Critical Topics in Saving NC Lives Focus Cardiac Arrest

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Regional Approach to Cardiovascular Emergencies Cardiac

Arrest Resuscitation System









Resuscitation Capable Hospital Pre-Transfer Guidelines

Inclusion Criteria

- Adults (age ≥ 18 years)
- Return of Spontaneous Circulation (ROSC) within 60 minutes of arrest
- Persistent Coma: Inability to follow commands and/or GCS < 9

Exclusion Criteria

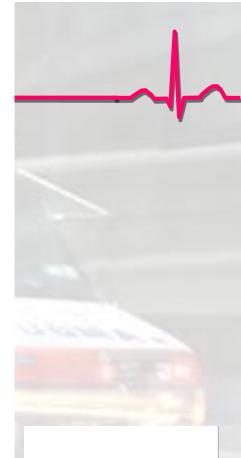
- Severe or terminal illness with anticipated non-aggressive care
- Active hemorrhage
- Systemic infection/sepsis
- · Severe refractory shock

Resuscitation Priorities

- · Airway: Intubation
- Breathing
- Avoid hyperventilation (goal PaCO2 of 38 42mmHg)
- Avoid hyperoxia (rapidly decrease FiO2 to maintain SpO2>95%)
- Circulation
- Goal MAP>65
- Anticipate and avoid hypotension
- Norepineprine is the preferred vasopressor
- ECG screen for STEMI

Cooling Induction

- Initiate cooling as soon as possible after ROSC
- Refrigerated (4°C) NS 30 cc/kg IV bolus as tolerated
- · Ice packs to groin, axilla and neck
- · Shivering control with Propofol 10 mcg/kg/min
- Paralyze patient with Vecuronium 0.1mg/kg q1hr





Cardiac Arrest Resuscitation System

Optimal Cardiac Arrest System Specification By Point Of Care Operations Manual Version 1.0





Resuscitation Capable Hospital Goal: To Improve survival from cardiac arrest by 50% Standard and well executed ACLS Protocols Baseline Neurologic examination 2 large bore IV ECG: If new LBB or STEMI: Activate STEMI Plan Early notification of the receiving hospital Early activation of the transport plan Implement Treatment protocols for STEMI and Cardiac Arrest Send medical records including EMS information, ECG, record of treatment with times, and EMTALA form (can fax records if need time to complete, EMTALA forms must go with patient) Optimize BP to MAP>65mmHG Titrate EtCO2 for 35-40 Consider CT of Brain Pressure Infuse 2L of cold saline if candidate for hypothermia (if EMS started cooling do not stop) Sedation and possibly paralysis Train family in recognition of cardiac emergency and compression only CPR prior to patient discharge Family and Staff support Data measurement and feedback







Cardiac Arrest Center Goal: To improve the survival from cardiac arrest by 50%	
ū	Standard and well executed ACLS protocols
	Baseline neurologic examination
ū	2 large bore IV's
	ECG: STEMI to cath lab
ū	Optimize BP to MAP>65mmHG
	Titrate EtCO2 for 35–40
ū	Consider CT of brain, do not delay cooling for scan or extensive testing before transfer unless clinically indicated
ū	Pressure infuse 2L of cold saline if candidate for hypothermia (If EMS started cooling do not stop)-continue cooling in transport
	Continue therapeutic hypothermia for 24 hours
	Sedation and possibly paralysis
٥	On-going neurological assessment and care
٥	24/7 Cath lab availability for STEMI
	Early coronary angiography if not a STEMI
ū	ICD Evaluation
ū	Rehabilitation plan
ū	Train family in recognition of cardiac emergency and compression only CPR prior to patient discharge
ū	Family and staff support
	Data measurement and feedback

