

Out-of-hospital cardiac arrest (OHCA) patients who have achieved return of spontaneous circulation (ROSC), but remain comatose

Within 10 minutes of hospital arrival:

Perform 12-lead electrocardiography (ECG) to identify patients who benefit from emergent angiography
Induce targeted temperature management (TTM) with mild therapeutic hypothermia (TH) to limit tissue injury following cardiac arrest

ST-segment elevation on the ECG

No ST-segment elevation on the ECG

Activate ST-segment elevation myocardial infarction (STEMI) team
Consider survival benefit/risk ratio,
especially if multiple unfavorable resuscitation features are present

"ACT"
Assess for unfavorable resuscitation features
Consult with interventional cardiology & intensive care services
Transport to cardiac catheterization laboratory (CCL)
(once a decision is made to proceed with coronary angiography)

Patients deemed suitable

Emergency angiography
Define coronary anatomy
Identify coronary lesion
Percutaneous coronary intervention (PCI)
Left ventricular (LV) function and hemodynamic assessment
Provide mechanical LV support if needed

Patients with multiple unfavorable resuscitation features

- Unwitnessed arrest
- Initial rhythm: Non-VF
- No bystander CPR
- >30 min to ROSC
- Ongoing CPR
- pH <7.2
- Lactate >7
- Age >85
- End stage renal disease
- Noncardiac causes (e.g., traumatic arrest)

Patients are less likely to benefit from coronary intervention
Individualized patient care and interventional cardiology consultation are strongly recommended

Patients deemed suitable

Early angiography
Define coronary anatomy
Identify coronary lesion
Percutaneous coronary intervention (PCI)
Left ventricular (LV) function and hemodynamic assessment
Provide mechanical LV support if needed