Clinical Practice Guidelines: Cardiac/Cardiogenic shock
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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**
- AMI
- 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 may be required to support perfusion in severe cases.

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

Due to cardiac dysrhythmia?

- **Y**
  - CPG: Bradycardia
  - CPG: Tachycardia – *broad complex*
  - CPG: Tachycardia – *narrow complex*

- **N**
  - CPG: Acute coronary syndrome

Due to STEMI?

- **Y**
  - Transport to hospital
  - Pre-notify as appropriate

- **N**
  - CPG: Paramedic Safety
  - CPG: Standard Cares

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