

Adult Massive Hemorrhage Protocol (MHP)-General Management

HSC Blood Bank Phone: 204-787-3508 HSC Paging: 204-787-2071

Medical lead determines if MHP criteria are met and orders the Massive Hemorrhage Protocol. *approved locations ER, MICU, SICU, Adult OR and PACU, Women's OR and PACU, Women's L+D, IR **Initiation of MHP to a future patient location (ie: ward patient going to OR) requires approval by TM on call

Call paging at "55"- Paging will announce "Transfusion 25" overhead.

Resuscitation team appoints one person as the Transfusion Liaison. This person ensures the following:

- 1. Request for Release of MHP form has been completed, including patient details section, and then faxed to Blood Bank.
- An individual from the unit has been assigned to collect coolers from blood bank. First cooler (4 units RBCs) ready at 15 minutes after blood bank receives the Release of MHP form. Second cooler (1 L FFP) ready at 45 minutes.
- 3. Baseline blood work has been drawn (Type and Screen, CBC, INR, sodium, potassium, HCO₃, chloride, calcium, glucose, creatinine, urea, TCO₂, Fibrinogen, ABG or VBG).

When cooler is opened this TIME is WRITTEN ON Check and Transfuse blood products using a DESIGNATED COOLER TAG. document pressure bag or a rapid transfuser If cooler is opened products must be given within 4 hours blood products device (platelets is an exception or returned to blood bank in 60 minutes as per blood this product should never be given administration Products in sealed cooler can be given within 8 hours of under pressure, or via a warmer). protocols. being released from blood bank Every 2 hours after initiation of MHP Every **hour or as ordered by medical lead**, after the initiation of draw a glucose, calcium, urea, creatinine, MHP: pick up another cooler, draw CBC, INR, fibrinogen, ABG or potassium, sodium and chloride VBG, 2nd type and screen (only if indicated by blood bank). If a patient is moved to a different location, the receiving unit is responsible for informing blood bank of the new location. ■ The sending unit is responsible for sending all unused blood products with the patient.

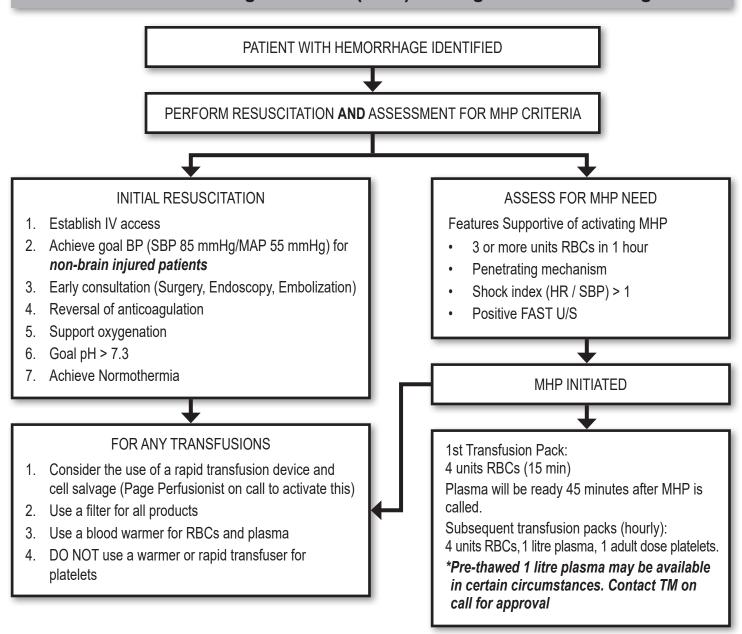
When patient has stopped bleeding, the bleeding is under control, patient has died or resuscitation efforts have been withdrawn close the MHP.

Closing Orders

Must notify Blood Bank that MHP has ended.
Return coolers and blood to Blood Bank <u>ASAP</u>
Return ROT's in provided Envelope to Blood Bank
Ensure all medication and blood work orders have been recorded



Adult Massive Hemorrhage Protocol (MHP)-Management of Bleeding Patient



Hemostatic Resuscitation Goals

Red Cells: Goal 70-90 g/L

Platelets: Goal > 50 (> 100 if intra-cranial or intra-ocular bleeding), consider platelet transfusion if platelet

dysfunction suspected.

Plasma: Goal INR < 1.4, Suggested initial dose 10–15 ml/kg

Fibrinogen: Goal > 1.5 g/L (2.0 g/L for Obstetric patient) (Consider empiric treatment with Fibrinogen for

Pre-eclampsia / eclampsia, DIC, placental abruption, AFE, HELLP, Uterine Rupture.)

Calcium: Goal calcium levels: Corrected calcium > 2.1 mmol/L or ionic Calcium (on blood gas) > 1.15 mmol/L,

Replacement: (1 gram Calcium Chloride via CVL or 3 grams Calcium Gluconate via peripheral IV)

Tranexamic Acid: Consider early use in trauma patients. 1 gram bolus followed by 125 mg/hr x 8 hrs)