



2. Asystole or Unstable with Bradycardia

HR <50bpm with hypotension, acutely altered mental state, shock, ischaemic ECG, acute heart failure

- ➊ Press the red emergency button.
- ➋ Who is the “hands-off” leader? Assign roles.
- ➌ Turn FiO₂ to 100% or give maximal supplemental oxygen
- ➍ Use epicardial pacing wires at 80 bpm asynchronous, maximum output.
- ➎ Is CPR required?
- ➏ Is transcutaneous pacing required? (see over)
- ➐ Consider atropine 0.6-3.0 mg IV
- ➑ Adrenaline bolus or increase adrenaline infusion or use isoprenaline
- ➒ Assess pulse/MAP/CVP/capnograph - if PEA develops **GO to** ⇒
CHKLST 3
- ➓ Make 777 adult emergency chest opening call(see over)go to CHKLST 13

Consider:

- Transvenous pacing under I/I
(phone interventional cardiologist on 0800 4STEMI).
- Hyperkalaemia (DO A BLOOD GAS) go to CHKLST 5

Critical CHANGES

If **PEA** develops: Go to ⇒ CHKLST 3 PEA
If **Hypoxia** develops: Go to ⇒ CHKLST 6 Hypoxia
Measure **serum K⁺** : Go to ⇒ CHKLST 5 Hyperkalaemia

During CPR

| | |
|--------------|--|
| Airway | Assess and secure with ETT |
| Ventilation | Ventilate at 8-10 breath/min and assess capnograph |
| Circulation | Confirm IV or IO access |
| IABP | Switch to pressure trigger |
| Assign roles | See CHKLST 13 – roles for chest re-opening |

DRUG DOSES and treatments

Give drugs via central line if available

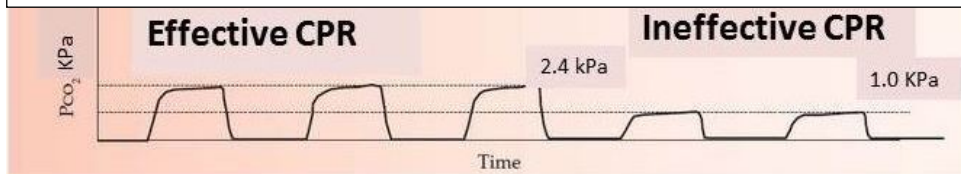
| | |
|-----------------------|------------------------------|
| Adrenaline infusion | 2-30ml/hr (2mg in 50mls) |
| Isoprenaline infusion | 2-30ml/hr (2mg in 50mls) |
| Atropine | 1-5 ampoules (0.6mg/ampoule) |

Adrenaline: 10 mL of 1 in 10,000 bolus 1.0 mL and increase bolus size to 2 mL, 5 mL, 10 mL depending on effect

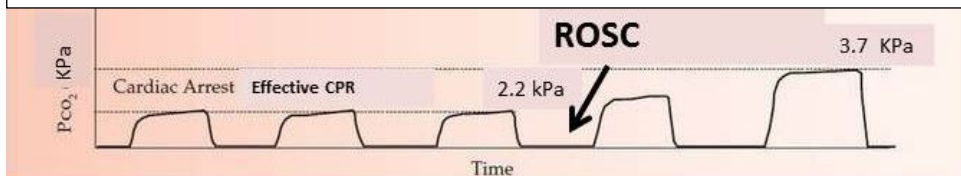
DEFIBRILLATOR / PACER instructions

1. Select **MANUAL ON**
2. Apply **ECG ELECTRODES and pads** to patient
3. Connect **BOTH** to the defibrillator
4. Press **PACER**
5. Adjust **Rate to 80/min.**
6. Press **START:**
7. Adjust **OUTPUT (mA) until electrical capture**
Pacer spikes aligned with QRS complex; normally 65-100mA.
Set final milliamperes to 10mA above this level.
8. Confirm mechanical capture - pulse present

End tidal CO₂ levels give some indication of the adequacy of the CPR. A flat line on capnography = ETT in oesophagus
With effective CPR the ETCO₂ usually be > 2.6 KPa



CPR may be ineffective because chest compressions are < 1/3 of the AP thoracic distance, they are too slow, because there is circulatory obstruction (tamponade/pneumothorax) or profound hypovolaemia. Low ETCO₂ levels during CPR are associated with



777 Emergency chest reopening call

- **SAY** 'There is an emergency in Cardiovascular ICU – ward 48 and the emergency chest opening team is required'
- State whether the intensivist and the surgeon need to be called by the call center (if either or both are not present they need to be called – preferably by you if time allows but if not by the call centre)
- Indicate whether you need the perfusionist to attend

Delegate one person to ensure that there are 4 units of red cells on the CVICU for this patient, if there are not order them urgently from the blood bank x24014

Call Centre Calls the Following Staff

Personnel on Group Page

Level 4 Anaesthetic Registrar

Charge nurse manager

CTSU Surgical Registrar

CTSU Theatre Nurse 1st on call (m-f 20:30 – 07:30 + w/e)

CTSU Theatre Nurse Co-ordinator (m-f 07:30 – 20:30)

Contact Centre makes Separate Phone Calls (unless told not to) to

Surgeon (on call)

CVICU Consultant

Perfusionist if requested