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 >30Ka:

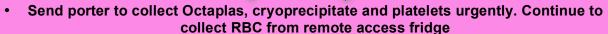
- Request Adult MHP
- Request CODE RED PACK A (4 units RBC, 4 units Octaplas)

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
- 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



- 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^{\dagger} less than 5.8, keep $Ca^{\dagger\dagger} > 1.0$
- 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	15ml/kg Max = 150ml
	~ 1 adult unit	~ 1 unit
10-20kg	10-20ml/kg Max = 400ml	15ml/kg Max = 300ml
20-30kg	1-2 adult units 10-20ml/kg	~ 2 units 15ml/kg
	Max = 600ml 2- 3 adult units	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	U-4 UIIIG

Pack B

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

^{*} Discuss volumes required with transfusion

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