Obstetrical Emergency

History
- Past medical history
- Hypertension meds
- Prenatal care
- Prior pregnancies / births
- Gravida / Para

Signs and Symptoms
- Vaginal bleeding
- Abdominal pain
- Seizures
- Hypertension
- Severe headache
- Visual changes
- Edema of hands and face

Differential
- Pre-eclampsia / Eclampsia
- Placenta previa
- Placenta abruptio
- Spontaneous abortion

Known or Suspected Pregnancy
Missed Period
Vaginal Bleeding
Abdominal Pain

NO → Exit to Appropriate Protocol(s)

YES →

- Left lateral recumbant position
- Blood Glucose Analysis Procedure
- IV or IO Access Protocol UP 6
- P — Cardiac Monior
- Abdominal Pain Vomiting and Diarrhea Protocol UP 3 ***if indicated***
- Diabetic Protocol AM 2/ PM 2 ***if indicated***
- Hypotension/ Shock Protocol AM 5/ PM 3 ***if indicated***

Uncontrolled vaginal hemorrhage with signs of shock

YES → P — **TXA 1 gm over 10 minutes IV / IO** *See Pearls*

NO ↓

Seizure Activity

YES → P —

MIDAZOLAM
2 – 2.5 mg IV / IO,
5 mg IM / IN
May repeat every 3 to 5 minutes
(Maximum 10 mg)

MAGNESIUM SULFATE
2 g IV / IO
Over 2 – 3 minutes
May repeat x 1

NO ↓

Childbirth / Labor Protocol AO 1 **if indicated**

Monitor and Reassess

Notify Destination or Contact Medical Control

Adult Obstetric Protocol Section

Obstetrical Emergency

Preeclampsia & Eclampsia:

- BP > 140/90 is MODERATE.
- BP > 160 systolic is CRITICAL.
- Vaginal bleeding requiring > 1 absorbent pad per hour for more than 6 hours is EMERGENT.
- Preeclampsia and Eclampsia can occur for up to 6 weeks after delivery.
- If decreased respiratory drive is noted after Midazolam or Magnesium Sulfate administration, assist ventilations.

Spontaneous Abortion:

- Vaginal bleeding for 4-6 hours is normal.

Ectopic Pregnancy:

- Extreme pain could indicate infection or retained tissue. Assess for signs of sepsis (hypotension, tachycardia, elevated temperature).

Post Delivery:

Vaginal bleeding can occur for up to 6 weeks.
Delayed postpartum hemorrhage can occur.
Episiotomy and c-section complications can occur.
Fever and infections are common.

MAGNESIUM SULFATE INFUSION INSTRUCTIONS

DOSE: 2 g infused over 2-3 minutes
Packaged 4 g/100 mL BAG or 5 g/10 mL VIAL

- Remove 50 mL (2 g) from 100 mL (4 g) bag of Magnesium Sulfate
- Reserve withdrawn 50 mL (2 g) in case repeat dose is needed

OR

- Withdraw 2 g from vial and inject into 50 mL Normal Saline bag
- Using a 10 gtt IV set, administer wide open

TXA ADMINISTRATION GUIDELINES

INDICATIONS:

- < 3 HOURS from time of injury
- SBP < 90 mmHg **OR** HR > 110 bpm
- Obvious significant bleeding, penetrating trauma, multiple trauma

CONTRAINDICATIONS:

- Patients < 12 years old
- Recent PE/DVT
- Evidence of DIC

TXA ADMINISTRATION INSTRUCTIONS

DOSE: TXA 1 g over 10 minutes

- Mix 10 mL vial of TXA (1 gram) in 50 mL bag of Normal Saline (Total 60 ml)
- Utilize a 10 gtt set and administer 60 gtt/min

Pearls

- **Recommended Exam: Mental Status, Abdomen, Heart, Lungs, Neuro**
- **Midazolam 5 – 10 mg IM is effective in termination of seizures. Do not delay IM administration with difficult or no IV or IO access. With active seizure activity, benzodiazepine is a priority over magnesium sulfate.**
- **Magnesium Sulfate should be administered as quickly as possible. May cause hypotension and decreased respiratory drive, but more likely in doses higher than 6 gm.**
- **Any pregnant patient involved in a MVC should be seen immediately by a physician for evaluation. Greater than 20 weeks generally require 4 to 6 hours of fetal monitoring. DO NOT suggest the patient needs an ultrasound but emphasize patient needs 4 to 6 hours of fetal monitoring.**
- **Tranexamic Acid (TXA):**
  Postpartum hemorrhage: NOT indicated and should NOT be administered where birth occurred > 3 hours prior to EMS arrival.
  Vaginal hemorrhage (not associated with pregnancy): May give with uncontrolled hemorrhage and/ or signs of shock.
- **Ectopic pregnancy:**
  Implantation of fertilized egg outside the uterus, commonly in or on the fallopian tube. As fetus grows, rupture may occur. Vaginal bleeding may or may not be present. Many women with ectopic pregnancy do not know they are pregnant. Usually occurs within 5 to 10 weeks of implantation. Maintain high index of suspicion with women of childbearing age experiencing abdominal pain.
- **Preeclampsia:**
  Occurs in about 6% of pregnancies. Defined by hypertension and protein in the urine. RUQ pain, epigastric pain, N/V, visual disturbances, headache, and hyperreflexia are common symptoms.
  In the setting of pregnancy, hypertension is defined as a BP > 140 systolic or > 90 diastolic mmHg, or a relative increase of 30 systolic and 20 diastolic from the patient's normal (pre-pregnancy) blood pressure.
  Risk factors: < 20 years of age, first pregnancy, multi-gestational pregnancy, gestational diabetes, obesity, personal or family history of gestational hypertension.
- **Eclampsia:**
  Seizures occurring in the context of preeclampsia. Remember, women may not have been diagnosed with preeclampsia.
- Maintain patient in a left lateral position, right side up 10 - 20° to minimize risk of supine hypotensive syndrome.
- Ask patient to quantify bleeding - number of pads used per hour.