CARDIAC ARREST CIRCULAR ALGORITHM





DOSES & DETAILS

CPR QUALITY

- Push hard (at least 2 inches [5cm]) and fast (100-120/min)
- and allow complete chest recoil.
- Minimize interruptions in compressions.
- Avoid extensive ventilation.
- Rotate compressor every 2 minutes, or sooner if fatigued.
 If no advanced airway, 30:2 compression-ventilation ration.
- Quantitative waveeform capnoraphy
- If PETCO₂ <10mm HG, attempt to improve CPR quality
- Intra-arterial pressure
- If relaxation phase (diastolic) pressure <20 mm Hg, attempt to improve CPR quality

SHOCK ENERGY FOR DEFRIBRILLATION

• Biphasic: Manufacturer recommendation (eq. initial dose of 120-200 J); if unknown, use maximum available. Second and subsequent doses should be equivalent, and higher doses may be considered. Monophasic: 360 J

DRUG THERAPY

- Epinephrine IV/IO Dose: 1 mg every 3-5 minutes
- Amiodarone IV/IO Dose: First dose: 300mg bolus. Second dose: 150mg.

ADVANCED AIRWAY

- Endotracheal intubation or supraglottic advanced airway
- Waveform capnography or canometry to confirm and monitor ET tube placement
- Once advanced airway in place, give 1 breath every 6 seconds (10-12 breaths/min) with continuous chest compressions

RETURN OF SPONTANEOUS CIRCULATION (ROSC)

• Pulse and blood pressure

- Abrupt sustained increase in PETCO₂ (typically ≥40mm Hg)
- Spontaneous arterial pressure waves with intra-arterial monitoring

REVERSIBLE CAUSES Ήs

Hydrogen ion (acidosis)

• Hypo-/Hyperkalemia

- Hypovolemia
- Hypoxia

Hypothermia

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

