Paediatric Blunt Traumatic Cardiac Arrest Treatment Pathway

- Gather Information
- Ensure Safety using PPE
- Activate Trauma Team (Consultant presence)
- Perform calculations based on estimated weight
- Call For Help Early
- Set up To receive Patient and designate Roles
- CODE RED– Activate MHP
- Predetermine age / weight specific interventions

Cardiac Arrest/ peri-arrest situation in a Trauma Patient

If non– traumatic cause leave pathway and follow APLS guidelines, and de-escalate team

Simultaneously address reversible causes and perform life saving interventions:

Hypovolaemia

Control external exsanguinating haemorrhage- apply pelvic binder/splints as necessary

Rapid volume replacement (IV/IO) with blood. (10ml/kg Hartmann's if no blood available)

Hypoxia

Control airway and maximise oxygenation and ventilation.

Tension Pneumothorax

Bilateral thoracostomies (formal drain not required)

Tamponade

BEDSIDE US– Is tamponade present???

De-prioritise Chest compressions Perform LSI first

SHOCKABLE RHYTHM Simultaneously perform LSI and Cardioversion

If you are considering a Resuscitative Thoracotomy for haemorrhage control.

Do you have the expertise to perform the procedure??

Do you have surgical assistance??

Did you witness the cardiac arrest/loss of vital signs?- if no do not perform

Is there evidence of severe head injury? If yes do not perform

Do not consider thoracotomy if more than 10 mins post arrest or loss of vital signs

ROSC Achieved

- Consider Imaging
- Transfer to theatre for Damage Control Surgery if haemorrhage control required
- Arrange ITU transfer (liaise with NECTAR/GNCH early)

ROSC not Achieved

consider the following to aid decision making re terminating resuscitation.

- Duration of cardiac arrest
- ETCO2 level
- Lack of response to interventions
- Cardiac Standstill on US

V4 Sept 2021

NORTHERN TRAUMA NETWORK NTN

Paediatric Penetrating Traumatic Cardiac Arrest Treatment Pathway

- Gather Information
- Ensure Safety using PPE
- Activate Trauma Team (Consultant presence)
- Perform calculations based on estimated weight
- Call For Help Early
- Set up To receive Patient and designate Roles
- CODE RED– Activate MHP
- Predetermine age / weight specific interventions

Cardiac Arrest/ peri-arrest situation in a Trauma Patient

If non– traumatic cause leave pathway and follow APLS guidelines, and de-escalate team

Simultaneously address reversible causes and perform life saving interventions:

Hypovolaemia

Control external exsanguinating haemorrhage

Rapid volume replacement (IV/IO) with blood. (10ml/kg Hartmann's if no blood available)

Hypoxia

Control airway and maximise oxygenation and ventilation.

Tension Pneumothorax

Bilateral thoracostomies (formal drain not required)

Tamponade

BEDSIDE US– Is tamponade present???

De-prioritise Chest compressions Perform LSI first

SHOCKABLE RHYTHM Perform LSI first. De-prioritise cardioversion

If you are considering a Resuscitative Thoracotomy.

Is there evidence of severe head injury? If yes do not perform

Do not consider thoracotomy if more than 15 mins post arrest or loss of vital signs.

ROSC Achieved

- Consider Imaging
- Transfer to theatre for Damage Control Surgery if haemorrhage control required
- Arrange ITU transfer (liaise with NECTAR/GNCH early)

ROSC not Achieved

consider the following to aid decision making re terminating resuscitation.

- Duration of cardiac arrest
- ETCO2 level
- Lack of response to interventions
- Cardiac Standstill on US

V4 Sept 2021

NORTHERN TRAUMA NETWORK NTN