

Further reading

# Post cardiac arrest SOP

UK Resus Council guidelines 2021 TTM2 trial 2021 https://theresusroom.co.uk/rosc/ COACT trial 2019

#### **Related SOPs**

Acute coronary syndrome SOP

**Neurological emergencies SOP** 

Successful return of spontaneous circulation (ROSC) following a medical cardiac arrest marks the beginning of the post cardiac arrest syndrome, characterized by:

- 1. Post cardiac arrest brain injury
- 2. Post cardiac arrest myocardial dysfunction
- 3. Systemic reperfusion response
- 4. Persistence of the underlying pathology

#### **Consider the cause:**

Coronary syndrome - refer to the Acute coronary syndrome SOP

Sepsis - give generous fluids, antibiotics, inotropic support

Pulmonary embolism - pre-alert the receiving ED about possible thrombolysis/ thrombectomy

Hypothermia - consider transporting to a hospital capable of providing extracorporeal rewarming

Intracranial event - consider transporting to a neurosurgical centre as per the Neurological emergencies SOP (NB No formal bypass arrangement exists)



# Post cardiac arrest SOP

#### Airway: case-by-case basis

A brief period of cardiac arrest with early ROSC may permit a rapid cognitive recovery and require no airway support. Occasionally a short period of watchful waiting is appropriate if the GCS is rising

In some deeply comatose patients, a well-functioning igel may be left in-situ if the risks of drug-assisted intubation potentially outweigh the benefits

In some patients, drug assisted intubation may be the most optimal airway strategy

Monitor EtCO<sub>2</sub> in all cases

## **Breathing: case-by-case basis**

In comatose patients, paralysis and mechanical ventilation to normocapnia is appropriate in most cases. Be aware of the detrimental effect positive intrathoracic pressures may have on cardiac output

Titrated oxygen to maintain SpO<sub>2</sub> 94-99% in all cases

## Circulation

12-lead ECG

Vascular access

Aim for systolic BP>100mmHg

Support with fluids +/- titrated adrenaline (50mcg doses in adults)

**ECG evidence of STEMI?** 

In most cases, transfer to nearest receiving ED. In exceptional circumstances, consider direct discussion with a senior cardiologist from scene as to most appropriate destination

#### In all cases:

Avoid fever Sedation as required (ketamine/midazolam) Aim for normoglycaemia Treat seizures promptly Yes Ref

No

Refer to receiving PPCI centre as per Acute coronary syndrome SOP

