A2
ADULT

CHEST PAIN
SUSPECTED ACUTE CORONARY SYNDROME

OXYGEN
Low flow

PRECAUTION
Caution: Do not administer or allow patient to take Nitroglycerin if patient has taken erectile dysfunction meds Viagra or Levitra within 24 hrs or Cialis within 36 hrs. In these situations, severe hypotension may occur as a result of NTG administration.

Nitroglycerin
BLS Personnel: Allow patient to take own if BP greater than 90

CARDIAC MONITOR

12 – LEAD ECG
STEMI Alert if appropriate. Perform right-sided lead (V4R) if inferior MI noted. Repeat ECGs are encouraged.

ASPIRIN
325 mg po to be chewed by patient – DO NOT administer if patient has allergies to aspirin or salicylates or has apparent active gastrointestinal bleeding

IV
TKO

NITROGLYCERIN
0.4 mg sl if systolic BP above 90. May repeat every 5 minutes until pain subsides, maximum 6 doses or BP less than 90 systolic.
Do not administer Nitroglycerin if Right Ventricular MI suspected

Consider
MORPHINE SULFATE
2-20 mg IV in 2-4 mg increments for pain relief if BP greater than 90 and NTG not effective. Consider earlier administration to patients in severe distress from pain.
Titrated to pain relief, systolic BP greater than 90, and adequate respiratory effort.
If persistent pain, continue NITROGLYCERIN to maximum of 6 doses.
Do not administer Morphine Sulfate if Right Ventricular MI suspected

Consider
FLUID BOLUS
250 ml NS if BP less than 90, lungs clear and unresponsive to positioning. May repeat X 1. Patients with Right Ventricular MI may require multiple fluid boluses.

Key Treatment Considerations

- Classic symptoms: Substernal pain, discomfort or tightness with radiation to jaw, left shoulder or arm, nausea, diaphoresis, dyspnea, anxiety
- Diabetic, female or elderly patients frequently present atypically
- Atypical symptoms can include syncope, weakness or sudden onset fatigue
- Rapid identification of STEMI to speed intervention is the goal of 12-lead ECG
- 12-lead ECG should be acquired as soon as possible after arrival (ideally within 5 minutes)
- 12-lead ECG should be acquired before initial NTG administration
- Minimize scene time in STEMI patients
- If STEMI noted and ST elevation is noted in inferior distribution (leads II, III, and aVF), the possibility for right ventricular MI (RVMI) exists
  - Perform ECG with right-sided lead (V4R) mirrored in the same orientation as V4. RVMI should be suspected if ST elevation of 1 mm or greater in V4R.
  - Patients with RVMI may present with shock or poor perfusion in the presence of clear lungs and may have JVD.
  - Nitroglycerin and Morphine should not be administered in the setting of RVMI. Trendelenburg positioning and fluid bolus is appropriate treatment for shock in this setting.
- If STEMI noted and ST elevation is noted in anterior distribution (V1-V4), patient is at higher risk for pump failure and CHF on presentation
- Many STEMI’s evolve during prehospital period and are not noted during first ECG, so repeat 12-lead ECGs are encouraged (avoid artifact by patient or vehicle movement)
- IV placement prior to NTG recommended in patients who have not taken NTG previously