LEE MEMORIAL HEALTH SYSTEM

POLICY & PROCEDURE MANUAL

OBSTETRIC HEMORRHAGE CARE GUIDELINES	**LOCATOR NUMBER**

TYPE

☐ **System-wide -** A formal statement of values, intents (policy), and expectations (procedure) that applies to every employee throughout the System.

☐ **Multidisciplinary** - A formal statement of values, intents (policy), and expectations (procedure) that applies to more than one discipline and is usually of a clinical nature. **Check below all areas to which this applies.**

☐ **Departmental -** A formal statement of values, intents (policy), and expectations (procedure) exclusive to a particular department or group of people within a department at one or multiple locations that does not impact any other area.

CHAPTER:

TAB:

POLICY #:

Disciplines / locations to which this multidisciplinary policy applies:

☐ Health Information Management	☐ Pharmacy	☐ Acute Care Hospital Nursing
☐ Housekeeping	☐ Plant Operations	☐ Ambulatory Services
☐ Information Systems	☐ Radiology	☐ Home Health
☐ Laboratory	☐ Rehabilitation Services	☐ HPCC
☐ Legal Services	☐ Respiratory	☐ Physician Offices
☐ Nutrition	☐ Security	☐ Rehab Hospital
☐ Other _____	_____	_____

Date Originated:	**Reviewed/No Revision:**	**Dates Revised:**	**Next Review Date:**

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Clinical Practice Council: **Date:**

Education Completed: ☐ **Date:** _____

Clinical Education Council Education Plan Required: **Yes** ☐ **No:** ☐ **Date:**

Approved by:

Policy Administrator: **Date:**

As Needed:

Medical Director: **Date:**

Board of Directors: **Date:**

PURPOSE:

To provide guidelines for the optimal response of the multidisciplinary team in the event of obstetric hemorrhage; to aid in recognizing patients at risk for hemorrhage; and to identify the stages of hemorrhage and primary treatment goals.

POLICY:

A. Optimal response to obstetric hemorrhage requires the coordination of effort of team members from multiple disciplines and departments.

1. Obstetric unit, anesthesia department, blood bank, pharmacy, operating room and other appropriate services work together to identify necessary system supports and processes for mounting an efficient and coordinated response to obstetric hemorrhage.
2. OB physicians, OB nurses, certified nurse midwives, anesthesiologist/CRNA, and other appropriately qualified clinicians are authorized to mobilize the team to respond to an obstetric hemorrhage.
3. statement about possible OB hem kit in pyxis or crash cart?

B. The following definitions describe the stages of obstetrical hemorrhage:

Stage 0	Prevention and recognition of OB hemorrhage in all births
Stage 1	Cumulative blood loss > 500 mL vaginal birth or 1000 mL cesarean birth **- OR-** Vital signs > 15% change or HR ≥ 110, BP ≤ 85/45, O2 sat < 95% **- OR -** Increased bleeding during recovery or postpartum
Stage 2	Continued bleeding or vital sign instability and 1000 – 1500 mL cumulative blood loss
Stage 3	Cumulative blood loss > 1500 mL, > 2 units PRBCs given, vital signs unstable or suspicion of Disseminated Intravascular Coagulopathy (DIC)

PROCEDURE:

A. **STAGE O** Management

1. Active management of third stage of labor:

    a. Administer Oxytocin __ units in ___ mL of IV solution.
        i. Titrate infusion rate to uterine tone
        ii. Use 10 units IM for women without IV access
        iii. **Do not give oxytocin as IV push**
    b. Provide vigorous fundal massage for at least 15 seconds

2. Ongoing qualitative measurement of blood loss at all births

    a. Assess blood loss at birth, prior to delivery of the placenta whenever possible
    b. Reassess cumulative blood loss after delivery of the placenta
    c. Documentation of bleeding
        i. Scant: < 1 inch on pad per hour (< 10 mL)
        ii. Small (light): < 4 inches on pad per 1 hour (10-25 mL)
        iii. Moderate: < 6 inches within 1 hour (25-50 mL)
        iv. Large (heavy): > 6 inches within 1 hour (50-80 mL)
        v. Excessive: pad saturated in 15 min (sat pad = 80 mL)
    d. If using formal methods to assess blood loss:
        i. Weigh blood soaked materials on gram scale (1 gram = 1 mL)

3. Ongoing evaluation of vital signs

4. Communication and documentation

    a. Verbally acknowledge actions you will take and orders received
    b. Provide ongoing updates about patient's status with other departments
    c. Record intake and output records

