

Chest Pain / Acute Coronary Syndrome

Suspected Ischemic Chest Pain

ALS Protocol

- ABCs
- Oxygen 4 LPM NC ①
- Monitor Cardiac Rhythm.
Obtain 12 lead ECG and transmit to appropriate hospital.
- IV NS TKO ②
- Transport ASAP to closest appropriate cardiac facility ⑧

- SpO2
- Vital Signs
- Obtain Medical History

- Assess Circulation**
- Is there a Volume problem?
 - Pump problem?
 - Rate problem?

- Consider the following treatment options:**
- Aspirin PO 150-325 mg ③
 - Nitroglycerin SL 0.4 mg ④
(see box below)
 - Nitroglycerin IV 5 mcg/min ⑤
(see box below)
 - Morphine IV 1-3 mg increments prn, or ⑥
 - Fentanyl 50 mcg IV or IM, prn. ⑦

Nitroglycerin is contraindicated if a patient is using phosphodiesterase inhibitors for erectile dysfunction.

Phosphodiesterase inhibitors include: Cialais, Levitra, Viagra, Revatio, sildenafil, tadalafil, danafil, gildanafil.

- Myocardial Infarction**
- Anterior Wall:**
- ST elevation in leads V1-V4
- Inferior Wall:**
- ST elevation in leads II, III, aVF
- Lateral Wall:**
- ST elevation in leads I, aVL, V5-6
- Posterior Wall:**
- ST depression and tall, broad (>0.04 sec) R wave in leads V1 and V2 (reciprocal changes)

12 Lead

I Lateral	aVR	V1 Septal	V4 Anterior
II Inferior	aVL Lateral	V2 Septal	V5 Lateral
III Inferior	aVF Inferior	V3 Anterior	V6 Lateral

- Oxygen:** adjust flow rate & route of administration as needed. Consider **hypoxic drive** in COPD and degree of respiratory effort. Non-COPD patients should be able to maintain SpO2 of 97% or higher. Increase oxygen concentration if SpO2 is low.
- IV:** Avoid the R wrist as IV site; all other R arm sites are acceptable. Consider and attempt to establish two IV lines.
- Aspirin** is relatively contraindicated in patients with active ulcer disease or asthma. Contraindicated in cases of known hypersensitivity to aspirin.
- Nitroglycerin SL:** sublingual is contraindicated if systolic BP < 100 mmHg.
- Nitroglycerin IV:** if normotensive, limit systolic BP drop to 10%, if hypertensive, limit drop to 30%. Never drop systolic BP below 100 mmHg. Nitroglycerin IV is indicated for suspected ischemic chest pain, unstable angina, acute pulmonary edema, acute MI.
- Morphine** is indicated for continuing pain and acute pulmonary edema.
- Fentanyl:** repeat dose 50 mcg prn (titrate to pain). Physician order required for respiratory depression/compromise, shock, or altered mentation.
- May bypass closest receiving hospital with 12 lead indicators and transport to appropriate receiving cardiac hospital.



- Document:**
- ABCs
 - Medical History
 - Time of Onset of Signs & Symptoms
 - Cardiac Rhythm
 - Quality of Pulses
 - SpO2, VS
 - Glasgow Coma Scale
 - Color, Diaphoresis
 - Lung Sounds
 - Response to Treatment

**CHEST PAIN
ACUTE CORONARY SYNDROME**