

## **SUSPECTED ACUTE CORONARY SYNDROME**

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### **Information Needed:**

- Discomfort or pain: OPQRST (Onset, Provocation, Quality, Region, Radiation, Severity, Time )
- Associated symptoms: nausea, vomiting, diaphoresis, dyspnea, dizziness,
- Obtain medical history (other medical problems, including hypertension, diabetes, or stroke)
- Recent use of sildenafil (Viagra®) or other erectile dysfunction medications in the last 24 hours
- Treatment should be considered in patients with atypical presentations and symptoms suspicious of acute coronary syndrome

### **Objective Findings:**

- General appearance: level of distress, apprehension, skin color, diaphoresis
- Signs of congestive heart failure (CHF): dependent edema, respiratory distress, distended neck veins
- Chest auscultation
- Pulse oximetry
- Assess discomfort on a 0-10 scale
- Cardiac monitor
- 12 lead ECG if available

### **Treatment:**

- Routine medical care
- Reassure patient and place in position of comfort, supine if patient is hypotensive
- Administer oxygen
- Assess patient: primary, secondary, and history
- Reassess patient, interpretation of ECG rhythm
- Give nitroglycerin (NTG) 0.4 mg sublingual. NTG may be given prior to IV access if SBP>90, may repeat q 5 minutes (If BP drops significantly after one dose or becomes borderline, use extreme caution with repeat doses)
- IV access
- Give 324 mg Aspirin (four 81 mg tablets) PO (chew) (unless known allergy to Aspirin)

- If discomfort persists, Consider morphine sulfate 2 - 5 mg slow IVP for discomfort. May repeat morphine in 2-5 mg increments q 5 minutes or more up to 20 mg.
- If unable to establish an IV up to 5 mg of morphine sulfate may be administered IM. May repeat in up to 5 mg increments q 10 minutes to a max of 20 mg.
- Prior to the administration of morphine sulfate and prior to each repeat dose, the patient's pain and vital signs should be reassessed. The patient must have a SBP >90 mmHg, respirations >12 and be awake to report pain.
- If dysrhythmia is present, see DYSRHYTHMIA Protocol
- If hypotension develops, consider fluid challenge in the presence of clear lung sounds of 250-1000 ml NS
- If hypotension persists, Dopamine 5 mcg/kg/min IV. If inadequate response, may titrate every 5 minutes in 5 mcg/kg/min increments to maintain SBP > 90mmHg. Maximum dose is 20 mcg/kg/min. Consider base physician contact

**Precaution and Comments:**

- Suspicion of angina is based on patient history. Be alert to patients likely to present with atypical symptoms or "silent acute myocardial infarctions": women, elderly, people with diabetes, and cigarette smokers.
- Angina may present with only back, shoulder or arm pain. Particularly in the elderly, it may present only with shortness of breath or generalized "ill" feelings. Other presentations of angina may be syncope, altered level of consciousness, dyspnea, weakness, etc.
- Constant monitoring of patient is essential
- Consider other potential causes of chest pain: pulmonary embolus, pneumonia, pericarditis, aortic dissection, and pneumothorax
- Consider rapid transport to appropriate receiving facility. Keep scene time to a minimum
- For patients who have evidence of a ST segment MI (STEMI) based on the machine reading of "...acute MI suspected..." contact the intended receiving hospital as soon as possible and state that the patient is being transported with a STEMI
- If the paramedic identifies ST segment changes that are not recorded by the EKG machine, or if ST segment changes were present initially and resolved prior to the full 12 lead, this should be reported to the receiving hospital as soon as possible.
- Do not administer nitroglycerin to patients who have taken any sildenafil (Viagra®) or other erectile dysfunction medications within the last 24 hours
- BLS providers may assist patients with taking their own NTG (SL tab or SL spray) if SBP >100, q 5 minutes to a maximum of three doses