

## Postpartum Hemorrhage from Vaginal Delivery Checklist

Women's Health & Education Center (WHEC)

For hemorrhage of more than 500 mL estimated blood loss, but less than 1,000 mL, from vaginal delivery:

- Start intravenous (IV) line if not present;
- Increase IV fluid rate;
- Increase IV oxytocin by increasing infusion rate, or by increasing concentration to 40-80 international units/L;
- Empty bladder;
- Conduct vigorous fundal massage;
- Administer 0.2 mg of methyl-ergonovine intramuscularly every 2-4 hours if patient is not hypertensive;
- Type and crossmatch 2 units packed red blood cells;
- Evaluate for retained product of conception, lacerations, uterine atony, and uterine inversion;
- Administer 0.25 mg of 15-methyl prostaglandin F<sub>2α</sub> intramyometrially or intramuscularly (may repeat every 15-90 minutes for a maximum of eight doses), or 800-1,000 microgram rectally (1).

If no response by 1,000 mL estimated blood loss:

- Call for help – second obstetrician, anesthesia, and blood bank;
- Order stat complete blood cell count and coagulation studies, including hematocrit, platelets, fibrinogen, and prothrombin time and partial thromboplastin time;
- Begin blood product transfusion based on clinical signs and judgment;
- Establish second large-bore IV line;
- Administer oxygen as needed to maintain oxygen saturation greater than 95% (2);
- Consider move to operating room for dilatation and curettage or laceration repair;
- Consider intrauterine balloon or uterine packing;
- Consider warm blanket to prevent hypothermia;
- Type and crossmatch 2 to 4 additional units packed red blood cells and thaw 2 to 4 units fresh frozen plasma;
- Place Foley catheter with urometer.

If no response by 1,500 mL estimated blood loss:

- Initiate massive transfusion protocol;
- Consider transfusion protocol of packed red blood cells, fresh frozen plasma, and platelets at a ratio of 1:1:1;
- Consider uterine artery ligation, B-Lynch sutures, or hysterectomy;

### References

1. Postpartum hemorrhage from vaginal delivery. Patient safety checklist no. 10. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2013;121:1151-1152
2. Lyndon A, Lagrew D, Shields L, Melsop K, Bingham D, Main E, editors. Improving health care response to obstetric hemorrhage: a California toolkit to transform maternity care. Stanford (CA): California Maternity Quality care Collaborative; 2010