Kalamazoo County Medical Control Authority

Crashing Patient / Patient in Extremis – Adult

Date: January 16, 2020

Criteria: A. Patient in whom cardiac or respiratory arrest appears imminent.

B. Patient with provider impression of extremis, including new onset altered mental status, airway issues, severe respiratory distress/failure, signs and symptoms of shock/poor perfusion.

Exclusion Criteria:

A. Life-threatening trauma

Goals:

EMS frequently encounters patients that are in extremis and quickly deteriorating to the point of cardiac arrest, often while packaging and loading these patients. It is important to rapidly recognize the deteriorating patient and take immediate action where you encounter the patient to stabilize the condition before loading and transporting. The following timeline provides a prioritization of the goal directed treatments to stabilize the patient and prevent deterioration:

A. Immediate Actions (within First 5 Minutes)

1. Airway

a. Insert Nasopharyngeal (or OP) Airway as indicated/tolerated if not following commands (GCS motor <6) or no response to verbal stimuli per the **Emergency Airway Procedure**.

2. Breathing

- a. If respiratory failure or distress, sit patient up if tolerated and not contraindicated by suspected spine injury.
- b. Provide high-flow oxygen per the **Oxygen Administration Procedure.**
- c. If respirations are <10 per minute, ventilate by BVM at 15LPM. Two person, two handed technique is most effective.
- d. If respirations are >10 but inadequate apply CPAP for respiratory distress/hypoxia per the **CPAP/BiPAP Procedure.**
- e. Respirations may be assisted with BVM in sitting position if patient tolerates.

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- f. Consider PPV by BVM if not following commands or SpO2 <90%
- 3. Monitoring ECG, SpO2, EtCO2 (if nasal prong adapter available), NIBP (if available)

B. Actions within First 10 Minutes

- 1. Circulation
 - a. Electrical Therapy (cardioversion or pacing) if dysrhythmia is primary cause of shock per the **Electrical Therapy Protocol**.
 - b. Emergent IV/IO access
 - c. Administer NSS up to 1 liter bolus, infused under pressure unless signs of pulmonary edema, per the **Shock Protocol**

C. Actions within First 15 Minutes

- 1. Re-assess response to treatments
- 2. Circulation
 - a. Repeat NSS up to 2 liter total for adults if indicated
 - b. If bradycardia, consider atropine 0.5 mg IV/IO, if indicated
 - c. If no response to fluids (SBP<80 and decreased LOC), administer Epinephrine per **Shock Protocol**

D. Actions within First 20 Minutes

- 1. Re-assess response to treatments
- 2. Circulation continue fluids/vasopressors (push dose) as indicated by **Shock Protocol** or medical control order
- 3. Airway insert advanced airway if indicated per **Emergency Airway Protocol.**

E. Once critical actions have been completed; move the patient to ambulance for transport.

Notes:

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- 1. The specific lengths of time listed are approximate to provide a sense of urgency and to prioritize actions. Provider safety is of utmost importance. Care for these patients should be given as quickly as possible, but safety considerations and the scene environment may lead to times that are longer than these stated goals. When conditions make it impossible to meet these goals, the reasons should be documented.
- 2. Actions listed should be simultaneous and not in any specific order.
- 3. Follow appropriate shock protocol for push dose Epinephrine 0.01 mg/mL (prepared by mixing 1 mL of 0.1 mg/mL siluted with 9 mL NSS)

Performance Parameters:

- **1.** Review all cases of cardiac arrest witnessed by (in presence of) EMS providers for compliance with this protocol to prevent patient deterioration.
- **2.** Ensure that specific treatments also follow other appropriate protocols, e.g. Airway Management, Shock, Tachycardia, Bradycardia, etc.

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