



- a. The EKG may be transmitted for remote interpretation by a physician or screened for STEMI by properly trained EMS clinicians or other healthcare providers with or without the assistance of computer-interpretation
  - b. Advance notification should be provided to the receiving hospital for patients identified as having a STEMI
  - c. Performance of serial EKGs is encouraged for symptomatic patients with EKGs initially non-diagnostic for STEMI
  - d. All EKGs should be made available to treating personnel at the receiving hospital, whether hand delivered as hard copy or transmitted from the field
5. Administer aspirin; chewable, non-enteric-coated aspirin preferred (162–325 mg)
  6. Establish IV access
  7. Nitroglycerin 0.4 mg sublingual (SL), can repeat q (quaque, every) 3–5 minutes if SBP greater than 100 mmHg
    - a. The use of nitrates should be avoided in any patient who has used a phosphodiesterase inhibitor within the past 48 hours
    - b. Examples include sildenafil (Viagra®, Revatio®), vardenafil (Levitra®, Staxyn®), tadalafil (Cialis®, Adcirca®) which are used for erectile dysfunction and pulmonary hypertension. Also avoid use in patients receiving intravenous epoprostenol (Flolan®) or treprostenil (Remodulin®) which is used for pulmonary hypertension
    - c. Care should always be taken when giving nitroglycerin when the patient's blood pressure is marginal. If used in this setting, the clinician should weigh the risk and benefit of nitrate administration over the administration of an opiate analgesic and be ready to respond to hypotension with fluid bolus or pressor
  8. The location of the infarct does not preclude the use of nitrates. Right-sided leads are of no additional value if an inferior STEMI has been diagnosed and such findings (presumed RV infarct) do not preclude the use of nitroglycerin: however, continually monitor the patient's hemodynamic status and be prepared to resuscitate if hypotension occurs
  9. If the pain is unresponsive to nitrates, opiates are an acceptable alternative. Morphine should be used with caution in unstable angina (UA)/non-STEMI due to an association with increased mortality
  10. Transport and destination decisions should be based on local resources and system of care
  11. Early notification to receiving facility of any changes in patient condition or serial EKGs

#### **Patient Safety Considerations**

1. Observe for signs of clinical deterioration: dysrhythmias, chest pain, shortness of breath, decreased level of consciousness/syncope, or other signs of shock/hypotension
2. Perform serial 12-lead EKGs (especially if clinical changes are noted)
3. Consider placing defibrillator pads on high-risk patients
4. Consider configuring monitor/defibrillator to allow automatic VT/VF alert
5. Consider configuring monitor/defibrillator to allow ST-segment trending if available

#### **Notes/Educational Pearls**

##### **Key Considerations**

Acute coronary syndrome may present with atypical pain, vague or only generalized complaints.