Obstetric Hemorrhage Protocol

Complete all steps in prior stages plus current stage regardless of stage in which the patient presents.

Postpartum hemorrhage is defined as cumulative blood loss of greater than or equal to 1,000mL or blood loss accompanied by signs or symptoms of hypovolemia within 24 hours. However, blood loss >500mL in a vaginal delivery is abnormal, and should be investigated and managed as outlined in Stage 1.

Recognition:
- Call for assistance (Charge RN, Attending, R4, baby nurse)
- Designate: Team leader ___________ Checklist reader/recorder Primary RN
- Announce: Cumulative blood loss Vital signs Determine stage

Stage 1: Blood loss >1000mL after delivery with normal vital signs and lab values. Vaginal delivery 500-999mL should be treated as in Stage 1.

Initial Steps:
- Ensure 16G or 18G IV Access
- Increase IV fluid (crystalloid without oxytocin)
- Insert indwelling urinary catheter
- Fundal massage

Medications:
- Ensure appropriate medications given patient history
- Increase oxytocin, additional uterotonics, consider TXA

Blood Bank:
- Confirm active type and screen and consider crossmatch of 2 units PRBCs

Action:
- Determine etiology and treat
- Prepare OR, if clinically indicated (optimize visualization/examination)
- Hemorrhage cart to the room

Stage 2: Continued Bleeding (EBL up to 1500mL OR > 2 uterotonics) with normal vital signs and lab values

Initial Steps:
- Mobilize additional help – OB STAT page
- Place 2nd IV (16-18G)
- Draw STAT labs (CBC, Coags, Fibrinogen)
- Prepare OR

Medications:
- Continue Stage 1 medications; TXA if not given already

Blood Bank:
- 2 units PRBCs (DO NOT wait for labs. Transfuse per clinical signs/symptoms) – send designee
- Thaw 2 units FFP
- Send designee to blood band

Action:
- For uterine atony --> consider uterine balloon, possible surgical interventions
- Consider moving patient to OR
- Escalate therapy with goal of hemostasis

Possible interventions:
- Bakri balloon
- Compression suture/B-Lynch suture
- Uterine artery ligation
- Hysterectomy

Huddle and move to Stage 3 if continued blood loss and/or abnormal VS.
Stage 3: Continued Bleeding (EBL > 1500mL OR > 2 RBCs given OR at risk for occult bleeding/coagulopathy OR any patient with abnormal signs/labs/oliguria)

**Initial Steps:**
- Mobilize additional help – ICU, gyn onc
- Move to OR (if not there already)
- Announce clinical status
- Outline and communicate plan

**Medications:**
- Continue medications, consider additional dose of TXA

**Blood Bank:**
- Initiate Massive Transfusion Protocol

**Action:**
- Achieve hemostasis, intervention based on etiology
- Escalate interventions

**Medications:**
- Oxytocin (Pitocin): 20 units/500 ml
- Methylergonovine (Methergine): 0.2 milligrams IM (may repeat); Avoid with hypertension
- 15-methyl PGF₂α (Hemabate, Carboprost): 250 micrograms IM (may repeat in q15 minutes, maximum 8 doses) Avoid with asthma
- Misoprostol (Cytotec): 800 micrograms PO or 800 micrograms SL
- Tranexamic Acid (TXA) 1 gram IV over 10 min (add 1 gram vial to 100mL NS & give over 10 min; may be repeated once after 30 min)

**Possible interventions:**
- Bakri balloon
- Compression suture/B-Lynch suture
- Uterine artery ligation
- Hysterectomy

Stage 4: Cardiovascular Collapse (massive hemorrhage, profound hypovolemic shock, or amniotic fluid embolism)

**Initial Step:**
- Mobilize additional resources

**Medications:**
- ACLS

**Blood Bank:**
- Simultaneous aggressive massive transfusion

**Action:**
- Immediate surgical intervention to ensure hemostasis (hysterectomy)

**Post-Hemorrhage Management**
- Determine disposition of patient
- Debrief with the whole obstetric care team
- Debrief with patient and family
- Document

Adapted from Safe Motherhood Initiative, ACOG (2019)