OBLS | Obstetric Life Support

General OB Emergency Pearls

1. **Assessment and Preparation:**
    a. Always assess **gestational age**—if unknown, check the fundal height (at or above the umbilicus suggests >20 weeks).
    b. Pregnant patients in their third trimester should always be transported in the **left lateral position** or with the stretcher tilted to avoid **supine hypotensive syndrome**.
    c. Establish **early IV access** with large bore catheters, when possible, especially in patients at risk for significant bleeding or shock.

2. **Communication:**
    a. Provide a **clear and concise SBAR (Situation, Background, Assessment, Recommendation)** report to the receiving facility, especially in time-sensitive emergencies.
    b. Notify the hospital early for **OB-specific alerts** (e.g., prolapsed cord, breech presentation, or postpartum hemorrhage).

3. **Delivery Readiness:**
    a. Always carry a **basic OB kit**: sterile gloves, clamps, scissors, bulb syringe, and a blanket for the newborn.
    b. Be prepared to manage **unexpected precipitous deliveries**—most deliveries are uncomplicated but require calm, controlled actions.

4. **Fetal and Maternal Monitoring:**
    a. Continuously monitor the mother's vital signs—**hypotension and tachycardia** can signal hemorrhage or shock.
    b. Be attentive to fetal well-being during transport by monitoring fetal movement if possible.

5. **Key Medications:**
    a. **Oxygen:** Use only if maternal oxygen saturation is <95%.
    b. **TXA:** Administer early in cases of significant bleeding (e.g., postpartum hemorrhage or trauma).

6. **Calm and Reassurance:**
    a. Obstetric emergencies can be incredibly stressful for patients and families. Keep the patient **calm and informed** at every step to **promote cooperation** and **reduce anxiety**.

Key Maneuvers for Common OB Emergencies:

Prolapsed Cord:

⇒ Relieve cord compression with a sterile, gloved hand

⇒ Do not touch or handle the cord unnecessarily.

Shoulder Dystocia:

⇒ Use the **McRoberts maneuver** and suprapubic pressure

⇒ escalate to advanced maneuvers if needed.

Hemorrhage:

⇒ Administer fluids aggressively and consider TXA and blood products if available and indicated.

⇒ Postpartum: Uterine massage is a critical intervention to control bleeding.

Breech Delivery:

⇒ Allow the mother to push naturally with contractions. **Do NOT pull-on fetal parts.** If feet first, cervix may not be fully dilated; tell mother NOT to push. If buttock first, can encourage pushing

⇒ Once the baby has been delivered to the level of the scapula, gently rotate the baby so the back is facing **upward** (if not already in that position). Support the baby by holding the pelvic bones without applying traction.

⇒ With a sterile gloved hand, gently run your fingers along the humerus to the elbow, sweeping the arm across the baby's chest to deliver it.

⇒ Rotate the baby **180 degrees** and repeat the same maneuver to deliver the opposite arm.

Perform the **Mauriceau-Smellie-Veit maneuver**:

1. Use one hand to flex the head for delivery by gently applying pressure to the infant's **maxilla** (avoid pressure on the eyes or inside the mouth).
2. Curve the fingers of your opposite hand over the baby's shoulders to support and guide the head.
3. If an assistant is available, they should apply **suprapubic pressure** (using one fist to press downward immediately above the pubic symphysis) to aid fetal head flexion and delivery

Nuchal Cord:

⇒ Attempt to loosen and slip it over the baby's head. If not possible, clamp and cut.

Neonatal Care:

⇒ **Dry and warm** the baby immediately after delivery.

⇒ **Skin-to-skin contact** with the mother promotes bonding and helps regulate the baby's temperature.

⇒ **Clear the airway** only if there is visible obstruction or difficulty breathing; routine suctioning is no longer recommended.

Transport Considerations:

⇒ Time is critical in OB emergencies such as **placental abruption**, **prolapsed cord**, or **eclampsia**—transport as quickly and safely as possible.

⇒ Consider **air transport** for rural or prolonged transport times to a facility capable of handling high-risk obstetrics.

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Fundal Height and Gestational Age

- **Definition:** Fundal height is the distance (in centimeters) from the top of the pubic symphysis to the top of the uterus (fundus). It is a simple, quick way to estimate gestational age when an ultrasound or clear dating of pregnancy is unavailable.

Key Guidelines for EMS:

1. **How to Measure Fundal Height:**
    a. Use a measuring tape to measure from the **pubic symphysis** (bony prominence at the front of the pelvis) to the **top of the uterus** (feel for the firm, rounded structure).
    b. Measure in **centimeters**.
    c. Ensure the patient is lying supine (if tolerated) or slightly tilted to the left to avoid compressing the inferior vena cava.
2. **Gestational Milestones Based on Fundal Height:**
    a. **At 20 weeks:** The fundus is typically at the **level of the umbilicus**.
    b. **After 20 weeks:** Each additional centimeter above the umbilicus generally correlates with one additional week of gestation.
        i. Example: Fundus **2 cm above the umbilicus** = ~22 weeks' gestation.
3. **Pre-20 Weeks Gestation:**
    a. The uterus may still be below the level of the umbilicus.
        i. **12 weeks:** Fundus is palpable just above the **pubic symphysis**.
        ii. **16 weeks:** Fundus is approximately halfway between the **pubic symphysis and the umbilicus**.

Quick Reference for Fundal Height

Fundal Height (cm)	Gestational Age (Weeks)
12 cm	~12 weeks (just above pubic symphysis)
16 cm	~16 weeks (midway to umbilicus)
20 cm	~20 weeks (at the umbilicus)
24 cm	~24 weeks (4 cm above umbilicus)
28 cm	~28 weeks (8 cm above umbilicus)
32 cm	~32 weeks
36 cm	~36 weeks (near the xiphoid process)

Cautions in Fundal Height Measurement:

- **Accuracy:**
  - Fundal height estimation is most accurate between **20-36 weeks**.
  - Beyond 36 weeks, the fetus may drop (lightening), altering fundal height.
- **Multiple Gestations or Complications:**
  - Larger-than-expected fundal height may suggest **twins**, **polyhydramnios**, or **macrosomia**.
  - Smaller-than-expected fundal height may indicate **intrauterine growth restriction (IUGR)** or **oligohydramnios**.
- **Obesity or Full Bladder:**
  - Increased maternal body mass index (BMI) or a full bladder may obscure fundal palpation or alter measurement.

Quick Reference for Vital Sign Changes by Trimester

	First Trimester	Second Trimester	Third Trimester	Postpartum ≤14 days	Postpartum >14 days
Systolic blood pressure (mmHg)	95 - 138	96 - 136	102 - 144	79 - 121	90 - 120
Diastolic blood pressure (mmHg)	56 - 87	57 - 87	62 - 95	61 - 94	60 - 80
Pulse	63 - 105	67 - 113	65 - 114	59 – 110	60 - 100
Respirations	8 - 24	8 - 24	8 - 24	10 – 22	12 - 20
Oxygen Saturation (%)	94 - 99	93 - 99	93 - 99	93 – 98	95 - 100

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