OBSTETRIC EMERGENCIES

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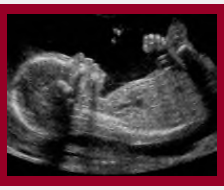

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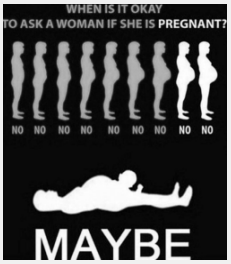

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WHAT YOU DO MAKES A DIFFERENCE FOR MOTHER AND BABY

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OUTLINE

- Normal Pregnancy & Childbirth
- Obstetric Emergencies

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Normal Pregnancy & Childbirth

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PREGNANCY STAGES

Embryonic Development:

Week 4
- Heart begins to beat
- Arm buds appear
- Liver, pancreas, and gall bladder start to form
- Spleen appears

Week 5
- Eyes start to form
- Leg buds appear
- Hands appear as paddles
- Blood begins to circulate
- Facial features start to develop

Week 6
- Lungs start to form
- Fingers and toes form

Week 7
- Hair follicles start to form
- Elbows and toes are visible

Week 8
- Face begins to look human
- External ears start to form

Fetal Development:

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NORMAL PREGNANCY & CHILDBIRTH

Stages of Labor

- **Onset of Labor**:
  - Contractions, cervical dilation
- **Stage 1 - Active Labor**:
  - Cervical dilation (4-10 cm), contractions intensify
- **Stage 2 - Pushing**:
  - Cervical dilation (10 cm), pushing, delivery
- **Stage 3 - Placental Delivery**:
  - Delivery of placenta, uterine contractions
- **Stage 4 - Postpartum**:
  - Initial postpartum period, stabilization

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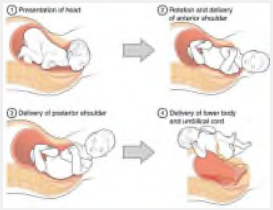
NORMAL PREGNANCY & CHILDBIRTH

Normal Vaginal Delivery Process

- **Fetal Head Descent**: Fetal head moves down birth canal
- **Crowning**: Fetal head visible, imminent delivery
- **Delivery**: Fetal head, body, and placenta delivered
- **Postpartum Care**: Initial assessment, stabilization, hospital care



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NORMAL PREGNANCY & CHILDBIRTH

	Primigravidas (First-Time Mothers)	Multigravidas (Previous Pregnancies)
Labor Duration	**Longer**: typically, 12-24 hours	**Shorter**: typically, 6-12 hours
Pain	may experience **more pain** during labor due to increased anxiety and unfamiliarity with the process.	may experience **less pain** during labor due to increased familiarity with the process
Anxiety	may be **more anxious** and fearful, which can impact labor progress	may be more confident and **less anxious**, which can positively impact labor progress.
Complications	at **higher risk** for complications such as preeclampsia, gestational diabetes, and postpartum hemorrhage	generally **lower risk** for complications such as preeclampsia and gestational diabetes
Fetal Monitoring / Contractions	may need to perform more frequent fetal monitoring to ensure the baby's well-being	may have more efficient contractions, which can lead to faster labor progress

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NORMAL PREGNANCY & CHILDBIRTH

Key Points for Paramedics

- **Assess Labor Progress**:
  - assess labor progress and adjust their care accordingly
- **Pain Management**:
  - be prepared to provide pain management options, such as oxygen, positioning, and emotional support
- **Fetal Monitoring**:
  - perform frequent monitoring (limited to contractions & fetal movement) to ensure the baby's well-being
- **Complications**:
  - be prepared to manage complications

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OBSTERIC EMERGENCIES:

Imminent Delivery in Field

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IF YOU SEE THE FETAL HEAD… DELIVERY IS IMMINENT

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IMMINENT DELIVERY

- Standard medical care
- Delivery of the infant.
- Delayed cord clamping and cutting (~1 minute).
- Delivery of the placenta.
- Transport of the patients

