


Kittitas County Prehospital EMS Protocols

SUBJECT: CHEST PAIN AND SUSPECTED STEMI

12-Lead Electrocardiogram Variations in Acute Coronary Syndromes

-  Non-diagnostic or baseline—no abnormalities
-  Suspicious for ischemia—ST segment depressed, T wave may invert
-  Suspicious for injury—ST segment elevated, T wave may invert
-  Suspicious for injury or infarction—ST segment elevated, T wave may invert, abnormal Q wave may be present
-  Suspicion for injury—new onset bundle branch block

AMI Recognition

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

Adult Heparin Protocol Initial Dosing Chart

For patients <40kg, give 60 units/kg loading dose. Maximum does is 4000 units

Contraindications:

- Heparin should **not** be used in patients:
- with severe thrombocytopenia
 - with any uncontrollable active bleeding

Weight (kg)	Initial Loading Dose
40	2400
45	2700
50	3000
55	3300
60	3600
65	3900
>65	4000

General Chest Pain Protocol

- A. If stable, administer O₂ @ 4-6 lpm per nasal Cannula.
- B. If unstable, administer O₂ @ 12-15 lpm per non-rebreather mask.
- C. Establish Cardiac Monitor.
- D. Establish 2 peripheral IVs with **Isotonic Crystalloid @ TKO.**
- E. Establish 12 lead ECG (include printout with PCR).
- F. If 12 lead ECG indicates ST- elevation, myocardial infarction (STEMI).
 1. Transport directly to the nearest facility with cardiac cath lab capabilities.
 2. Initiate Heparin protocol.
- G. **324 mg of ASA** (chewable) if equal radial pulses are present, no aspirin allergy, and have not taken aspirin in the last four hours
- H. **Administer Plavix 600 mg**
- I. Administer **Nitroglycerin 0.4 mg sublingual or spray q 3 minutes**, up to a total of 1.2 mg, unless BP ≤ 100 mm Hg systolic. (If hypotension occurs, consider 250 cc fluid challenge.)
- J. If pain unrelieved and BP > 100 mm Hg systolic, administer **Morphine 2-5 mg IV initially**, followed in 2 mg increments q 5 minutes, up to a total of 20 mg, or until pain is relieved or BP drops below 100 mm Hg systolic. (If hypotension occurs, consider 250cc fluid challenge.)
 1. Should respiratory depression occur secondary to **Morphine** administration, consider **Naloxone.**
 2. If patient is allergic/hypersensitive to **Morphine Sulfate**, consider **Fentanyl 3 mcg/kg**, up to 150 mcg in 25 mcg increments.
- K. Notify **Virginia Mason Memorial ED** before transporting STEMI patients. If Yakima Regional ED is not willing to accept patient, contact local ED for on-line medical direction.