PEORIA AREA EMS SYSTEM
PREHOSPITAL CARE MANUAL

Routine Cardiac Care Protocol

Patients experiencing chest pain with a suspected cardiac origin may present with signs and symptoms which include:

- Substernal chest pain / pressure
- Heaviness, tightness or discomfort in the chest
- Radiation and/or pain/discomfort to the neck or jaw
- Pain/discomfort/weakness in the shoulders/arms
- Nausea/vomiting
- Diaphoresis
- Dyspnea

Priorities in the care of chest pain patients include:

- Assessing and securing ABCs.
- Determining the quality and severity of the patient's distress.
- Identifying contributing factors of the event.
- Obtaining a medical history (including medications & allergies).

Timely transportation to the emergency department is an important factor in patient outcome.

First Responder Care

First Responder Care should be focused on assessing the situation and initiating care to reassure the patient, reducing the patient's discomfort and beginning treatment for shock.

1. Render initial care in accordance with the *Routine Patient Care Protocol*.

2. **Oxygen**: 15 L/min via non-rebreather mask. If the patient does not tolerate a mask, then administer 6 L/min via nasal cannula.

BLS Care

BLS Care should be directed at conducting a thorough patient assessment, providing care to reassure the patient, reducing the patient's discomfort, beginning treatment for shock and preparing or providing patient transportation.

Routine Cardiac Care Protocol

BLS Care (continued)

1. Render initial care in accordance with the *Routine Patient Care Protocol.*

2. **Oxygen**: 15 L/min via non-rebreather mask. If the patient does not tolerate a mask, then administer 6 L/min via nasal cannula.

3. **Aspirin (ASA)**: 324mg PO (4 tablets of 81mg chewable aspirin by mouth).

   - **Ask the patient specifically about any history of hypersensitivity to ASA.**
   - **Do not give ASA to patients with active ulcer disease, asthma or known allergy to ASA.**

4. **Nitroglycerin (NTG)**: 0.4mg SL (1 metered spray dose sublingually). May repeat every ***3-5 minutes*** to a total of 3 doses (if systolic BP remains > 100mmHg).

   - NTG (& ASA) may be administered without contacting Medical Control if the patient is age 30 or older, has chest pain consistent with acute myocardial infarction (AMI) and has a systolic BP > 100mmHg. *If the patient does not meet this criteria, consult Medical Control prior to administering NTG*.

5. Initiate ALS (or ILS) intercept if necessary and transport as soon as possible.

6. **Contact Medical Control** as soon as possible.

ILS Care

ILS Care should be directed at conducting a thorough patient assessment, providing care to reassure the patient, reducing the patient's discomfort, beginning treatment for shock and preparing or providing patient transportation.

1. Render initial care in accordance with the *Routine Patient Care Protocol.*

2. **Oxygen**: 15 L/min via non-rebreather mask. If the patient does not tolerate a mask, then administer 6 L/min via nasal cannula.

Routine Cardiac Care Protocol

ILS Care (continued)

3. **Aspirin (ASA)**: 324mg PO (4 tablets of 81mg chewable aspirin by mouth).

   - **Ask the patient specifically about any history of hypersensitivity to ASA.**
   - **Do not give ASA to patients with active ulcer disease, asthma or known allergy to ASA.**

4. **Nitroglycerin (NTG)**: 0.4mg SL (1 metered spray dose sublingually). May repeat every ***3-5 minutes*** to a total of 3 doses (if systolic BP remains > 100mmHg).

   - NTG (& ASA) may be administered without contacting Medical Control if the patient is age 30 or older, has chest pain consistent with acute myocardial infarction (AMI) and has a systolic BP > 100mmHg.

ILS & ALS may administer NTG when the patient's systolic BP is between 90-100mmHg if IV access has been established.

5. Initiate ALS intercept if necessary and transport as soon as possible (transport can be initiated at any time during this sequence).

6. Obtain **12-Lead EKG** and transmit to Medical Control.

7. **Contact Medical Control** as soon as possible, regardless of EKG transmission.

ALS Care

ALS Care should be directed at conducting a thorough patient assessment, providing care to reassure the patient, reducing the patient's discomfort, beginning treatment for shock and preparing or providing patient transportation.

1. Render initial care in accordance with the *Routine Patient Care Protocol*. If time permits, establish a 2nd line (preferably an 18g saline lock) en route.

2. **Oxygen**: 15 L/min via non-rebreather mask. If the patient does not tolerate a mask, then administer 6 L/min via nasal cannula.

Routine Cardiac Care Protocol

ALS Care (continued)

3. **Aspirin (ASA)**: 324mg PO (4 tablets of 81mg chewable aspirin by mouth).

   - **Ask the patient specifically about any history of hypersensitivity to ASA.**
   - **Do not give ASA to patients with active ulcer disease, asthma or known allergy to ASA.**

4. **Nitroglycerin (NTG)**: 0.4mg SL (1 metered spray dose sublingually). May repeat every ***3-5 minutes*** to a total of 3 doses (if systolic BP remains > 100mmHg).

   - NTG (& ASA) may be administered without contacting Medical Control if the patient is age 30 or older, has chest pain consistent with acute myocardial infarction (AMI) and has a systolic BP > 100mmHg.

ILS & ALS may administer NTG when the patient's systolic BP is between 90-100mmHg if IV access has been established.

5. Obtain **12-Lead EKG** and transmit to Medical Control.

6. **Nitropaste (Nitro-Bid):** 1 inch to anterior chest wall if patient's systolic BP is greater than 100mmHg.

7. **Morphine Sulfate:** 2-5mg IV every ***5 minutes*** (if needed) to reduce the patient's anxiety and severity of pain.

8. **Promethazine (Phenergan):** 12.5mg IV diluted with 10mL NS and administer over 60 seconds (if systolic BP > 90mmHg) **for nausea and/or vomiting**. Promethazine 12.5mg may be repeated one time in ***15 minutes*** to a total dose of 25mg.

9. *If the patient is allergic to Morphine or if Morphine is not effective:*
   Fentanyl: 50mcg IV over 2 minutes for pain. Fentanyl 50mcg may be repeated one time in ***5 minutes*** to a total dose of 100mcg.

9. Transport as soon as possible (transport can be initiated at any time during this sequence).

10. **Contact Medical Control** as soon as possible, regardless of EKG transmission.

Routine Cardiac Care Protocol

Critical Thinking Elements

- Initiate ALS intercept if the patient's chest pain is not eliminated with Oxygen or NTG.
- Consider the patient to be in cardiogenic shock if the patient has dyspnea, diaphoresis, a systolic BP < 100mmHg, and signs of congestive heart failure.
- Obtaining a 12-Lead EKG should not significantly delay initiation of transport.
- EKG limb leads should actually be placed on the patient's limbs!
- A pulse oximeter is a tool to aid in determining the degree of patient distress and the effectiveness of EMS interventions. A high pulse oximeter reading should not result in oxygen therapy being withheld.
- NTG that the patient self administers prior to EMS arrival should be reported to Medical Control. Subsequent doses should be provided by the EMS unit's stock.
- **Medications should not be administered IM to a suspected AMI patient**.
- Phenergan (Promethazine) is diluted with 10mL normal saline for patient comfort (reduces burning sensation that some patients experience) and to prevent phlebitis.
- Nitropaste can be placed on the patient's upper back instead of the anterior chest if needed (*e.g.* if the patient has excessive chest hair).
- If the patient's systolic BP drops **below 90mmHg**, wipe the Nitropaste off.