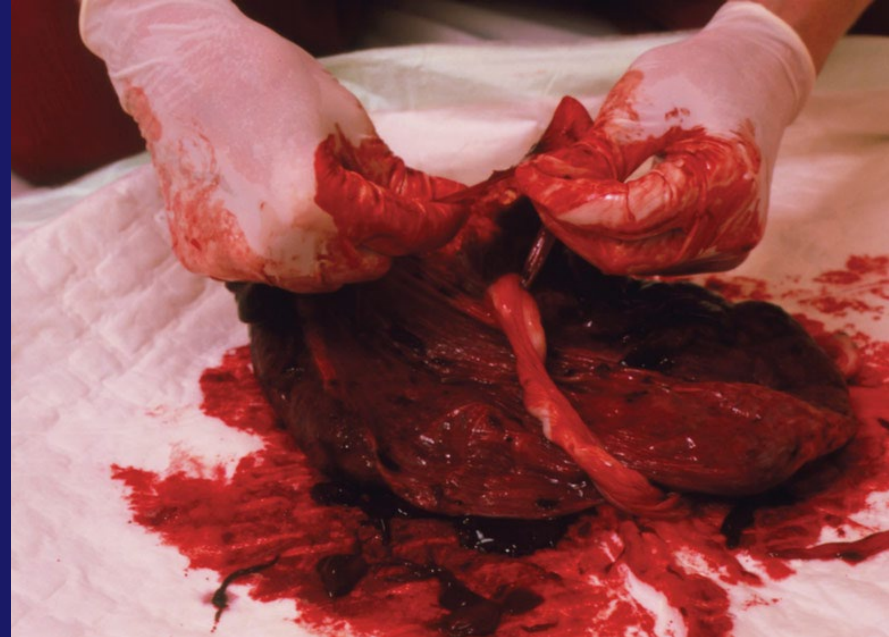
- Apgar scoring
  - Evaluates the newborn's vital functions
- Cutting the umbilical cord
  - Tie or clamp the cord with clamps 2 inches apart, then cut the cord between them.
  - Examine the ends to ensure there is no bleeding.
  - Once the cord is cut, wrap the newborn in a dry blanket.

# Assisting Delivery

- Prepare for transport
  - Do not wait for the placenta to deliver.
- Delivery of the placenta
  - The placenta usually delivers within 30 minutes after delivery of the baby.
  - Do not pull on the umbilical cord to speed up placental delivery.
  - Instruct the patient to bear down.

# Assisting Delivery

- Delivery of the placenta (cont'd)
  - The fetal side should be gray, shiny, and smooth.
  - The maternal side should be dark maroon with a rough texture.



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# Assisting Delivery

- Delivery of the placenta (cont'd)
  - Place the placenta in a plastic bag.
  - Examine the perineum for lacerations.

# Postpartum Care

- Obtain the mother's vital signs.
- Monitor the mother's condition closely.
- Assess the fundus.
- Note the lochia. (discharge)
- Cover the mother with blankets.

# Emergency Pharmacology in Pregnancy

- Maternal physiology changes may have an impact on pharmacologic therapies.
  - IV medications may pass quickly through the maternal system.
  - Higher doses may be needed.
  - Oral drugs may take longer to work.

# Magnesium Sulfate

- In pregnancy, used to manage eclampsia
- Can cause:
  - Respiratory depression
  - Hypotension
  - Circulatory collapse
- Must be administered slowly

# Preterm Labor

- Preterm labor is labor that begins after the 20th week but before the 37th week.
- The patient may be admitted to the hospital for medication, bed rest, and monitoring.

# Fetal Distress

- Caused by many conditions.
- Difficult to assess in the field.
  - Most women will know if fetal movement has slowed or stopped.
- Provide support and rapid transport.

# Uterine Rupture

- Occurs during labor.
- Signs and symptoms include:
  - Weakness, dizziness, and thirst
  - Initial strong contractions that have lessened
  - Signs of shock
- Treat for shock and provide rapid transport.

