Treatment Protocol: PREGNANCY COMPLICATION — Ref. No. 1217

Base Hospital Contact: Required for vaginal bleeding at > 20 weeks pregnancy or newborn delivery. ❶❷❸

1. Do not delay transport for treatment if suspected eclampsia; Manage delivery en route
2. Assess airway and initiate basic and/or advanced airway maneuvers prn *(MCG 1302)*
3. Administer **Oxygen** prn *(MCG 1302)*
4. Establish vascular access *(MCG 1375)*
   Vascular access should not take precedence over controlled delivery or emergency transport
5. For poor perfusion *(MCG 1355)*:
   Normal Saline 1L IV rapid infusion
   Reassess after each 250 mL increment for evidence of volume overload (pulmonary edema); stop infusion if pulmonary edema develops
6. If crown is showing with amniotic sac intact, pinch sac and twist the membrane to rupture

BREECH DELIVERY

7. Support presenting part and allow newborn to deliver
8. If head does not deliver, place gloved hand inside mother and form "V" formed with fingers by baby's face to provide an opening for the airway

PROLAPSED CORD

9. Manually elevate presenting fetal part off the umbilical cord; maintain elevation of the presenting part until transfer of care❹
10. Wrap cord with moist gauze

NUCHAL CORD

11. If nuchal cord is loose attempt slipping the cord over the head prior to delivery
12. If the cord is too tight to easily slip over the head, clamp the cord in two places 1 inch apart and cut the cord with scissors

SHOULDER DYSTOCIA

13. Perform McRoberts maneuver with suprapubic pressure in order to deliver the anterior shoulder ❺

MATERNAL HYPERTENSION (BP ≥ 140/90mmHg) / ECLAMPSIA ❻

14. Place mother in left lateral decubitus position

15. For seizure, treat in conjunction with *TP 1231, Seizure*

POST-PARTUM HEMORRHAGE ❼

18. Massage the mother's lower abdomen (fundal massage)

19. Establish 2 IVs, large bore catheter (16g or 18g) preferred

20. Administer **Normal Saline 1L IV rapid infusion**
    Repeat x1 for ongoing hemorrhage and/or poor perfusion
    Reassess after each 250mL increment for evidence of volume overload (pulmonary edema); stop infusion if pulmonary edema develops

21. For patients within 3 hours post delivery with ongoing bleeding and one or more of the following:
    Systolic blood pressure (SBP) <90 mmHg, OR
    Heart rate > SBP, OR
    Estimated blood loss >500mL

    Tranexamic Acid (TXA) 1 gram in 50 or 100mL Normal Saline IV/IO, infuse over 10 minutes

SPECIAL CONSIDERATIONS

❶ This protocol was intended for complications of pregnancy at the time of delivery; if patient is known to be pregnant and has complaints not associated with labor or delivery treat per *TP 1202, General Medical* or most applicable protocol.

❷ If the patient has vaginal bleeding associated with known pregnancy > 20 weeks, Contact Base and communicate signs and symptoms so that the receiving hospital can pre-notify OB consultants as needed.

❸ Any delivery after the first trimester (12 weeks) should be considered childbirth for the purposes of this treatment protocol and paramedics should contact Base to discuss the management and transport. In general, delivery prior to 20 weeks gestation is nonviable and does not require resuscitation. However, dates can be incorrectly estimated, therefore, Base Contact is strongly encouraged. Any *potentially viable birth* should be resuscitated in the field and transported to a perinatal center that is also an EDAP (with a NICU if ≤34 weeks gestation). Births prior to 20 weeks do not necessarily require specialty center care and can be transported to the MAR.

❹ In addition to manually elevating the presenting part from the umbilical cord, placing the patient in Trendelenburg position during transport can help to elevate the presenting part off the cord to maintain blood flow to the fetus. Do not attempt to push a prolapsed cord back in.

❺ Shoulder dystocia is inability to deliver the anterior shoulder, which usually occurs in large newborns. If delivery fails to progress after head delivers, hyperflex mother's hips tightly in knee to chest position (McRoberts maneuver) and apply firm suprapubic pressure in attempt to dislodge anterior shoulder.

❻ HTN in a pregnant or recently post-partum patient is a sign of pre-eclampsia, which required immediate emergency and obstetric care. Additional signs of pre-eclampsia are edema and headache which can progress to seizures (eclampsia). Patients who are ≥ 20 weeks pregnant or ≤ 6 weeks post-partum with hypertension (BP ≥ 140/90mmHg) should be transported to a Perinatal Center for evaluation.

❼ Some bleeding is normal during delivery, typically up to 500mL. Bleeding is reduced with fundal massage after placental delivery, which promotes contraction of the uterus. Post-partum hemorrhage is typically defined as blood loss with signs of poor perfusion and/or cumulative blood loss ≥1000mLs, however, if despite fundal massage the estimated blood loss is > 500 mLs and there is ongoing hemorrhage, initiate TXA and fluids concurrently.