

Shock Trauma Go-Team Standard Operating Procedure Prehospital Transfusion

Last update: 29 JAN 2020

Transfusion Triggers:

- ▶ Radial pulse > **130** bpm (or absent) **OR**
- ▶ Systolic blood pressure < **90** mm Hg **OR**
- ▶ Shock Index > **0.9** **OR**
- ▶ Mental deterioration with any of the signs above

Additional Indications:

- ▶ Venous lactate > **4** mmol/L
- ▶ ET_{CO2} < **25** mm Hg (and properly ventilated)
- ▶ Witnessed trauma arrest < 5 min prior to arrival
- ▶ Age > 65 AND SBP < **100** AND HR > **100** (Shock index > **1.0**)
- ▶ One or more extremity amputations
- ▶ Obvious external or junctional hemorrhage

Based on SOPs from:
London HEMS, 75th
Ranger Regiment, THOR,
and Israeli Defense Force
(IDF)

YES

ADDRESS SOURCES OF OBVIOUS HEMORRHAGE
Ensure IV/IO/Central Access
Administer **1 g of TRANEXAMIC ACID (TXA)** over 5 minutes
(if < 3 hours from time of original injury)
Consider tourniquet, pelvic binder, straightening fractures to length

YES

First Choice:
1 unit, whole blood (WB)
Second Choice:
1 Unit PRBC + 1 Unit FFP

YES

If massive transfusion anticipated,
consider administration of **1 g 10% CALCIUM CHLORIDE** or **3 g of 10% CALCIUM GLUCONATE**

-1g of CaCl 10% in 10mL is 13.65 meq / 10mL

-1g of CaGlu 10% in 10mL is 4.65 meq/ 10 mL

Is patient still in shock?

YES

First Choice:
Second unit, WB
Second Choice:
1 Unit PRBC + 1 Unit FFP

NO

Continue to monitor