## Stage 0

**Every woman in labor/giving birth**

- Assess every woman for risk factors for hemorrhage
- Measure cumulative quantitative blood loss on every birth

### Active Management

- **3rd Stage:**
  - Oxytocin IV infusion or 10u IM
  - Fundal Massage - vigorous, 15 seconds min.

- If Medium Risk: T & Scr
- If High Risk: T&C 2 U
- If Positive Antibody Screen (prenatal or current, exclude low level anti-D from RhoGam): T&C 2 U

## Stage 1

**Blood loss: > 500ml vaginal or >1000 ml Cesarean, or VS changes (by >15% or HR ≥ 110, BP ≤ 85/45, O2 sat <95%)**

### Stage 1 is short: activate hemorrhage protocol, initiate preparations and give Methergine IM.

- Activate OB Hemorrhage Protocol and Checklist
- Notify Charge nurse, OB/CNM, Anesthesia
- VS, O2 Sat q5'
- Record cumulative blood loss q5-15'
- Weigh bloody materials
- Careful inspection with good exposure of vaginal walls, cervix, uterine cavity, placenta

### Blood Bank

- IV Access: at least 18gaage
- Increase IV fluid (LR) and Oxytocin rate, and repeat fundal massage
- Methergine 0.2mg IM (if not hypertensive)

- T&C 2 Units PRBCs (if not already done)

## Stage 2

**Continued bleeding with total blood loss under 1500ml**

### OB back to bedside (if not already there)

- **Extra help:** 2nd OB, Rapid Response Team (per hospital), assign roles
- VS & cumulative blood loss q 5-10 min
- Weigh bloody materials
- Complete evaluation of vaginal wall, cervix, placenta, uterine cavity
- Send additional labs, including DIC panel
- If in Postpartum: Move to L&D/OR
- Evaluate for special cases:
  - Uterine Inversion
  - Amn. Fluid Embolism

### Assessments

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### Meds/Procedures

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<th>2nd Level Uterotonic Drugs:</th>
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<td>• Hemabate 250 mcg IM or</td>
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<td>• Misoprostol 800 mcg SL</td>
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### Transfuse Aggressively Massive Hemorrhage Pack

- Near 1:1 PRBC:FFP
- 1 PLT apheresis pack per 4-6 units PRBCs

### Unresponsive Coagulopathy:

After 8-10 units PRBCs and full coagulation factor replacement: may consult re Factor VIII risk/benefit

## Stage 3

**Total blood loss over 1500ml, or >2 units PRBCs given or VS unstable or suspicion of DIC**

### Stage 3 is focused on the Massive Transfusion protocol and invasive surgical approaches for control of bleeding.

- Mobilize team
  - Advanced GYN surgeon
  - 2nd Anesthesia Provider
  - OR staff
  - Adult Intensivist
  - Repeat labs including coags and ABG’s
  - Central line
  - Social Worker/ family support

### Assessments

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  - Advanced GYN surgeon
  - 2nd Anesthesia Provider
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### Blood Bank

- Notify Blood Bank of OB Hemorrhage
- Bring 2 Units PRBCs to bedside, transfuse per clinical signs – do not wait for lab values
- Use blood warmer for transfusion
- Consider thawing 2 FFP (takes 35+min), use if transfusing > 2u PRBCs
- Determine availability of additional RBCs and other Coag products

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