Trauma Society of South Africa Protocol

MASSIVE TRANSFUSION / MASSIVE HAEMORRHAGE PROTOCOL

Ongoing haemorrhagic shock despite resuscitation
Ongoing attempts to stop the Bleeding
Already 2 units of packed cells utilized
Anticipated massive transfusion requirements (>50%blood volume to be transfused in 3hrs/ >total volume transfusion in24hrs)
Coagulopathy in trauma

Trauma team leader
Phone blood bank and initiate MTP
Confirm blood cross-match and submission to blood bank
Ensure clotting profile workup
Stop MTP once no longer required

Blood bank
Prepare 6PRBC, 6FFP, and 1 pooled platelets per package issued & prepare for the next package
Initially O negative/positive blood until cross match done
Deliver to the appropriate site
Terminate only when informed by team leader

Initiate MTP with blood bank
Establish good IVI access
Transfuse 1:1:1 for packed cells: FFP: Platelets
Take blood for cross match, ABG, FBC, PI PTT, TEG if available (others U+E/CMP)
Control bleeding (Emergency Room + theatre as necessary)

Continue on clinical grounds if patient unstable with evidence of ongoing bleeding
Aim for Platelets>100 000 with active bleeding, INR<1.5, Hb >9g/dl, Fibrinogen >1 g/L
Modify requirements based on TEG (if available)
Continue observation and supportive care in ICU
Once stable modify according to clotting profile + Hb

Continue resuscitation at 1:1:1 as clinically indicated
Add 6-8units of Cryoprecipitate after 8units of packed cells
Replace Calcium if ionized value less than 1.0mmol/l
Consider Recombinant Factor VIII if available (50-90µg/kg)
Repeat ABG, FBC, PI PTT, TEG (if available)

NB Complications of Transfusions
Transfusion reactions
Inflammatory complications
Immuno-modulatory effects
Infection transmissions
Metabolic effects