Figure. Hemorrhage Stages

<table>
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<th>Stage 0</th>
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| Stage 0 focuses on risk assessment and active management of the third stage. | • Assess every woman for risk factors for hemorrhage. | • Active Management 3rd Stage:  
  - Oxytocin IV infusion or 10u IM  
  - Fundal Massage: vigorous, 15 seconds min. | • If Medium Risk: T&Sc  
  • If High Risk: T&C 2 U  
  • If Positive Antibody Screen (prenatal or current), exclude low level anti-D from RhGamm; T&C 2 U |
| Blood loss: >500 ml 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 Charged nurse, Anesthesia Provider  
  • VS, O2 Sat q5  
  • Calculate cumulative blood loss q5-15'  
  • Weigh bloody materials  
  • Careful inspection with good exposure of vaginal walls, cervix, uterine cavity, placenta | • IV Access: at least 18gauge  
  • Increase Oxytocin rate, and repeat fundal massage  
  • Methergine 0.2mg IM (if not hypertensive)  
  • May repeat if good response to first dose, BUT otherwise move on to 2nd level uterotonics drug (see below)  
  • Empty bladder: straight cath or place Foley with uterine | • 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 LSD/OR  
  • Evaluate for special cases:  
  - Litterine Inversion  
  - Amn. Fluid Embolism  
  • 2nd Level Uterotonic Drugs:  
  - Hemabate 250 mcg IM q30  
  - Misoprostol 800-1000 mcg PR  
  • 2nd IV Access (at least 18gauge)  
  • Bimanual massage  
  • Vaginal Birth: (typical order)  
  - Move to OR  
  - Repair any tears  
  - D&C: no retained placenta  
  - Place intrauterine balloon  
  - Selective Embolization (Interventional Radiology)  
  • Cesarean Birth: (still intra-op)  
  - Inspect broad lig, posterior uterus and retained placenta  
  - B-Lynch Suture  
  - Place intrauterine balloon  
  • 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 | |
| Stage 3: Total blood loss over 1500ml, or >2 units PRBCs given or VS unstable or suspicion of DIC | • 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  
  • Activate Massive Hemorrhage Protocol  
  • Laparatomy:  
  - B-Lynch Suture  
  - Uterine Artery Ligation  
  - Hysterectomy  
  • Patient support  
  - Fluid warmer  
  - Upper body warming device  
  - Sequential compression stockings  | Transfuse Aggressively Massive Hemorrhage Pack  
  - Near 1:1 PRBC:FFP  
  - 1 PLTpheresis pack per 6units PRBCs  
  - Unresponsive Coagulopathy:  
  - After 10 units PRBCs and full coagulation factor replacement may consider FFP after | |

This Project was supported by funds received from the State of California, Department of Public Health, Center for Family Health, Maternal, Child and Adolescent Health Division.