Chapter 24
Obstetrics and Gynecological Emergencies
U.S. DOT Objectives are covered and/or supported by the PowerPoint™ Slide Program and Notes for Emergency Care, 11th Ed. Please see the Chapter 24 correlation below.

**KNOWLEDGE AND ATTITUDE**

- **4-9.1** Identify the following structures: uterus, vagina, fetus, placenta, umbilical cord, amniotic sac, perineum. Slides 6-7
- **4-9.2** Identify and explain the use of the contents of an obstetrics kit. Slides 13, 20
- **4-9.3** Identify predelivery emergencies. Slides 17, 57-76
- **4-9.4** State indications of an imminent delivery. Slides 13-16
- **4-9.5** Differentiate the emergency medical care provided to a patient with predelivery emergencies from a normal delivery. Slides 18, 22-26
- **4-9.6** State the steps in the predelivery preparation of the mother. Slides 19, 21
- **4-9.7** Establish the relationship between body substance isolation (Standard Precautions) and childbirth. Slide 13
- **4-9.8** State the steps to assist in the delivery. Slides 22-26
- **4-9.9** Describe care of the baby as the head appears. Slides 22-24

(continues)
**KNOWLEDGE AND ATTITUDE**

- **4-9.10** Describe how and when to cut the umbilical cord. Slides 27-28
- **4-9.11** Discuss the steps in the delivery of the placenta. Slide 38
- **4-9.12** List the steps in the emergency medical care of the mother postdelivery. Slides 39-40
- **4-9.13** Summarize neonatal resuscitation procedures. Slides 30-35
- **4-9.14** Describe the procedures for the following abnormal deliveries: breech birth, prolapsed cord, limb presentation. Slides 9, 42-49
- **4-9.15** Differentiate the special considerations for multiple births. Slides 42, 50-52
- **4-9.16** Describe special considerations of meconium. Slides 42, 55-56
- **4-9.17** Describe the special considerations of a premature baby. Slides 42, 53-54
- **4-9.18** Discuss the emergency medical care of a patient with a gynecological emergency. Slides 78-81
- **4-9.19** Explain the rationale for understanding the implications of treating two patients (mother and baby). Slides 39-40

(cont.)
*SKILLS

- **4-9.20** Demonstrate the steps to assist in the normal cephalic delivery.
- **4-9.21** Demonstrate necessary care procedures of the fetus as the head appears.
- **4-9.22** Demonstrate infant neonatal procedures.
- **4-9.23** Demonstrate postdelivery care of the infant.
- **4-9.24** Attend to the steps in the delivery of the placenta.
- **4-9.25** Demonstrate the procedures for the following abnormal deliveries: vaginal bleeding, breech birth, prolapsed cord, limb presentation.
- **4-9.26** Demonstrate the steps in the emergency medical care of the mother with excessive bleeding.
- **4-9.27** Demonstrate completing a prehospital care report for patients with obstetrical/gynecological emergencies.
Care of the Mother Before Delivery
Anatomy

- Fetus—developing baby
- Uterus—a muscular organ also called the womb
- Cervix—the neck of the uterus
- Vagina—canal
- Placenta—attached to the wall of the uterus and is composed of maternal and fetal tissues

(cont.)
Anatomy

- Amniotic sac
- Umbilical cord
- Placenta
- Uterus
- Cervix
- Rectum
- Bladder
- Pubic bone
- Vagina
Stages of Pregnancy

* 1st trimester (1st–3rd months)
  - Fetus is being formed

* 2nd trimester (5th month)
  - Uterus grows rapidly, reaching the umbilicus

* 3rd trimester (7th month)
  - Uterus now reaches the epigastrium
Types of Presentation

- Cephalic
  - Normal, head-first birth
- Breech
  - Buttocks or both feet deliver first
Stages of Labor

First stage: beginning of contractions to full cervical dilation

Second stage: baby enters birth canal and is born

Third stage: delivery of the placenta

Click the image to zoom.
Labor Pains

- Ache in lower back
- Pain in lower abdomen, with increased intensity
- Regular intervals
Delivery
Equipment

