

Post Partum Hemorrhage Bundle

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September 24, 2019

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Postpartum Hemorrhage Bundle

- ◆ **National Partnership for Maternal Safety: consensus bundle on obstetric hemorrhage**
 - Readiness and Response- OB emergency notification system, Hemorrhage cart, medications, exsanguination protocol, unit education/skills and drills
 - Recognition and Prevention- risk assessment, huddle board, cumulative blood loss
 - Reporting system- “Penn Medicine Safety Nets”, OBQI committee (reviews cases of severe maternal morbidity; > 2L blood loss, ICU transfer, 4 units or more PRBCs)

Risk Assessment Tool

◆ Antepartum assessment of modifiable risk factors-

Antepartum assessment of modifiable PPH risk factors

1. Starting Hgb <10 or Hct <30 or Plt <70 (for potential PO versus IV Fe, steroids for ITP)
2. Bleeding disorder
3. Abnormal placentation (modifiable plan –location of delivery, blood availability, Oncology, etc)

**Add these above three risk factors to 3rd trimester lab section of supervision of normal /high risk pregnancy to be assessed at time of third trimester labs

Intrapartum Assessment of PPH risk

Average Risk	Elevated Risk	Highest Risk
No significant risk factors	Prior c-section(s)/uterine surg	Placenta Previa
Singleton pregnancy	Multiple gestations	Suspected Accreta/Percreta
	Polyhydramnios	Platelets < 50K
	EFW>4000g	Hgb <9
	Grandmultiparity (>4 births)	Known coagulopathy
	Hx of PPH	Active bleeding (> bloody show)
	Chorioamnionitis	
	Oxytocin administration for >24 hours	
	Achievement of 40mu/min Oxytocin	
	Operative vaginal delivery	
	Significant myomas	
	Retained placenta	
	Prolonged 2 nd stage (>=3 hrs)	
	Magnesium Sulfate administration	

Average Risk-Routine IV pitocin after delivery of neonate, Controlled cord traction until placental delivery

Elevated Risk-Preparation for delivery with appropriate uterotonics/OB hemorrhage cart available/Low threshold for T&C based on clinical judgment

Highest Risk-T&C (available products at delivery), preparation of appropriate uterotonics/appropriate personnel/OB hemorrhage cart outside of patient room/appropriate surgical venue

Postpartum Hemorrhage Cart

◆ Contents-

1 Check cart monthly and		Hospital of the University of Pennsylvania: Labor and Delivery Unit									
2 every time it is opened		Hemorrhage Treatment Cart									
3											
4		Inspection Date									
5		Quantity	Lawson #	Expires	Place check marks in boxes and initial on last page						
6											
7 Top Shelf											
8	Alcohol Swabs	20									
9	IV Start Kit	3		Y							
10	21ga Butterflies	3		Y							
11	23ga Butterflies	3		Y							
12	Blue Tube Tops	5		Y							
13	Purple Tube Tops	5		Y							
14	Yellow Tube Tops	5		Y							
15	Pink Tube Tops	5		Y							
16	Red Tube Tops	5		Y							
17	Vacutainer	4		N							
18	Vacutainer Transfer Device	4		Y							
19	Sodium Chloride Injections	4		Y							
20	AngioCaths: 18g	2		Y							
21	AngioCaths: 20g	2		Y							
22	Smart Site Adapter 5/7	5		Y							
23 First Drawer											
24	21g Safety Glide Needle	4		Y							
25	3cc Syringes	5		N							
26	Suture: 2-0	3		Y							
27	Suture: 3-0 Small	8		Y							
28	Suture: 3-0 Large	7		Y							
29	Suture: Chromic	6		Y							
30	Blood Administration Tubing	2		Y							
31	Needle Counter/ OR mini kit	N/A		Y							
32	Filter Straw	4		Y							

Interdisciplinary Skills Review

◆ “Skills and Drills” stations-

- SBAR/Hemorrhage Guidelines and Risk Stratification
- Emergency Response Protocols
- Blood administration and Exsanguination Protocol
- Hemorrhage Cart and Uterotonic Medications
- Quantification of Blood Loss
- Intrauterine Tamponade Balloon Initiation
- B-lych Suture and Uterine Tamponade Balloon Placement

◆ **Mandatory Competency- offered yearly to all new employees**

References

- ◆ Bittle, M., O'Rourke, K., & Srinivas, S.K. (2018). Interdisciplinary skills review program to improve team responses during postpartum hemorrhage. *JOGNN*. 47:454-263.
- ◆ Hamm, R. F., Wang, E., O'Rourke, K., Romanos, A., & Srinivas, S. K. (2019). Institution of a comprehensive postpartum hemorrhage bundle at a large academic center does not immediately reduce maternal morbidity. *American journal of perinatology*, 36(01), 015-021.
- ◆ Main, E.K., Goffman, D., Scavone, B.M., Lowe, L.K., Bingham, D., Fontatine, P.L. & Levy, B.S. (2015). National partnership for maternal safety: consensus bundle on obstetric hemorrhage. *JOGNN*. 44(4):462-470.

