ADULT POST–CARDIAC ARREST CARE

Return of spontaneous circulation (ROSC)

Optimize Ventilation and Oxygenation

- If not already done, place ETT; if ETT already in place, confirm proper position and patency
- Provide minimal level of supplemental oxygen to maintain SpO_2 of 90% to 98%
- Support ventilation to keep carbon dioxide levels in physiologic range ($PaCO_2$ between 35 and 45 mmHg or monitored using $ETCO_2$) unless clinical condition warrants carbon dioxide level above or below this range; avoid hypercarbia

Manage Hemodynamics (MAP ≥ 65 mmHg)

- Administer as indicated:
  - IV/IO **fluid bolus**
  - Inotrope/vasopressor infusion (as clinically indicated)
- Consider mechanical circulatory support

- Obtain 12-lead ECG
- Consider diagnostic imaging (CT, POCUS, ECHO)
- Identify treatable causes (including Hs and Ts)

STEMI or further cardiac support needed?

YES

- Consider early angiography/ reperfusion therapy
- Consider mechanical circulatory support
- Cardiology consultation

NO

Able to follow verbal commands?

YES

- Admit to critical care unit
- Consider angiography prior to discharge

NO

- Active temperature control
- Brain imaging
- EEG monitoring

Medications

IV/IO fluid bolus	1 to 2 L NS or LR solution
Dopamine	5 to 20 mcg/kg/min IV/IO
Epinephrine	2 to 10 mcg/min IV/IO
Norepinephrine	0.1 to 0.5 mcg/kg/min IV/IO

Hs and Ts

- **H**ypovolemia
- **H**ypoxemia
- **H**ydrogen ion excess (acidosis)
- **H**yperkalemia/hypokalemia
- **H**ypothermia
- **H**yperglycemia/hypoglycemia
- **T**amponade (cardiac)
- **T**ension pneumothorax
- **T**hrombosis (pulmonary embolism)
- **T**hrombosis (myocardial infarction)
- **T**oxins

Ventilation and Oxygenation Goals

Ventilation

- Start at 10 breaths/min; adjust as needed
- $PaCO_2$: 35 to 45 mmHg

Oxygenation

- Provide minimal level needed to maintain SpO_2 of 90% to 98%

Active Temperature Control

- Actively prevent fever and maintain a temperature of 37.5° C or less for at least 36–72 hours
- Consider hypothermic temperature control in select subpopulations. If targeting a hypothermic range, monitor for negative consequences of hypothermia
- Use fever prevention/temperature control methods (e.g., uncovering patient, acetaminophen, surface cooling devices with temperature monitoring/feedback)
- Continuously monitor core temperature via esophageal, rectal or bladder catheter

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