ANGINA

30 Second Review

RN, LPN

DEF: Chest pain due to reversible ischemia of a portion of heart muscle

S/S: Subjective complaints of chest pressure, heaviness, pain may be radiating, with a compatible history.

Vital Signs Stable

RX: Nitro 0.4 mg (1/150) SL Q 5-10 minutes x 3 pm
BP checks between nitro doses.
O2 4 to 6 lt/min
If not relieved, start MI protocol. Continue Nitro SL pm.

SKILL LEVEL: RN, LPN

DEFINITION: Chest discomfort caused when metabolic requirements of the myocardium cannot be satisfied by the amount of available oxygen because of narrowing of the coronary arteries. This narrowing results in ischemia to the myocardium. Discomfort is usually intermittent in nature and of fairly short duration. Symptoms are frequently related to physical or emotional exertion. Angina can present in variant ways, including GI symptoms.

DATA BASE:

Subjective:

1. Risk Factors—History of one or more:
   - Prior or current heart conditions and/or medications
   - Cigarette smoking/history
   - Hypertension
   - Hyperlipidemia
   - Family history of coronary artery disease
   - Male gender
   - Obesity
   - Diabetes Mellitus
   - Lack of regular exercise

2. Chest discomfort which may be described as:
   - Heavy pressure
   - Burning sensation
   - Squeezing or tightness
3. **Discomfort:**

   Can start in the chest, but possibly starting in or radiating to the shoulders, arms, back, neck, or jaws. Bilateral Jaw Pain unrelated to trauma is commonly cardiac in origin.

   May be sudden in onset and relieved in minutes by rest and/or vasodilators (Nitroglycerin).

   May be precipitated by exercise or exertion and possibly associated with nausea, sweating, and/or belching.

**Objective:**

1. **Mental status:** Fearful but quiet during an acute episode.

2. **Vital signs:** May be normal during angina attack. Normal between anginal episodes; hypertension, tachycardia, and tachypnea during an acute attack. Hypotension and bradycardia may occur in some circumstances.

3. **Lungs:** Clear to percussion and auscultation; possibility of bibasilar rales during an acute attack.

4. **Heart:** Possibility of S3 or S4 gallop with an irregular rhythm during an acute attack.

5. Frequently the exam is normal.

**Assessment:** Angina pectoris. Rule out: myocardial infarction, pericarditis. Other causes of chest pain include pleuropulmonary disease, esophageal-gastric disease, musculoskeletal discomfort, and others.

**Plan:**

1. Complete vital signs with patient in resting position, preferably lying down.

2. Give Nitroglycerin 0.4-0.6 mg SL, if BP > 100 systolic. Repeat every five minutes x 3 doses if BP stable and symptoms not relieved.
3. Consider Oxygen 4-6L by nasal cannula.

4. Consider EKG. Note if EKG is done while patient is complaining of pain or not.

5. If pain unrelieved by Nitroglycerin x 3 or condition becomes unstable or deteriorates, see Intractable Angina/Possible MI.

6. If pain is relieved but this is a new onset of Angina, or an increase in the patient's usual angina pattern, it could be unstable angina, requiring more aggressive treatment, including hospitalization. Contact the medical practitioner for further orders.

7. If this pain is relieved by Nitro and follows a typical pattern for this patient and patient is stable, contact the the practitioner or get a chart review within 24 hours.

Patient Teaching:

**Medications:** Check medication adherence ("compliance"). Teach purpose, dosage, side effects, toxic effects, and importance of adherence to medication therapy. Specific side effects of nitroglycerin include tachycardia, pounding headache, hypotension, flushing, and dizziness. Advise clients to sit or lie down when taking nitroglycerin because of the effects of postural hypotension. The effects and side effects of nitroglycerin can start in 15 to 30 seconds. The inmate should always carry nitroglycerin tablets. Keep these away from direct sunlight and heat and replace tablets at least every six (6) months, because they may lose potency.

**Activity:** Educate patient about modification of activities known to precipitate angina. Encourage rest periods. Many activities may not need to be discontinued as long as the exertion level is modified (e.g., sitting while performing the activity instead of standing). Assist client in establishing a program of supervised, noncompetitive regular exercise, such as walking, jogging, bicycling, or swimming. Regular exercise at appropriate individual levels frequently helps.

**Prevention:** Counsel patient on the importance of risk factor modification in order to arrest or decrease the progression of atherosclerotic disease.
Angina

APPROVED:

Medical Services Manager

Date

Chief Medical Officer

Date

Medical Director

2/24/15

Date

Effective Date: 3/2015
Revised: February 2015