



# Cardiac: Suspected Acute Coronary Syndrome

## Assessment

### Pediatric Pearls:

- Use pediatric dosing of medications or electrical therapy for a pediatric patient < 37 kg and as defined by the PEDIA Tape.
- Focus on rapid and early BLS airway and ventilation tools. Intubation may not be the best option for these patients.

### Signs & Symptoms:

- Pain or pressure between navel and jaw
- "Heart racing", "palpitations", or "heart too slow"
- CHF signs of symptoms
- Syncope
- Severe weakness if > 45 years old
- Difficulty breathing (no obvious respiratory cause)

### Differential:

- Angina vs Myocardial infarction
- Pericarditis
- Pulmonary embolism
- Asthma / COPD
- Pneumothorax
- Aortic dissection
- GI reflux / Hiatal hernia / PUD
- Esophageal spasm
- Chest wall injury or pain
- Pleuritic pain
- Overdose (sympathomimetic)

## Clinical Management Options

P	P	P	P	P	P	<ul style="list-style-type: none"> <li>• <a href="#">Oxygen</a> PRN titrated to SpO<sub>2</sub> 92%-96%</li> <li>• Perform bilateral blood pressures, if difference between R &amp; L arm SBP is <math>\geq 20</math>mmHg then consider aortic dissection and withhold Aspirin and Nitro</li> <li>• <a href="#">Aspirin</a></li> <li>• Basic airway management</li> </ul>
L	L	L	L	L	L	<ul style="list-style-type: none"> <li>• 4 lead and <a href="#">12 lead ECG</a> placement and acquisition</li> <li>• <a href="#">Nitroglycerin</a> if SBP <math>\geq 100</math> mmHg</li> </ul>
1	2	3	4	5	6	<ul style="list-style-type: none"> <li>• <a href="#">Vascular access</a></li> <li>• <a href="#">Isotonic Crystalloid</a> PRN titrated to SBP <math>\geq 100</math> mmHg or MAP <math>\geq 65</math></li> </ul>
						<ul style="list-style-type: none"> <li>• Monitor and interpret ECG within 5 minutes of patient contact</li> </ul>
						<ul style="list-style-type: none"> <li>• Declaration of "<a href="#">STEMI Alert</a>" and minimize scene time to &lt; 15 minutes if possible</li> <li>• Fluid therapy for Inferior Wall MI: <a href="#">Isotonic Crystalloid</a></li> <li>• Pain management: <a href="#">Fentanyl</a></li> <li>• If Hypersympathetic state from stimulant abuse: <a href="#">Midazolam</a> (usually presents with sustained HR &gt; 120 bpm and HTN)</li> </ul>

## Consult Online Medical Control As Needed

### Pearls:

- Refer to drug formulary charts for all medication dosing for both adults and pediatric patients.
- Do not administer Nitroglycerin in any patient who used Viagra (sildenafil) or Levitra (vardenafil) in the past 24 hours or Cialis (tadalafil) in the past 48 hours or other PDE erectile dysfunction medications due to potential severe hypotension.
- Refer to STEMI Alert or ACS Consultation Criterion.
- If patient has STEMI, or is going directly to cardiac cath, attempt to establish a second IV but do not delay transport. Transport providers need to minimize scene time to < 15 minutes whenever possible.
- Monitor for hypotension and respiratory distress after administration of nitroglycerin, fentanyl, or midazolam.
- Diabetics and geriatric patients often have atypical pain, or generalized complaints.
- EtCO<sub>2</sub> if multiple doses of Fentanyl or Midazolam medication administered.