- Surgical gloves, scissors
- Towels, sheets, baby blanket
- Gauze pads
- Sanitary napkins
- Towel or plastic bag
- Sterile disposable gloves, eye wear
Pre-delivery Evaluation

- Name, age, due date?
- First pregnancy?
- Contractions or pain? Onset?
- Bleeding or discharge?
  - Meconium staining
- Crowning?
Evaluation of Labor Pains

- Contraction interval or frequency
- Contraction time or duration
- Feel the urge to move bowels
- Feel the need to push
- Rock-hard abdomen
Transport Decision

- Based on assessment
  - Birth imminent if contractions less than 2 minutes apart
- Number of prior births
- Distance to hospital
Supine Hypotensive Syndrome

- Dizziness and drop in blood pressure
- Referred to as vena cava compression syndrome
- Decreased blood return leads to drop in BP and shock
Treatment of Hypotension

- Transport on left side
- Pillow or rolled blanket behind back
Preparing for Delivery

- Patient privacy
- Standard Precautions
- Position mother on bed, floor, or ambulance stretcher
- Remove clothing
- Position your assistant
- Position equipment near patient
OB Kit
Delivering the Baby
Normal Delivery

If the amniotic sac has not broken by the time the baby’s head is delivered, use your finger to puncture the membrane.

DO NOT PULL ON THE BABY!
Checking for Umbilical Cord
Delivery Steps

Suction mouth, then nose

Assist with upper shoulders

(cont.)
Delivery Steps

Support the trunk

Support the torso & legs
Delivery Steps

1. Wipe blood and mucus from nose and mouth
2. Suction again
3. Warmth is critical!
4. Wrap baby in warm towel, head lower than trunk
Post Delivery

- Same level as mother
- Wait for pulsating to stop
- Clamp and cut umbilical cord
- Note exact time of birth
Cutting the Umbilical Cord

- Infant warm
- Sterile clamps or umbilical tape
- 1st clamp 10 inches
- 2nd clamp 7 inches
- Cut between clamps
Care of the Newly Born
Care of the Newly Born

- Drying, Warming, Positioning, Suction, Tactile Stimulation
- Oxygen
- Bag-Mask Ventilation
- Chest Compressions
- Intubation
- Medications

BASIC

ADVANCED
Assessment—Newly Born

- Breathing, heart rate, crying, movement, skin color
- Pulse greater than 100 bpm
- Vigorous crying
- Moving extremities
- Blue coloration hands and feet ONLY
- Reassess after 5 minutes
Resuscitation—Newly Born

1. Warmth & clear airway
2. Suction
3. Establish breathing
4. Assess heart rate, respirations & color
Respirations

- Newborn should begin breathing within 30 seconds
- Provide only small puffs of air if using mouth to mask
- Rate of 40 to 60 per minute
- Adequate respirations and a pulse rate greater than 100 per minute
  - Supplemental oxygen
Heart Rate

- Heart rate less than 100 beats per minute
  - Ventilate at a rate of 40 to 60 per minute
- Heart rate is less than 60 beats per minute
  - Initiate chest compressions
- Rate of 120 compressions per minute
- 3:1 ratio of compressions to respirations
- 90 compressions and 30 ventilations per minute
Stimulation

- Gentle but vigorous rubbing of the baby’s back
- Do not hold the baby up by his feet and slap his bottom.
- It is not uncommon for this blue color to remain for the first few minutes.
Cultural Considerations

- Be sensitive to various ethnic, cultural, and religious groups regarding child birth.
- If possible, allow time for family to respond to the birth.
Care of the Mother After Delivery
Delivery of the Placenta

- Labor pains
- Lengthening of cord
- Process may take longer than 30 minutes.
- Transport can be delayed.
- Place in a container and label.
Caring for the Mother

- Observe for delivery of placenta.
- When placenta delivers, place in plastic bag for transport to hospital.

