

Massive Hemorrhage Protocol

Holiday Hemorrhage

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Pre/Post Transfusion Knowledge Question

1. It is acceptable to use vasopressors in rural trauma?

- A. True
- B. False

Pre/Post Transfusion Knowledge Question

2. What position should the patient be in during resuscitation?
- A. Prone
 - B. Supine
 - C. Trendelenburg
 - D. Reverse Trendelenburg

Pre/Post Transfusion Knowledge Question

3. Tranexamic acid must be given:

- A. Slowly over an hour
- B. With blood
- C. As soon as possible
- D. After the first 2 trauma packs

Beautiful Bruce County



“Feet on the Dash”



PREPARING FOR THE TRAUMA PATIENT



PEOPLE

- ☐ Doctors
- ☐ X-ray
- ☐ Nurses
- ☐ Lab



PROCESSES

- ☐ PPE
- ☐ Back-up Blood
- ☐ X-ray Chest & Pelvis
- ☐ FAST US
- ☐ Blood PRBC's
- ☐ Team Roles
- ☐ Documentation



EQUIPMENT

- ☐ Monitors
- ☐ Pelvic Binder
- ☐ Chest tubes
- ☐ Spreaders
- ☐ FAST US
- ☐ Tourniquet
- ☐ Scalpel
- ☐ Rapid infuser
- ☐ Airway equip.
- ☐ IVs with blood tubing
- ☐ Warming Blanket



MEDICATIONS

- ☐ Sedation & paralytic agents
- ☐ 3% Saline
- ☐ Pain Medication
- ☐ Vasopressors
- ☐ Mannitol



TRANSPORT

- ☐ Who is calling Critical
- ☐ ORNGE vs. Land
- ☐ Speaker in trauma room

Paramedic Patch to “Far Away Hospital”

17 Year Old Female

- Decreased LOC
- Obvious R femur & R ankle #
- Facial injuries
- Belted

19 Year Old Male

- Alert & oriented
- Neck pain
- Chest pain
- Abdo pain
- Belted

Initial Assessment

17 Female “Unknown”

- Airway - patent
- Breathing – present, moaning, NRB
- Circulation – pale, feels cool
- Disability – verbal on AVPU
- Environment – obvious R femur #, R ankle #, bilateral periorbital ecchymosis, bleeding from mouth

19 Male “Jeff”

- Airway – patent
- Breathing – present talking
- Circulation – pale, feel cool
- Disability – Alert
- Environment – Seat belt sign, R ankle fracture

Vitals

17 Female

- HR 126
- RR 22
- BP 88/54
- O2 sat 94% on NRB
- Temp 35.7

19 Male “Jeff”

- HR 128
- RR 24
- BP 96/64
- O2 sat 94% on NRB
- Temp 36.2

SHOCK



INTERVENTION

A microscopic view of numerous red blood cells, which are biconcave discs, floating in a fluid. The cells are a vibrant red color. One cell in the lower-left foreground is in sharp focus, showing its characteristic shape and internal texture. The background is filled with many other similar cells, some of which are out of focus, creating a sense of depth.

CIRCULATION

2 large bore IV's each

Group & Screen

Ensure 100% NRB

Call your transfusion lab STAT!

Don't forget! PELVIC BINDER

Do not use Trendelenburg!

CRITICALL
ONTARIO



Connecting physicians, resources and care **1-800-668-HELP**



Uncrossmatched Blood



“Far Far Away Hospital’s” Massive Hemorrhage Protocol



MHP Activated
“Far Away
Hospital”



Call “Real Far
Hospital” & have
more blood sent
with OPP or taxi



Cross
Match
ASAP



Use O neg for
female under 45



Use O positive for
everyone else



Do NOT use
crystalloid!



TXA

Pre-Arrival to Lead Trauma Hospital

17 Female “Unknown”


- HR 118
- BP 92/64
- O2 sat 98% NRB
- Temp 35.8
- GCS 14
- 2 units with 3rd up & 500mls RL

19 Male “Jeff”

- HR 132
- BP 77/48
- O2 sat 91% NRB
- Temp 35.6
- GCS 9
- 2 units & 500mls RL

Blood Ready-To-Go

SOUTHWEST REGIONAL TRAUMA NETWORK

PREPARING FOR THE TRAUMA PATIENT 

PEOPLE

☐ Doctors ☐ X-ray
☐ Nurses ☐ Lab

PROCESSES

☐ PPE ☐ Back-up Blood ☐ X-ray Chest & Pelvis ☐ FAST US
☐ Blood PRBC's ☐ Team Roles ☐ Documentation

EQUIPMENT

☐ Monitors ☐ Pelvic Binder ☐ Chest tubes ☐ Spreaders
☐ FAST US ☐ Tourniquet ☐ Scalpel ☐ Rapid infuser
☐ Airway equip. ☐ IVs with blood tubing ☐ Warming Blanket

MEDICATIONS

☐ Sedation & paralytic agents ☐ 3% Saline
☐ Pain Medication ☐ Vasopressors
☐ Mannitol

- Trauma team activation
- Emergency team organizes roles
- Transfusion lab sends blood
- Labelled “Female 17” and “Male 19”
- Rapid infuser on & warming
- FAST US ready to diagnose
- OR is on-call



Rapid Infusion

Massive Hemorrhage (MHP) Tracking Form

Patient name and PIN:										MHP Activation (Date/ Time): MHP Discontinuation (Date/Time):									
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Blood Products Transfused	TIME:										TIME:									
	Trauma Pack (TP)										Trauma Pack (TP)									
	PRBC										PRBC									
	Plasma										Plasma									
	Platelets										Platelets									
	Fibrinogen										Fibrinogen									
	Resuscitant										Resuscitant									
	TIME:										TIME:									
	Trauma Pack (TP)										Trauma Pack (TP)									
	PRBC										PRBC									
Plasma										Plasma										
Platelets										Platelets										
Fibrinogen										Fibrinogen										
Resuscitant										Resuscitant										

Tranexamic Acid																			
Dose 1 (Time):										Dose 2 (Time):									
Patient Temperature (On Initiation of MHP then q15min)																			
TIME:																			

- Check blood!!!
- Give TXA 1G - ASAP
- Group and Screen
- Run blood on largest IV until central line available
- Heat blood
- 4u PRBC's come first
- Then TP (Trauma packs) arrive

Get MORE Blood!

- RUNNER!
- 4u PRBC's
- 4u Plasma
- 1 Pack of Platelets
- Give blood products until BP 90/

1195 36 23 BX-16-0063297A BLOOD, FRESH T, WH 21NOV16 10:49		1195 36 23 BX-16-0063297A BLOOD, FRESH T, WH STAT	
<input type="checkbox"/> Next Trauma Pack			
<input type="checkbox"/> Other _____		11-24-30-49 Eld Bank Product MPED-G	
1195 36 23 	1195 36 23 	1195 36 23 	1195 36 23 
BLOOD, FRESH T, WH		BLOOD, FRESH T, WH	



Trauma Operating Room



Interventional Radiology



Jeff 19 Year Old Male



- Ruptured diaphragm
- Esophageal tear with subcutaneous emphysema causing mediastinal shift
- Grade V Spleen laceration
- C5-7 spinous process fractures

Sally 17 Year Old Female



- Right zygomatic fracture
- Lefort II Fracture
- Right femur fracture
- Left femoral neck fracture
- Bleeding in pelvis from iliac vein
- Small bladder tear
- Right Hyphema

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Thank You