

Traumatic Cardiac Arrest



Life-threatening trauma

Obvious non-reversible cause. E.g. total body disruption; decapitation

Do not attempt resuscitation

Y

N

- Stop Bleeding
- Open airway
- Decompress chest & assist breathing if necessary

- IV or IO access; fluid resuscitation to goal SBP > 90mmHg or consciousness
- Early damage control surgery

Traumatic cardiac arrest

Summon assistance if required. Consider "medical" causes (e.g. myocardial infarction precipitating minor trauma) & if likely, manage according to conventional guidelines with *consideration* of the points below.

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Open airway and protect cervical spine.

Consider airway devices e.g. endotracheal intubation; supraglottic airway

Return of Spontaneous Circulation – ROSC?

Y

N

*

IV or IO access

20mL/kg IV plasma / red blood cells or crystalloid
Further 5-10mL/kg fluid boluses if indicated

ROSC?

Y

N

*

Decompress chest: finger or needle thoracostomy followed by insertion of intercostal catheter

ROSC?

Y

N

*

Ultrasound (if available) to assess pericardial tamponade. Resuscitative thoracotomy if tamponade identified (or, if ultrasound unavailable, likely given the known mechanism). Consider needle pericardiocentesis only if surgical intervention is not possible.

ROSC?

Y

N

Consider resuscitative thoracotomy to clamp descending aorta, control thoracic haemorrhage, relieve cardiac tamponade, and facilitate internal cardiac compressions and internal defibrillation

ROSC?

Y

N

*

Conventional BLS, ALS or internal cardiac compressions for 10 minutes after all reversible causes have been addressed. BLS/ALS can occur simultaneously with the above interventions if this does not interfere with their application and there are sufficient people available.

ROSC?

Y

N

Cease resuscitation

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Control likely sites of haemorrhage (direct pressure; tourniquet)

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*These interventions are prioritised according to the likely aetiology of the cardiac arrest, and if indicated are ideally addressed simultaneously by a multi-member team.

Post-resuscitation care, prioritising surgical haemorrhage control and fluid resuscitation to target SBP 90mmHg (110mmHg if there is a head injury) or consciousness until this is achieved.

Used with permission from The Australian and New Zealand Committee on Resuscitation (ANZCOR) guideline 11.10.1 – Management of Cardiac Arrest due to Trauma, April 2016.