B. **STAGE 1** Management

1. Activate OB Hemorrhage Protocol

    a. Notify Obstetrician (if not at bedside), charge nurse/supervisor, anesthesia provider

2. Interventions

    a. Vital signs including O2 sat every 5 minutes
    b. Oxygen at 10L via mask, maintain pulse ox @ 95%
    c. Calculate cumulative blood loss every 5 – 15 minutes
    d. Weigh bloody materials
    e. Careful inspection with good exposure of vaginal walls, cervix, uterine cavity, placenta
    f. IV access with at least 18 gauge
    g. Increase IV fluid and oxytocin rate, and repeat fundal massage
    h. Methergine 0.2 mg IM (if not hypertensive). May repeat if good response to first dose, **BUT** otherwise **move on** to Stage 2 uterotonic drug
    i. Empty bladder: straight cath or place foley with urimeter
    j. Type & Cross 2 Units PRBCs

3. Evaluate patient response to interventions

    a. If patient stable following Stage 1 interventions the perform increased postpartum surveillance
    b. Proceed to Stage 2 if continued bleeding and vital sign instability

4. Communication and documentation

    a. Verbally acknowledge actions you will take and orders received
    b. Provide ongoing updates about patient's status with other departments
    c. Record intake and output records

C. **STAGE 2** Management

1. Call for extra help: second obstetrician, MET Team, assign roles

2. Interventions

    a. Vital sign and cumulative blood loss every 5 - 10 minutes
    b. Weigh bloody materials
    c. Complete evaluation of vaginal walls, cervix, uterine cavity, placenta

d. Send additional labs, including DIC panel
e. If in postpartum, move to L&D/OR
f. Evaluate for special cases such as uterine inversion, Anaphylactoid Syndrome
g. Second level uterotonic drugs:
    i. **Hemabate** 250 mcg IM or
    ii. **Misoprostol** 800 – 1000 mcg PR
h. Second IV access with at least 18 gauge
i. Bimanual massage by provider
j. **Vaginal Birth:**
    i. Move to OR
    ii. Repair any tears
    iii. D&C: r/o retained placenta
    iv. Place intrauterine balloon
    v. Selective Embolization (Interventional Radiology)
k. **Cesarean Birth:**
    i. Inspect broad ligament, posterior uterus and retained placenta
    ii. B-Lynch suture
    iii. Place intrauterine balloon
l. **Notify Blood Bank of OB hemorrhage**
m. **Bring 2 Units PRBCs to bedside, transfuse per clinical signs – do not wait for lab values**
n. Use blood warmer for transfusion
o. Consider thawing 2 FFP (takes 35+ minutes), use if transfusing > 2 units PRBCs
p. Determine availability of additional RPCs and other Coag products

3. Evaluate patient response to interventions

    a. If stabilized during Stage 2 (< 1500 cumulative blood loss) then perform increased postpartum surveillance
    b. Proceed to Stage 3 if
        i. cumulative blood loss > 1500 mL
        ii. > 2 units PRBCs administered
        iii. Unstable vital signs after Stage 2 interventions
        iv. Suspicion of DIC

4. Communication and documentation

    a. Verbally acknowledge actions you will take and orders received
    b. Provide ongoing updates about patient's status with other departments
    c. Record intake and output records

D. **Stage 3** Management

1. Mobilize team

    a. Second anesthesia provider, OR staff, Adult Intensivist

2. Interventions

a. Repeat labs including coags and ABGs
b. Central line placement
c. Case management for family support
d. Surgical
    i. B-Lynch Suture
    ii. Uterine Artery Ligation
    iii. Hysterectomy
e. Patient Support
    i. Fluid warmer
    ii. Upper body warmer device
    iii. Sequential compression stocking
f. Transfuse aggressively
    i. Near 1:1 PRBC:FFP
    ii. 1 PLT pheresis pack per 6 units PRBCs
g. Unresponsive Coagulopathy: after 10 units PRBCs and full coagulation factor replacement, may consider rFactor VIIa

3. Evaluate patient response to interventions

    a. If stabilized during Stage 3, then perform increase postpartum surveillance, consult with intensivist and transfer to ICU

    d. Communication and documentation

        a. Verbally acknowledge actions you will take and orders received
        b. Provide ongoing updates about patient's status with other departments
        c. Record intake and output records

RELATED POLICIES:

M03 07 558 Massive Transfusion Protocol (MTP)

REFERENCES:

California Maternal Quality Care Collaborative (CMQCC): Hemorrhage Taskforce (2009)