Chest Pain: Not Cardiac

San Mateo County Emergency Medical Services

For musculoskeletal and pleuritic pain and any chest pain that is NOT of possible cardiovascular etiology

### History
- Age
- Medications (Erectile dysfunction medications)
- Past medical history (e.g., MI, angina, diabetes, or post menopausal)
- Allergies
- Recent physical exertion
- Onset
- Provocation
- Quality (e.g., pressure, constant, sharp, dull, etc.)
- Region/Radiation/Referred
- Severity (0 – 10 scale)
- Time (onset/duration/repetition)

### Signs and Symptoms
- Heart rate < 60 with associated hypotension, acute altered mental status, chest pain, acute CHF, seizures, syncope, or shock secondary to bradycardia
- Chest pain
- Respiratory distress
- Hypotension or shock
- Altered mental status
- Syncope
- Nausea
- Abdominal Pain
- Diaphoresis

### Differential
- Acute myocardial infarction
- Hypoxia
- Pacemaker failure
- Hypothermia
- Sinus bradycardia
- Athletes
- Head injury (elevated ICP) or stroke
- Spinal cord lesion
- Sick sinus syndrome
- AV blocks (e.g., 1°, 2°, or 3°)
- Overdose

### Signs and Symptoms Flowchart

1. Chest pain?
   - Signs/symptoms consistent with cardiac etiology?
   - Yes → Chest Pain: Suspected Cardiac
   - No

2. Oxygen for sat < 92%
3. Position of comfort for pain control

4. Consider, cardiac monitor
5. Consider, 12-Lead ECG

6. Establish IV/IO
7. For pain consider, Fentanyl

8. If systolic BP < 90
   - Normal Saline bolus 500ml IV/IO
   - Maximum 2L

   - Consider Base Hospital for medical direction

### Pearls
- Many STEMI evolve during prehospital care and may not be noted on the initial 12-Lead ECG.
- An ECG should be obtained prior to treatment for bradycardia if patient condition permits.
- If a patient has taken their own Nitroglycerin without relief, consider potency of medication. Provider maximum doses do not include patient administered doses.
- Monitor for hypotension after administration of nitroglycerin and opioids.
- Diabetics, geriatric, and female patients often have atypical pain, or only generalized complaints. Suspect cardiac etiology in these patients, and perform a 12-Lead ECG.