# Precipitous Labor and Birth

- The entire labor time and birth time usually total less than 3 hours.
- Chances increase the more children the woman has had.
- Contractions are usually more intense.
- Assess the woman postdelivery for tears and bleeding.

# Post-Term Pregnancy

- The fetus has not been born after 42 weeks.
- The cause is unknown.
- This situation is high risk because:
  - The fetus may become malnourished.
  - There is increased chance of meconium aspiration.

# Meconium Staining

- Meconium: first stool the fetus passes
  - Odorless, greenish-black, with a tar-like consistency
- May be voided into the amniotic fluid and cause chemical pneumonia in the newborn

# Multiple Gestation

- Prepare for more than one resuscitation.
- Consider the possibility of multiples if:
  - The first newborn is small.
  - The abdomen is still fairly large after the birth.
- The second newborn is usually born within 45 minutes.

# Multiple Gestation

- The procedure is the same as for a single birth.
- Check if there are one or two cords coming out of the placenta when it delivers.
- Record the time of birth for each newborn.
  - Identify the first newborn delivered as “Baby A.”

# Intrauterine Fetal Death

- The fetus died in the uterus before labor.
- Care will focus on the woman.
- The actual cause is usually difficult to determine.
- Labor can occur up to 2 weeks or longer after the fetal death.
  - Do not attempt resuscitation.

# Cephalopelvic Disproportion

- The head of the fetus is larger than the pelvis.
- A cesarean section is usually required.
  - May cause postpartum complications

# Cephalic Presentation

- The newborn's head is overly extended, creating a face presentation at birth.
  - Brow presentation
  - Occiput-posterior presentation
  - Military presentation

# Cephalic Presentation

- If the newborn's head cannot be externally rotated or the delivery cannot be completed:
  - Support the woman and fetus.
  - Provide rapid transport.

# Breech Presentations

- A different part of the body besides the head leads the way through the birth canal.
- Types:
  - Frank
  - Incomplete
  - Complete



# Breech Presentations

- If buttocks are presenting and delivery is imminent:
  - Position the woman with buttocks at edge of bed or stretcher, legs flexed.
  - Allow newborn's buttocks and trunk to deliver spontaneously.
  - Once the legs are clear, support the body.
  - Lower the newborn slightly.

# Breech Presentations

- Once the hairline is spotted, grasp the newborn's ankles and lift upward.
- If the head does not deliver within 3 minutes, the newborn may suffocate.
- Do not try to forcibly pull the newborn out.

# Breech Presentations

- Other presentations are rare.
  - Footling breech
  - Transverse presentation
- In abnormal presentations, do not attempt delivery in the field.



# Shoulder Dystocia

- Difficulty in delivering the shoulders.
- If the shoulders cannot clear the birth canal, the fetus cannot breathe.
- A major concern for the newborn is brachial nerve plexus damage.

# Shoulder Dystocia

- McRoberts maneuver
  - Hyperflex the woman's legs tightly to the abdomen.
  - You may need to apply pressure to the lower abdomen and gently pull on the fetus's head.

# Nuchal Cord

- The umbilical cord becomes wrapped around the newborn's neck during delivery.
- Slip a finger under the cord and gently attempt to slip it over the shoulder and head.
  - If unsuccessful, cut the cord.

# Prolapsed Umbilical Cord

- The cord emerges before the fetus.
  - Shuts off the oxygenated blood supply from the placenta
  - Leads to fetal asphyxia



# Prolapsed Umbilical Cord

- Keep the woman supine with hips elevated.
- Administer 100% supplemental oxygen.
- Have the woman pant with each contraction.
- Gently push the presenting part back up the vagina until it no longer presses on the cord.

# Prolapsed Umbilical Cord

- Maintain pressure while another paramedic covers the exposed cord with dressings.
- Maintain that position throughout urgent transport.

# Uterine Inversion

- The placenta fails to detach properly from the uterine wall when it is expelled.
  - The uterus turns inside out as a result.
- Severity graded by how much the uterus has reversed itself.
- Very painful and may rapidly cause shock.

