

Chest Pain – Acute Coronary Syndrome

BLS Procedures

Administer oxygen if dyspnea, signs of heart failure or shock, or SpO₂ < 94%
Assist patient with prescribed Nitroglycerin as needed for chest pain

- Hold if SBP less than 100 mmHg

ALS Prior to Base Hospital Contact

Perform 12-lead ECG

- Expedite transport to closest STEMI Receiving Center if monitor interpretation meets the manufacturer guidelines for a positive STEMI ECG.
- Document all initial and ongoing rhythm strips and ECG changes

For continuous chest pain consistent with ischemic heart disease:

- **Nitroglycerin**
 - SL or lingual spray – 0.4 mg q 5 min for continued pain
 - No max dosage
 - Maintain SBP greater than 100 mmHg
- **Aspirin**
 - PO – 324 mg

IV/IO access

- 3 attempts only prior to Base Hospital contact

If pain persists and not relieved by NTG:

- **Morphine** – per policy 705 - Pain Control
 - Maintain SBP greater than 100 mmHg

If patient presents or becomes hypotensive:

- Lay Supine
- **Normal Saline**
 - IV/IO bolus – 500 mL -may repeat x1 for total 1000 mL.
 - Unless CHF is present

Communication Failure Protocol

One additional IV/IO attempt if not successful prior to initial BH contact

- 4 attempts total per patient

If hypotensive (SBP less than 90 mmHg) and signs of CHF are present or no response to fluid therapy:

- **Epinephrine 0.1 mg/mL**
 - Slow IV/IOP – 0.1 mg (1 mL) increments over 1-2 minutes
 - Repeat every 3-5 min
 - Max 0.3 mg (3 mL)

Base Hospital Orders only

Consult ED Physician for further treatment measures

ED Physician Order Only: For ventricular ectopy [PVC's > 10/min, multifocal PVC's, or unsustained V-Tach], consider Amiodarone IV/IOPB - 150 mg in 50 mL D5W infused over 10 minutes

Additional Information:

- Nitroglycerin is contraindicated when phosphodiesterase inhibitor medications [Sildenafil (Viagra and Revatio), Vardenafil (Levitra), and Tadalafil (Cialis)] have been recently used (Viagra or Levitra within 24 hours; Cialis within 48 hours). These medications are most commonly used to treat erectile dysfunction or pulmonary hypertension. NTG then may only be given by ED Physician order
- Appropriate dose of Aspirin is 324mg. Aspirin may be withheld if able to confirm that patient has received appropriate dose prior to arrival. If unable to confirm appropriate dose, administer Aspirin, up to 324mg.

Effective Date: June 1, 2018
Next Review Date: March 31, 2020

Date Revised: March 8, 2018
Last Reviewed: March 8, 2018


VCEMS Medical Director