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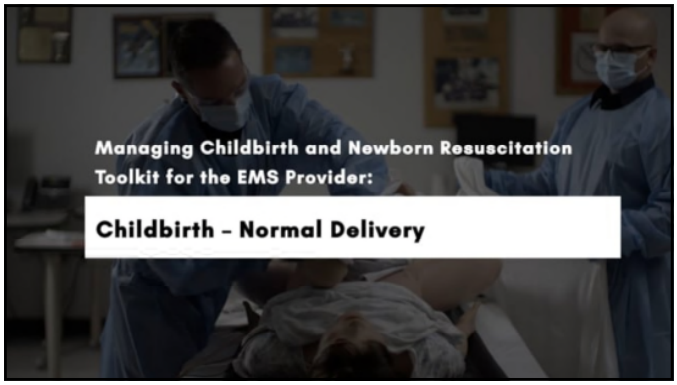

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IMMINENT DELIVERY

- Guide and control but do not try to stop the delivery.
- Don't pull on infant or put traction on cord.
- Massage the fundus of the uterus after delivery of the placenta.
- Wrap up the delivered placenta and take it to the hospital.

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IMMINENT DELIVERY

Source: J.E. Tintinalli, J.S. Stapczynski, O.J. Ma, D.M. Yealy, G.D. Meckler, D.M. Cline: Tintinalli's Emergency Medicine: A Comprehensive Study Guide, 8th Edition
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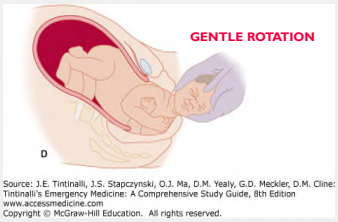
IMMINENT DELIVERY



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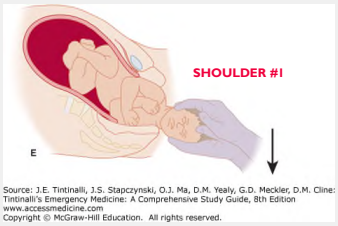
IMMINENT DELIVERY



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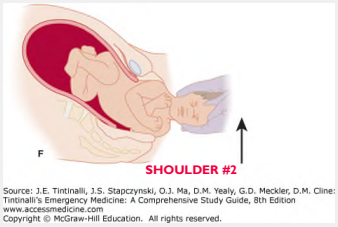
IMMINENT DELIVERY



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OBSTERIC EMERGENCIES:

Prepartum Hemorrhage

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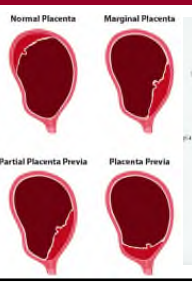
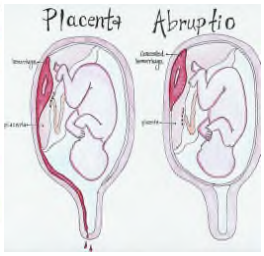
PREPARTUM HEMORRHAGE

Vaginal bleeding during pregnancy, prior to onset of labor

Causes

- **Subchorionic Hematoma**
- **Placenta Previa**: Placenta partially or completely covers internal cervical os
- **Placental Abruption**: Premature separation of placenta from uterus
- **Uterine Rupture**: Tearing of uterine wall
- **Cervical or Vaginal Trauma**: Injury to cervix or vagina





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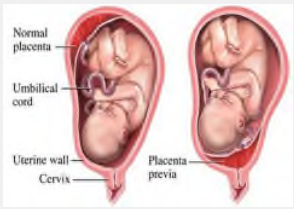
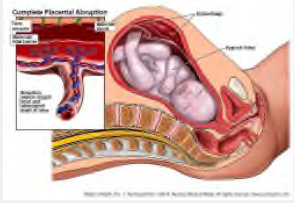
PREPARTUM HEMORRHAGE