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Control Vaginal Bleeding

- Place sanitary napkin over vagina.
- Position mother’s legs lowered and together.
- Massage the uterus.
- Nurse the baby.
- Treat torn perineum as a wound.
Childbirth Complications
Childbirth Complications

- Breech presentation
- Prolapsed cord
- Limb presentation
- Multiple births
- Premature birth
- Meconium
Breech Presentation

- Most common abnormal delivery
- Buttocks first or both legs first
- Increased risk of prolapsed cord
- Possible meconium staining
Patient Care—Breech Presentation

1. Transport rapidly.
2. Never attempt to pull legs.
3. Provide high-concentration oxygen.
5. If body delivers, support it.
6. Provide care for baby, cord, mother, and placenta.
Prolapsed Cord

- Position mother head down and buttocks raised.
- Provide high-concentration oxygen.
- Check for pulses and wrap cord.
- Insert several fingers into vagina to push up on baby’s head.
- Transport.

(cont.)
Prolapsed Cord

- Elevate hips, administer oxygen, and keep mother warm
- Keep baby’s head away from cord
- Do not attempt to push cord back
- Wrap cord in sterile moist towel
- Transport mother to hospital, continuing pressure on baby’s head
Limb Presentation

- Limb protrudes from vagina
- Commonly a foot or arm
- Cannot be delivered in prehospital
- Rapid transport
Assessment—Limb Presentation

- Look for crowning
- Arm or leg
- Arm and leg together
- Shoulder and arm
Keep baby off cord

Transport mother

Mother in head down position

High-concentration oxygen
Multiple Births

- More than one baby born during single delivery
- Twins not considered complication
- Call for assistance.
Assessment—Multiple Births

- Mother should be aware.
- Abdomen appears unusually large.
- Multiple contractions
Patient Care—Multiple Births

Clamp or tie cord of 1st baby, before the 2nd is born.

2nd baby either before or after placenta

Provide care.
Premature Birth

- Infant weighs < 5-1/2 lbs (2.5 kgs)
- Born before 37th week
- Assessment
  - Full term vs. premature
  - Head is larger
Patient Care—Premature Birth

1. Keep baby warm
2. Keep airway clear
3. Provide ventilations, as needed
4. Watch for umbilical cord bleeding
5. Provide oxygen
6. Avoid contamination
7. Transport in warm ambulance
Meconium

- Results from fetus defecating
- Sign of fetal or maternal distress
- Assessment
  - Amniotic fluid greenish or brownish-yellow
  - Risk for respiratory problems
Patient Care—Meconium

1. Reduce risk of aspiration.
2. Suction mouth then nose.
3. Maintain open airway.
4. Provide ventilations and/or chest compressions.
5. Transport.
Emergencies in Pregnancy

- Pre-birth Bleeding
- Ectopic Pregnancy
- Seizures
- Miscarriage and Abortion
- Trauma
- Stillbirths
Placenta Previa

- Placenta in abnormal position
- Tearing of placenta
- May occur in 3rd trimester
Abruptio Placentae

- Placenta separates from uterine wall
- Partial or complete
- Life threatening
- May occur in the 3rd trimester
Ruptured Uterus

As the uterus enlarges throughout pregnancy, the uterine wall becomes extremely thin and is prone to spontaneous or traumatic rupture.
Signs and Symptoms

- Main sign—profuse bleeding
- Associated abdominal pain
- Shock
- Rapid heartbeat
Patient Care—Excessive Bleeding

Signs of shock — high concentration of oxygen

Sanitary napkin over vagina

Save tissue.
Ectopic Pregnancy

- Normal pregnancy—egg divides in the oviduct (fallopian tube)
- Ectopic pregnancy—egg implanted outside the uterus
- Acute abdominal pain
- Vaginal bleeding
- Rapid and weak pulse (later sign)
- Low blood pressure (a very late sign)

(cont.)
Ectopic Pregnancy

Locations of ectopic pregnancy

- Fallopian tube (90%)
- Ovary
- Abdomen (6%)
- Outside wall of uterus
- Cervix
Patient Care: Ectopic Pregnancy

