POST-CARDIAC ARREST

Optimize Ventilation and Oxygen
- Maintain SaO2 >92-98 %
- Consider advanced airway and ETCO2 (35-45)
- Avoid hyperventilation

TREAT HYPOTENSION
- IV/IO BOLUS (1-2 L)
- Vasopressor Infusion
- Treatable causes H's & T's
- 12 Lead EKG

FOLLOW COMMANDS?

NO → Consider Induced Hypothermia 32—36° C >24 hours → STEMI Or High Suspicion of AMI

YES → **STEMI** Or High Suspicion of **AMI**

YES → **PCI** Reperfusion → Advanced Critical Care

NO → **Advanced Critical Care**

REVERSIBLE CAUSES H's & T's
Hypovolemia
Hypoxia
Hydrogen Ion (H+)
Hypo/hyperkalemia
Hypothermia
Toxins
Tamponade
Tension Pneumothorax
Thrombosis
Pulmonary
Coronary

CPR CONSULTANTS
TRAINING CENTER

Based on AHA ECC 2020 Guidelines

TACHYCARDIA

HR typically > 150 BPM

UNIVERSAL ASSESSMENT
Reversible Causes? H's & T's
- Airway? BVM as necessary
- Oxygen if Hypoxic
- Pulse, and Blood Pressure
- Cardiac Monitor
- IV Access
- 12 Lead EKG. DO NOT delay therapy

REVERSIBLE CAUSES H's & T's
Hypovolemia
Hypoxia
Hydrogen Ion (H+)
Hypo/hyperkalemia
Hypothermia
Toxins
Tamponade
Tension Pneumothorax
Thrombosis
Pulmonary
Coronary

Persistent tachyarrhythmia with HYPOPERFUSION:
- Hypotension
- Altered Mental Status
- Shock
- Ischemic Chest Pain/ discomfort
- Acute heart failure

YES → **SYNC Cardioversion**
- Consider Sedation
- If regular narrow complex, consider adenosine

NO → Wide QRS? > .12 second

YES →
- Consider Adenosine if regular and monomorphic
- Consider antiarrhythmic infusion
- EXPERT CONSULTATION

NO →
- Vagal Maneuvers
- Adenosine (SVT)
  6mg IV Bolus
  12mg IV Bolus
- β-Blocker or Calcium Channel Blocker
- EXPERT CONSULTATION

Wide Complex Antiarrhythmic Infusion
- Procainamide - 20-50 mg/min
- Amiodarone - 150 mg over 10 min
- Sotalol - 100 mg (1.5 mg/kg) over 5 min

BRADYCARDIA WITH A PULSE

Heart Rate typically < 50 BPM with complaint

UNIVERSAL ASSESSMENT
Reversible Causes? H's & T's

- Airway? BVM as necessary
- Oxygen if Hypoxic
- Pulse, and Blood Pressure
- Cardiac Monitor
- IV Access

Persistent bradyarrhythmia with HYPOPERFUSION:

- Hypotension
- Altered Mental Status
- Shock
- Ischemic Chest Pain/discomfort

NO

Monitor and Observe

Expert Consultation

YES

CONSIDER ATROPINE

Atropine Dose:

- First Dose: 1 mg IV Bolus
- Repeat Dose: 1 mg IV Bolus
  Repeat every 3 - 5 minutes
  Max total dose: 3 mg

If Atropine is not effective:

- Transcutaneous Pacing
  OR
- Dopamine infusion - 5-20 mcg/kg/min
  OR
- Epinephrine infusion - 2-10 mcg min

Consider:
Expert Consultation
Transvenous Pacing

CARDIAC ARREST ALGORITHM

REVERSIBLE CAUSES
H's & T's

Hypovolemia
Hypoxia
Hydrogen Ion (H+)
Hypo/hyperkalemia
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HELP—ACTIVATE EMERGENCY RESPONSE

START *High Quality* CPR
30:2
100—120 per minute
Compression Fraction > 60—80 %

- Give Oxygen
- Attach Monitor/Defibrillator

CHECK RHYTHM

VF/VT

SHOCK

Drug Therapy

- IV/IO Access
- Epinephrine 1 mg 3-5 min
- Amiodarone 300 mg or Lidocaine (1– 1.5 mg/kg)VF/VT

CONSIDER ADVANCED AIRWAY

TREAT REVERSIBLE CAUSES
H's & T's

AT 2 MINUTE CYCLE—
RE-EVALUATE RHYTHM

ROSC

NO

YES

POST CARDIAC ARREST CARE

CONTINUOUS CPR

MONITOR CPR

ETCO2 MAP