PLACENTA PREVIA



PLACENTAL ABRUPTION



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PREPARTUM HEMORRHAGE

Assessment

- **Vital Signs**: Maternal blood pressure, pulse, respiratory rate
- **Fetal Monitoring**: Fetal heart rate, movement, contractions?
- **Pelvic Examination**: fetal presentation, bleeding

Management

- **Provide Oxygen**: Administer oxygen to mother
- **Positioning**: Position mother on left side to increase blood flow to placenta (>20 weeks)
- **Fluid Resuscitation**: Administer IV fluids to maintain avoid maternal hypotension pressure
  - Note: TXA is Contraindicated before childbirth
- **Transport to Hospital**: early notification

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OBSTERIC EMERGENCIES:

Postpartum Hemorrhage

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POSTPARTUM HEMORRHAGE

- Definition: > 500 mL blood loss post-delivery
- Causes:
  - Uterine atony
  - Retained products (placental tissue)
  - Vaginal lacerations/tears
- Standard medical care
  - Massage the fundus of the uterus after delivery of the placenta until firm
  - Consider uterotonic agents per local protocols
  - If hypotensive:
    - 2 Large Bore IVs, NaCl boluses with goal SBP > 90 mmHg
    - Consider TXA
  - Contact receiving facility as early as possible

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OBSTERIC EMERGENCIES:

Preeclampsia / Eclampsia

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PREECLAMPSIA / ECLAMPSIA

- **Preeclampsia**
  - Any pregnant or recently delivered (within 4 weeks) woman with BP >140/90 and marked edema of the face, hands, and/or feet.
  - No definitive cause of preeclampsia.
    - May be a result of abnormal placental and placental blood vessels
    - Removal of these (i.e. childbirth) ends the disease in MOST cases.
- **Eclampsia**
  - Preeclampsia + seizures

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TREATING PREECLAMPSIA / ECLAMPSIA

- Standard medical care
- Preeclampsia
  - Slow & quiet ambulance transport
- Eclampsia:
  - Airway management
  - Benzodiazepine
  - IV Magnesium if >28 weeks pregnant
  - Blood sugar

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OBSTERIC EMERGENCIES:

Prolapsed Cord

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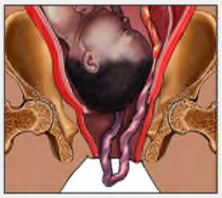
PROLAPSED CORD

- The ideal individual to manage a prolapsed cord is an OB-GYN physician.
- The fetus cannot oxygenate if the cord is compressed.
- Emergent c-section is indicated.
- **But what you do matters! Your actions may save a baby's life or prevent serious neurologic disabilities.**



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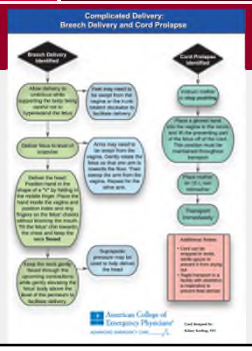
PROLAPSED CORD

- Administer high flow oxygen to the mother (even if sat is 100%)
- Place patient in left lateral recumbent position.
- Elevate presenting part off the umbilical cord by using a gloved hand in vagina.
  - **DO NOT** the compress cord.
- Keep elevated until relieved at hospital
- Call for ALS and initiate transport
- Contact receiving facility as early as possible



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OBSTERIC EMERGENCIES:

Nuchal Cord

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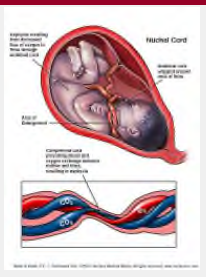
NUCHAL CORD

- Up to 50% of term deliveries, more in preterm deliveries
- If the cord is loose, move it over the infant's head.
- If the cord is tight, apply two clamps in the most accessible area and cut the cord.
- There may be more than 1 loop around the neck