- Consider the need for immediate transport
- Position the patient for shock
- Care for shock
- Nothing by mouth

Seizures in Pregnancy

- Preeclampsia
  - Swelling of extremities

- Eclampsia
  - Occurs late in pregnancy

- Assessment
  - Elevated BP
  - Excessive weight gain
  - Swelling of face and extremities
  - Headache
Patient Care—Seizures

- Open airway.
- Give high-concentration oxygen.
- Transport.
- Handle gently.
- Maintain warmth.
Miscarriage and Abortion

- Delivery before 28th week
- Called spontaneous abortion or miscarriage
- Induced abortion
  - Results from deliberate actions to stop pregnancy
Signs and Symptoms

- Cramping abdominal pains
  - Associated with 1st stage of labor
- Bleeding
  - Moderate
  - Severe
- Discharge
  - Tissue
  - Blood
Patient Care—Miscarriage

- Vital signs
- Oxygen
- Control bleeding
- Transport
- Save tissues
- Emotional support
Trauma in Pregnancy

- Blunt or penetrating
  - Automobile collisions
  - Falls
  - Assault

- Greatest danger
  - Hemorrhage
  - Shock
Patient Assessment—Trauma

- Pulse 10–15 bpm faster than normal
- Blood volume increased
- Shock
- Consider trauma
- Bleeding or wetness
- Mechanism of injury
Provide resuscitation

Oxygen

Suction

Transport

Emotional support
Stillbirths

- Baby dies in the womb
- Continue resuscitation
- Records
Patient Assessment—Stillbirth

- Obvious blisters
- Foul odor
- Skin or tissue deterioration and discoloration
- Softened head
- Cardiac or pulmonary arrest
Patient Care—Stillbirth

- Obviously dead
  - No resuscitation
- Pulmonary or cardiac arrest
  - Basic life support
- Imminent death
  - Prepare to provide life support.
Gynecological Emergencies
Gynecological Emergencies

- Vaginal bleeding
- Sexual assault
Patient Care—Vaginal Bleeding

1. Standard Precautions
2. Ensure adequate airway
3. Assess for signs of shock
4. High concentration oxygen
5. Transport
Trauma to External Genitalia

- Observe mechanisms of injury
- Signs of severe blood loss and shock
- Control bleeding with direct pressure
- Oxygen
- Professional attitude
- Respect patient privacy
Sexual Assault

- Scene safety
- Identify and treat medical and psychological needs.
- Provide open airway.
- Do not disturb evidence.
- Examine genitals ONLY if severe bleeding.
- Discourage from bathing.
- Report as required.
Review Questions

1. Name and describe the anatomical structures of a woman’s body that are associated with pregnancy.
2. Describe the three stages of labor.
3. Explain how to evaluate and to prepare the mother for delivery.

(cont.)
Review Questions

4. Name, in the order of the inverted pyramid, the steps that may be taken to resuscitate a newborn infant.

5. Name and describe several possible complications of delivery.

6. Name and describe several possible pre-delivery emergencies.
Street Scenes

• What should be the first priority when entering the scene?
• Should ALS assistance be requested?
• What questions should you ask the mother or the father?

(cont.)
Street Scenes

What immediate care should be provided to the newborn?

What care should your partner be giving to the mother?
On arrival, crew met the patient and her husband. They state that the baby is about two weeks early and labor began an hour ago. Labor progressed very quickly and the pains and contractions are very intense and frequent. At the time of the 9-1-1 call, the patient's water broke. Delivery is imminent. A second unit with ALS requested in the event that there are complications, but they were diverted. We assisted with a normal cephalic delivery. The umbilical cord is loosened around the baby's neck and a normal delivery is observed. The baby is suctioned, stimulated, dried, and warmed. The cord is clamped and cut. The baby is placed on the mother's abdomen for transport and warmth. Transport is initiated prior to delivery of the placenta. See Form #107 for PCR on baby.