Clinical Practice Guidelines: 
Cardiac/Cardiogenic shock

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<tr>
<th>Date</th>
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<td>Purpose</td>
<td>To ensure consistent management of patients with Cardiogenic shock.</td>
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<td>Scope</td>
<td>Applies to all QAS clinical staff.</td>
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Cardiogenic shock is characterised by prolonged hypotension with inadequate tissue perfusion in spite of adequate left ventricular filling pressure.\[1\]

Up to half the patients admitted to hospital with cardiogenic shock will not survive to discharge.

Significant history may include:\[2,3\]
- Pre-existing cardiac disease
- Recent viral infection
- Congenital heart disease (children)

Causes of cardiogenic shock include:
- AMI
- Drugs:
  - β-blockers
  - calcium channel blockers
  - some chemotherapy medications
- Electrolyte imbalances:
  - hypocalcaemia
- Structural:
  - ventricular hypertrophy
  - cardiomyopathy
  - aortic stenosis
  - aortic or mitral regurgitation
- Other:
  - malignant hypertension
  - catecholamine excess

Clinical features
- Chest pain and/or discomfort (described as burning, pressure or tightness)
- Diaphoresis
- Cold mottled or cyanotic peripheries
- ALOC
- Tachycardia (or occasionally bradycardia)
- Hypotension (SBP < 90 mmHg)
- Respiratory distress (secondary to cardiogenic pulmonary oedema)
  - tachypnoea
  - hypoxia (SpO₂ < 95%)
  - wheeze

Risk Assessment
- Not applicable
Additional information

- Management focuses on ensuring adequate circulatory and respiratory support.
- Judicious fluid boluses may be required to maintain cerebral perfusion.
- Ventilation support with Intermittent positive pressure ventilation (IPPV)/continuous positive airway pressure (CPAP) may be required in severe pulmonary oedema.
- Adrenaline (epinephrine) may be required to support perfusion in severe cases.

Consider:
- Oxygen
- IPPV/CPAP
- IV access
- Aspirin
- Adrenaline (epinephrine)
- IV fluid

Due to cardiac dysrhythmia?

Manage as per:
- CPG: Bradycardia
- CPG: Tachycardia – broad complex
- CPG: Tachycardia – narrow complex

Due to STEMI?

Manage as per:
- CPG: Acute coronary syndrome

Transport to hospital
Pre-notify as appropriate

Note: Officers are only to perform procedures for which they have received specific training and authorisation by the QAS.