



MIAMI TOWNSHIP FIRE & EMS CLERMONT COUNTY, OHIO *MEDICAL PROTOCOLS*



CARDIOGENIC SHOCK

Historical Findings

1. Age \geq 30. Age $<$ 30, contact medical command.
2. History of chest pain suggestive of cardiac origin and/or dyspnea.
3. No evidence or history of trauma or bleeding.

Physical Findings

1. Systolic blood pressure \leq 90 mmHg with signs of cardiovascular compromise:
 - A. Acute altered mental status.
 - B. Ongoing chest pain.
 - C. Severe shortness of breath.
 - D. Presyncope or syncope.

Protocol

1. Initiate contact; reassure, and explain procedures.
2. Assess and secure the patient's airway and provide oxygen per the airway, oxygen and ventilation protocol.
3. Perform patient assessment, obtain vital signs and begin cardiac monitoring.
4. Acquire a 12 lead ECG and maintain cardiac monitoring at all times.
 - A. Treat all arrhythmias prior to hypotension because the arrhythmia is often the cause of the hypotension.
 - B. If an acute RVI AMI is suspected, hypotension should be managed with aggressive IV fluids in the absence of rales on lung exam. Establish IV access and administer a 1 liter 0.9 % normal saline bolus and reassess.
 - C. All other acute myocardial infarctions should be treated cautiously with IV fluids due to the risk of pulmonary edema. Establish IV access and administer a 500 mL 0.9% normal saline bolus in the absence of rales on lung exam and reassess.



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- D. Nondiagnostic ECGs should be treated initially with IV fluids in the absence of rales on lung exam. Establish IV access and administer a 500 mL 0.9 % normal saline bolus and reassess.
 - E. If hypotension is refractory to IV fluids or the patient has signs and symptoms of pulmonary edema initiate dopamine (intropin) starting at 5 micrograms / kg / minute titrated up to 20 micrograms / kg / minute to maintain a systolic blood pressure of 100 mmHg.
5. Dopamine drip rates are calculated based on a 1600 microgram / mL concentration (400mg in 250 mL).
- A. 400 micrograms/minute = 15 gtts / minute
 - B. 800 micrograms/minute = 30 gtts / minute
 - C. 1200 micrograms/minute = 45 gtts / minute
 - D. 1600 micrograms/minute = 60 gtts / minute
6. Update medical command on patient's condition.