# Uterine Inversion

- Keep the patient recumbent.
- Administer 100% supplemental oxygen.
- Start two IV lines with normal saline.
- Do not attempt to remove the placenta if it is still attached to the uterus.

# Uterine Inversion

- Carefully monitor vital signs.
- Consider oxytocin to control hemorrhage.
- Make one attempt to replace the uterus.

# Postpartum Hemorrhage

- Can be either early or late hemorrhage.
  - Early: bleeding within 24 hours of delivery
  - Late: bleeding occurring from 24 hours to 6 weeks after delivery
- Blood loss exceeds 500 mL during first 24 hours after birth.

# Postpartum Hemorrhage

- Causes of postpartum hemorrhage include:
  - Lacerations
  - Prolonged labor or multiple baby delivery
  - Retained products of conception
  - Multiple pregnancy
  - Placenta previa
  - Full bladder

# Postpartum Hemorrhage

- Continue uterine massage.
- Encourage the woman to breastfeed.
- Notify the receiving facility of status.
- Transport immediately.
- Add a large-bore IV line en route.
- Do not pack dressings into the vagina.

# Pulmonary Embolism

- Frequently caused by a clot arising in pelvic circulation from:
  - Amniotic embolism
  - Pregnancy-related venous thromboembolism
  - Water embolism

# Pulmonary Embolism

- Suspect if a woman in the postpartum state experiences:
  - Sudden dyspnea
  - Tachycardia
  - Atrial fibrillation
  - Hypotension
  - Sharp, sudden chest or abdominal pain
  - Syncope

# Postpartum Depression

- One in nine women experience postpartum depression.
- It may appear up to 1 year after birth.
- Signs and symptoms include:
  - Signs similar to others with depression
  - Anger directed toward the infant
  - Little or no interest in the infant
  - Thoughts of harming herself or her infant

# Trauma and Pregnancy

- Trauma is the leading cause of maternal death in the United States.
- Abdominal trauma occurs from the same mechanisms in pregnant women as nonpregnant women.

# Pathophysiology and Assessment Considerations

- Anatomic changes are important in trauma.
  - Abdominal contents compress into the upper abdomen.
  - The diaphragm elevates by about 1.5 inches.
  - The peritoneum maximally stretches.

# Pathophysiology and Assessment Considerations

- First trimester
  - The uterus is well protected and rarely damaged from trauma.
- Second and third trimesters
  - The uterus extends into the abdomen and becomes more vulnerable to trauma.

# Pathophysiology and Assessment Considerations

- Pregnant patients will have different signs or responses to trauma.
  - It may be more difficult to interpret tachycardia.
  - Signs of hypovolemia may be hidden.
  - The patient has a higher chance of bleeding to death in case of pelvic fractures.
  - A respiratory rate less than 20 breaths/min is not adequate.

# Considerations for the Fetus and Trauma

- Fetal injury can occur from:
  - Rapid deceleration
  - Impaired fetal circulation
- If a pregnant woman has massive bleeding, maternal circulation will reroute blood from the fetus.

# Considerations for the Fetus and Trauma

- The fetal heart rate is the best indication of fetal status after trauma.
  - A normal fetal heart rate is between 120 and 160 beats/min.
  - A rate slower than 120 beats/min indicates fetal distress and a dire emergency.

# Management of the Pregnant Trauma Patient

- You can only treat the woman directly.
- Transport a pregnant woman on her left side if no spinal injury is suspected.



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# Management of the Pregnant Trauma Patient

- Ensure an adequate airway.
- Administer oxygen.
- Assist ventilations when needed and provide a higher-than-usual minute volume.
- Control external bleeding and splint fractures.

# Management of the Pregnant Trauma Patient

- Start one or two IV lines of normal saline.
- Transport the patient in the lateral recumbent position.

# Management of the Pregnant Trauma Patient

- Maternal cardiac arrest
  - Provide CPR and ALS as you would for any other trauma patient.
  - CPR and ventilator support may keep the fetus viable, even if the mother is already dead.

# Thank You



Please continue to the next section