Just-In-Time Learning Series:

ESSENTIALS ON THE CARE FOR THE PREGNANT PATIENT IN A DISASTER SETTING

Region 8 MOUNTAIN PLAINS Regional Disaster Health Response System

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PREGNANCY & TRAUMA:

- Tachycardia is often a late sign of trauma in the pregnant patient, instead the fetal heart rate may be an early indicator of distress.
- To avoid supine hypotension syndrome at ≥ 20 weeks gestation, place the patient on left lateral recumbent position *or* manually displace the uterus off the vena cava.
- Maintain patients O2 saturation >95%.
  - If a chest tube is needed, go 2 intercostal spaces higher than normal.
- Give Rhogam to Rh- patients within 72 hours of trauma.

Mother/fetus stable: Tocomonitor for 4 hours.
Mother stable/fetus unstable & viable: C-Section.
Mother unstable: Identify and treat mothers injuries first.

If the mother is experiencing cardiac arrest:

- **Gestational age ≥ 24 weeks:** Consider resuscitative hysterotomy. Begin within 4 minutes of arrest to deliver baby 5 mins after pulse is lost.
- **Gestational age unknown, uterus at umbilicus (20 weeks):** Mother may benefit from resuscitative hysterotomy when in arrest.

PHYSIOLOGIC CHANGES IN PREGNANCY

Pregnancy is a high volume, high output, low resistance state.
Uterus is out of the pelvis at 12 weeks, Uterus is at umbilicus at 20 weeks.

Cardiovascular	Peripheral Vasodilation → BP ↓; SV ↑ + HR ↑ = Cardiac Output ↑
Hematologic	Plasma volume ↑ > red blood cell volume ↑ → Physiologic anemia of pregnancy
Pulmonary	TV ↑, Minute Ventilation ↑, FRC ↓; PCO2 27-32mmHg. O2 consumption ↑, O2 reserves ↓
Renal	↑ GFR, ↓ Cr
Gastrointestinal	↓ Gastric emptying, ↓ esophageal sphincter tone

DELIVERY

(Delayed Cord Clamping: 30-60 seconds after delivery)

Nuchal Cord	Reduce over head, reduce over shoulder, Somersault maneuver
Should Dystocia	Deliver body within 5 min of head. Try each maneuver for 30 seconds: - McRoberts: leg hyperflexion and suprapubic pressure - Rubin: push baby's anterior shoulder towards chest - Woods Corkscrew: rotate baby 180 degrees Posterior arm delivery
Breech	Don't assist until fetus delivered to umbilicus. Deliver legs and once the scapulas are visible deliver the arms. Lay baby's body on dominant arm with middle and index fingers on baby's maxilla, non-dominant hand supports the neck, helper provides suprapubic pressure, elevate baby's body up to 45 degrees to deliver head.
Cord Prolapse	Elevate presenting part, keep cord warm and moist, deliver by c-section
Postpartum Hemorrhage	4 Ts (Tone, Trauma, Tissue, Thrombin): oxytocin, other uterotonics, TXA 1gm, fundal massage, bimanual massage, intrauterine balloon, repair lacerations, reduce uterine prolapse, remove retained products, resuscitate, OR/IR

PREGNANCY EMERGENCIES

Peripartum Cardiomyopathy	Oxygen, diuretics, afterload reduction (hydralazine + isosorbide dinitrate), inotropes and vasopressors if needed (dobutamine, milrinone, norepinephrine). Chronic therapies → diuretics, beta blockers, and potentially digoxin. Avoid ACE inhibitors.
Preeclampsia	Treat hypertension (labetalol, hydralazine, or nifedipine), magnesium to prevent seizures, corticosteroids if < 34 weeks for lung maturation; delivery if ≥37 weeks or ≥34weeks with severe features
Eclampsia	Magnesium or benzodiazepines, delivery

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