POST-CARDIAC ARREST CARE ALGORITHM

ProMed CERTIFICATIONS

Return Of Spontaneous Circulation (ROSC)

MANAGE AIRWAY	• Early placement of endotracheal tube
MANAGE RESPIRATORY PARAMETERS	• Start at 10 breaths per minute • SpO_2 ≥92%-98% • $PaCO_2$ 35-45 mm Hg
MANAGE HEMODYNAMIC PARAMETERS	• Systolic blood pressure >90 mm Hg • Mean arterial pressure >65 mm Hg

Obtain 12-lead ECG

CONSIDER EMERGENCY CARDIAC INTERVENTION IF:	• STEMI present • Unstable cariogenic shock • Mechanical circulatory support required

Does patient follow commands?

NO

COMATOSE
- TTM
- Obtain brain CT
- EEG monitoring
- Other critical care management

YES

AWAKE
Other critical care management

Evaluate and treat rapidly reversible etiologies
Involve expert consultation for continued management

INITIAL STABILIZATION PHASE

Resuscitation during the post-ROSC phase is ongoing. Many of these activities can occur concurrently.
However, if prioritization is necessary follow these steps:

- Airway Management: Waveform capnography or capnometry and monitor ETT placement
- Manage respiratory parameters: Titrate FIO_2 for SpO_2 92%-98%; start at 10 breaths/min; titrate to $PaCO_2$ of 35-45 mm Hg
- Manage hemodynamic parameters: Administer crystalloid and/or vasopressor or inotrope for goal systolic blood pressure >90 mm Hg or mean arterial pressure >65 mm Hg

CONTINUED MANAGEMENT AND ADDITIONAL EMERGENT ACTIVITIES

These evaluations should be done concurrently so that decisions on targeted temperature management (TTM) receive high priority as cardiac interventions.

- Emergent cardiac intervention: Early evaluation on 12-lead electrocardiogram (ECG); consider hemodynamics for decision on cardiac intervention
- TTM: If patient is not following commands, start TTM as soon as possible; begin at 32-26°C for 24 hours by using a cooling device with feedback loop
- Other critical care management:
  1. Continuously monitor core temp
  2. Maintain normoxia, normocapnia, and euglycermia
  3. Provide EEG monitoring
  4. Provide lung-protective ventilation

H'S AND T'S

H's
Hypovolemia
Hypoxia
Hydrogen ion (acidosis)
Hypo-/hyperkalemia
Hypothermia

T's
Tension pneumothorax
Tamponade (cardiac)
Toxins
Thrombosis (pulmonary)
Thrombosis (coronary)

This Algorithm is based on the latest (2020) American Heart Association standards and guidelines