

PAEDIATRIC CODE RED – MASSIVE HAEMORRHAGE

TRAUMA TEAM LEADER MUST DECLARE **PAEDIATRIC CODE RED** if:

- Poor response to initial fluid resuscitation
- Suspected or actual active haemorrhage – **start pack A immediately**

Take baseline blood samples prior to transfusion for:

- FBC, G&S, clotting screen and fibrinogen
- Near patient testing – ABG/capillary gas, FBC AND ROTEM

Nominate a member of team to call blood bank on the red phone (or 61108) to activate PAEDIATRIC CODE RED

- State patient unique identifier & CODE RED TRAUMA and patient date of birth if known
- **Collect RBC from remote access fridge and Octaplas from the lab**

IF >30Kg:

- Request Adult MHP
- Request **CODE RED PACK A** (4 units RBC, 4 units Octaplas)
- OR
- **CODE RED PACK B** (6 units RBC, 6 units Octaplas, 2 cryoprecipitate, 1 pool platelets)
- **Commence RBC 10-20ml/kg, Octaplas 15ml/kg, Plt 15ml/kg, Cryo 10ml/kg**

IF <30Kg:

- Request **PAEDIATRIC CODE RED PACK A** (2 units RBC, 2 units Octaplas)
- OR
- **PAEDIATRIC CODE RED PACK B** (3 units RBC, 3 units Octaplas, 1 pool cryoprecipitate, 1 unit platelets – apheresis unit)
- **Commence RBC 10-20ml/kg, Octaplas 15ml/kg, Plt 15ml/kg, Cryo 10ml/kg**

- Send porter to collect Octaplas, cryoprecipitate and platelets urgently. Continue to collect RBC from remote access fridge
- Give **TRANEXAMIC ACID 15mg/kg bolus (Max = 1g) followed by 15mg/kg over 8 hours****
 - Continue Pack B until bleeding is controlled

IF BLEEDING CONTINUES:

- Request early, don't wait until previous pack finished.
- Give in aliquots until haemorrhage is controlled
- No crystalloid / colloid until bleeding controlled and base deficit corrected
- FFP can be given instead of Octaplas in dire straits
- Keep K^+ less than 5.8, keep Ca^{++} > 1.0
- Communicate with surgeons regularly:
 - Blood (review situation and future need)
 - Acid/base: pH / lactate – improving?
 - Surgical progress
 - Temperature
 - Electrolytes (K^+)

Lab tests: **repeat FBC and Clotting** to therapeutic targets:

- Hb >100g/L
- Platelets >100x10⁹/L
- Fibrinogen >1.5g/L
- PT ratio <1.2

**Paediatric Massive Haemorrhage: Code Red/
Table of Volumes for Requesting Blood Products**

Pack A

Weight	Red Cells	FFP/Octaplas
< 5kg	10-20ml/kg Max = 100ml	15 ml/kg Max = 75ml
5-10kg	10-20ml/kg Max = 200ml ~ 1 adult unit	15ml/kg Max = 150ml ~ 1 unit
10-20kg	10-20ml/kg Max = 400ml 1-2 adult units	15ml/kg Max = 300ml ~ 2 units
20-30kg	10-20ml/kg Max = 600ml 2- 3 adult units	15ml/kg Max = 450ml ~ 3 units
30-50kg	10-20ml/kg Max = 1000ml 3-4 adult units	15ml/kg Max = 750ml ~3-4 units
> 50kg	ADULT Policy	

Pack B

Weight	Red Cells	FFP/Octaplas	Platelets*	Cryo
< 5kg	10-20ml/kg Max = 100ml	15 ml/kg Max = 75ml	15 ml/kg* Max = 75ml	5-10ml/kg Max = 50ml
5-10kg	10-20ml/kg Max = 200ml 1 adult unit	15ml/kg Max = 150ml ~ 1 unit	15ml/kg* Max = 150ml	5-10ml/kg Max = 100ml
10-20kg	10-20ml/kg Max = 400ml 1-2 adult units	15ml/kg Max = 300ml ~ 2 units	15ml/kg* Max = 300ml	5-10ml/kg Max = 200ml
20-30kg	10-20ml/kg Max = 600ml 2- 3 adult units	15ml/kg Max = 450ml ~ 3 units	15ml/kg* Max = 450ml	5-10ml/kg Max = 300ml
30-50kg	10-20ml/kg Max = 1000ml 3-4 adult units	15ml/kg Max = 750ml 3-4 units	15ml/kg* Max = 750ml	5-10ml/kg Max = 500ml
> 50kg	ADULT Policy			

* Discuss volumes required with transfusion

** Rate of TXA infusion should be 2mg/kg/hr

