



CHEST PAIN-SUSPECTED CARDIAC ISCHEMIA

Effective: January 1, 2024

Replaces: January 1, 2021

1. BLS Treatment

- 1.1. Routine Medical Care – Adult (**700-S04**)
 - 1.1.1. **If patient is short of breath, hypoxic or has obvious signs of congestive heart failure, administer Oxygen** – titrate to achieve pulse oximetry saturation between 94%-98%
- 1.2. **Aspirin 324mg PO** (chewable) as soon as possible
- 1.3. Treat for signs and symptoms of shock as necessary (**700-A10**)
- 1.4. May assist patient in taking his/her own Nitroglycerin if patient is alert, oriented and had a SBP greater than 100 mmHg

2. ALS Treatment

- 2.1. **Vascular Access (IV)**, TKO
- 2.2. Obtain **12 Lead ECG**, if 12 Lead ECG states “**STEMI**” or “**Acute MI Suspected**”:
 - 2.2.1. Determine closest most appropriate STEMI receiving center
 - 2.2.2. Transmit a good quality 12 Lead ECG to the selected STEMI Center, when the first transmission capable monitor arrives, regardless of ETA (**700-M09**)
 - 2.2.3. **Provide advanced notification (Policy 501)**
- 2.3. **Nitroglycerin 0.4mg SL**
 - 2.3.1. Repeat every 3 minutes, max of 3 doses, for continued pain and discomfort, and if SBP remain greater than 100 mmHg
 - 2.3.2. If the patient becomes hypotensive after the administration of Nitroglycerin:
 - 2.3.2.1. Place the patient in shock position, if possible
 - 2.3.2.2. Consider **250ml Fluid bolus**
 - 2.3.2.3. If no improvement after 5 minutes, treat according to (**700-A10**)
- 2.4. **Morphine Sulfate 5mg slow IV**, if systolic blood pressure is greater than 100 mmHg and; if still symptomatic after 3 nitroglycerin doses, or if nitroglycerin is contraindicated
 - 2.4.1. **May repeat Morphine Sulfate 5 mg IV** every 3-5 minutes, to a max of 20 mg

3. Sympathomimetic Related Chest Pain

- 3.1. If chest pain is related to sympathomimetic use:
 - 3.1.1. AND is not relieved with nitroglycerin or morphine;
 - 3.1.2. AND sustained tachycardia;
 - 3.1.3. Administer **Midazolam 2.5mg IV**
- 3.2. **BASE CONTACT**: if additional Midazolam above 2.5mg is needed

4. Special Considerations

- 4.1. Consider placing defibrillator pads on high risk patients
- 4.2. To avoid hypotension, withhold nitroglycerin if patient has taken phosphodiesterase inhibitor within the past 48 hours. Examples include: Sildenafil (Viagra, Revatio), or Vardenafil (Levitra, Staxyn, Tadalafil (Cialis, Adcirca),
Withhold nitroglycerin use in patients receiving intravenous epoprostenol, or treprostenil (Remoudulin, Flolan) for pulmonary hypertension.



5. Chest Pain – Suspected Cardiac Ischemia Treatment Flow Chart