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OBSTERIC EMERGENCIES:

Shoulder Dystocia

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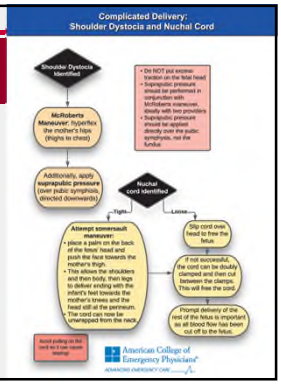
SHOULDER DYSTOCIA

- Administer high flow oxygen to the mother.
- Place patient in left lateral recumbent position.
- Check for prolapsed cord.
- Do not pull on presenting part or attempt delivery
- Contact receiving facility as early as possible



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OBSTERIC EMERGENCIES:

Breech Presentation

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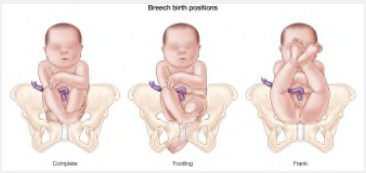
BREECH PRESENTATIONS



Complete (5-10%)

Hips flexed, knees flexed (cannonball position)

Footling (10-30%)

One or both hips extended, foot presenting

Frank (50-70%)

Hips flexed, knees extended (pike position)

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BREECH PRESENTATION

- Administer high flow oxygen to the mother.
- Place patient in left lateral recumbent position.
- Check for prolapsed cord.
- Do not pull on presenting part or attempt delivery.
- Contact receiving facility as early as possible

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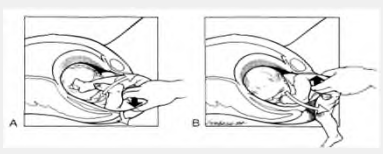
BREECH PRESENTATION

RAPID TRANSPORT TO ED IS NUMBER ONE PRIORITY



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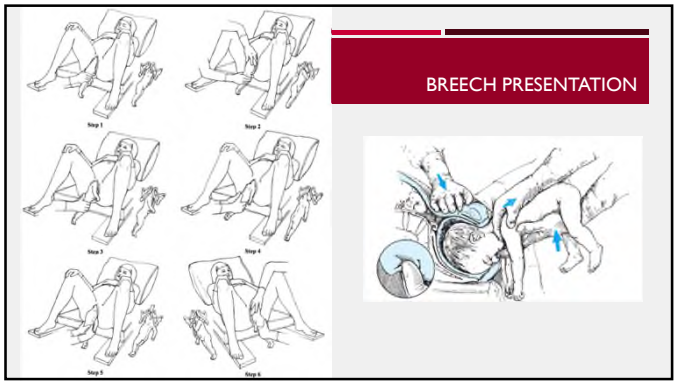
BREECH PRESENTATION

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Managing Childbirth and Newborn Resuscitation Toolkit for the EMS Provider:
Childbirth – Complicated Delivery

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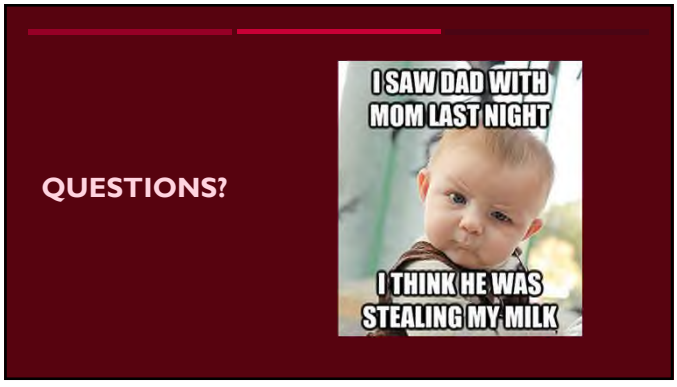
QUESTIONS?
I SAW DAD WITH MOM LAST NIGHT
I THINK HE WAS STEALING MY MILK

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