

Massive Transfusion Policy (MTP) Quick Guide

Triggers for Initiating MTP FROM ED – Using BloodTrack Blood Refrigerator

1. Any patient receiving blood products to maintain SBP en route
2. Assessment of Blood Consumption (ABC) Score Comprised of four components:
 - SBP less than 90 mm Hg
 - HR greater than 120 bpm
 - Positive Focused Assessment Sonography in Trauma (FAST Exam)
 - Penetrating torso injury

** A score of 2 or greater on the ABC Score indicates a need to initiate the Massive Transfusion Protocol.*

Designation of Person Responsible for Triggering MTP

- Primary Team
- Intensivist Team
- ED, Anesthesia

Initiate MTP

- Initiate Trauma Page for MTP Activation
- Identify patient and MRN
- Runner to blood bank immediately for cooler
- Initial lab draws as patient condition allows
- RN to blood fridge for initial trauma pack
- Remove RED TRAUMA PACK IF AVAILABLE
- RED TRAUMA PACK CONTAINS
 - 4 units WHOLE BLOOD
- Administer whole blood – up to, but no greater than, 4 units
- IF MTP CONTINUES after 4 units, convert to MTP PACK component therapy as directed by the Attending
- IF NO RED TRAUMA PACK AVAILABLE, MOVE STRAIGHT TO COMPONENT THERAPY AS BELOW – PINK PACK FOR FEMALE, BLUE PACK FOR MALE
- MTP pack in blood fridge includes
 - 5 units PRBC
 - 5 units plasma
- Administer in RBC & plasma in 1:1 ratio, then platelets which will be delivered on the top of the initial cooler
- Blood Bank to set up MTP Pack #2 containing
 - 5 units PRBC
 - 5 units plasma
- ED to pick up cooler with above noted contents
- Blood bank to set up MTP Pack #3 to include
 - 5 units PRBC
 - 5 units plasma (do not delay issuing cooler if less than five units are available)
 - 1 unit apheresis platelets (to accompany cooler, but not placed in cooler)
- Repeat alternating #2 and #3 in 1:1 ratio or as directed until MTP deactivated or moves to TEG based orders

Lab Studies

- All labs will be performed STAT or via Point of Care Testing where available
- Type and screen
- Thromboelastogram (TEG)
- CBC, PT/PTT, Basic Metabolic Panel, ionized Calcium, Lactate and Arterial Blood Gas (ABG) – initially and every 4 hours or after each cooler or whichever comes first
- Fibrinogen level after 10 units PRBC
 - Give cryoprecipitate 10 units (after every 2 coolers) for fibrinogen level less than 100 mg/dL

Hemostasis

- If bleeding controlled, deactivate MTP
- If bleeding uncontrolled, continue MTP
- With continued ooze:
 - Give plasma for INR greater than 1.6
 - Give platelets for platelet count less than $50 \times 10^9/L$
 - Consider rFVIIa (recombinant Factor VIIa) – requires Attending approval

After Stabilization

- Deactivate MTP
- Return cooler with any unused units to the Blood Bank
- Draw labs
 - PT / Fibrinogen / CBC / BMP / iCa
 - At least every 6 hours and PRN for 24 hours
 - Then every 12 hours for 24 hours

Updated : 11/2020