Southern Illinois Regional EMS System

CC-6 ASYSTOLE / PULSELESS ELECTRICAL ACTIVITY (PEA)

ALS/ILS:

- General Patient Assessment and Initial Medical Care protocol
- Cardiac Arrest protocol
- Perform CPR until defibrillator is attached
- Check pulse / identify rhythm
    - o Verify asystole in at least two leads

- NON SHOCKABLE RHYTHM, Perform CPR for 2 minutes (5 cycles).
- While CPR is in progress,
    - o Verify IV/IO access.
    - o Consider preparation of medications.
- Consider possible underlying causes:
    - o Hypovolemia
    - o Hypoxia
    - o Hypothermia
    - o Hyper – Hypokalemia
    - o Acidosis
    - o Hypoglycemia
    - o Tension Pneumothorax
    - o Cardiac Tamponade
    - o Toxins / Overdose
    - o Thrombosis (coronary, pulmonary)

- After 2 minutes of CPR:
    - o Check rhythm / pulse.
    - o If rhythm changes, proceed to appropriate protocol/algorithm.

- ASYSTOLE or PEA found on monitor:
    - o Non-shockable rhythm, immediately perform CPR for 2 minutes (5 cycles).
    - o Administer a vasopressor.
        - **Epinephrine (1:10000) 1mg** IV/IO every 3-5 min. or
        - **Vasopressin 40 units** IV/IO
    - o Vasopressin may only replace the first or second dose of epinephrine.
    - o Administer medication during CPR in order to reach central circulation.

- After 2 minutes of CPR:
    - o Check rhythm / pulse
    - o If rhythm changes, proceed to appropriate protocol/algorithm.

- If ASYSTOLE or PEA is found after the pulse/rhythm check:
    - o CPR for 2 minutes (5 cycles).
    - o Continue the above CPR – medication rotation
        - Continue to administer **Epinephrine (1:10000) 1mg** every 3-5 minutes

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(continued)

- ET drug administration:
  - o Epinephrine (1:10000) 2 – 2.5mg diluted in 10mL NS
  - o Vasopressin 80 units with saline flush

- NOTES:
  - o Consider the most appropriate time for advanced airway placement.
  - o Placement of an ET tube should only minimally interfere with chest compressions.
  - o If you can adequately ventilate with a BVM and OPA/NPA, early emphasis should not be placed on intubation.
  - o Immediate airway attention is required when vomitus, blood, or secretions pose an aspiration hazard.