REGION I EMERGENCY MEDICAL SERVICES
STANDING MEDICAL ORDERS
EMT – Basic

SMO: Chest Pain of Suspected Cardiac Origin

Overview: Patients with acute nontraumatic chest pain are among the most challenging patients cared for in EMS. They may appear seriously ill or completely well and yet remain at significant risk of sudden death or acute myocardial infarction. Sorting out which patient is experiencing chest pain of cardiac origin represents a tremendous challenge. This protocol should be utilized whenever cardiac chest pain is suspected. Whenever there is question as to whether or not you should utilize this protocol, contact medical control for further guidance.

INFORMATION NEEDED

__Discomfort or pain: OPQRST, Previous episodes
__Associated symptoms: Weakness, nausea, vomiting, diaphoresis, dyspnea, dizziness, palpitations, "indigestion"
__Medical history (cardiac history, other medical problems, including hypertension, diabetes or stroke)

OBJECTIVE FINDINGS

__General appearance: level of distress, skin color, diaphoresis
__Signs of CHF (peripheral edema, respiratory distress, distended neck veins)
__Lung sounds
__Assessment of pain
__ Vital Signs

TREATMENT

__Reassure patient and place in position of comfort, or supine if patient's systolic BP is < 90.
__ Pulse oximetry
__Oxygen 2-6 L/min by nasal cannula or Non-rebreather mask at 10-15 L/min
__Assess patient: primary, secondary and history
__Assist patient with taking their own **NTG** if SBP is >100; repeat q 5 min. to a max of three, or stop if SBP becomes less than or equal to 100
__ **BABY ASA 81 mg FOUR tablets** chew and swallow
__Routine Medical Care

Documentation for Adherence to Protocol:

__Presence of PQRST history
__Vital signs before/after NTG administration
__Oxygen administration
__NTG unless hypotension or Viagra or Levitra w/in past 12 hrs. Documented
__ASA unless allergy documented

Medical Control Contact Criteria

__Contact Medical Control if any question exists as to whether or not this protocol should apply i.e. atypical sounding chest discomfort.
__ For permission to assist patient with taking their own **NTG**
__Additional treatment for ongoing pain when BP<100

PRECAUTIONS AND COMMENTS

- Minimize scene time and notify the receiving hospital.
- Suspicion of Acute Coronary Syndrome (ACS) is based upon patient history. Be alert to patients likely to present with atypical symptoms or "silent AMI's": women, elderly and diabetics.
- **Nitroglycerin** is contraindicated in patients who have taken Viagra or Levitra within the past 12 hours.
- Consider other potential causes of chest pain: pulmonary embolus, pneumonia, aortic aneurysm and pneumothorax.
- If transport time permits, ask the following questions to assist in determining eligibility for thrombolitic therapy:

REGION I EMERGENCY MEDICAL SERVICES
STANDING MEDICAL ORDERS
EMT – Intermediate

SMO: Chest Pain of Suspected Cardiac Origin

Overview: Patients with acute nontraumatic chest pain are among the most challenging patients cared for in EMS. They may appear seriously ill or completely well and yet remain at significant risk of sudden death or acute myocardial infarction. Sorting out which patient is experiencing chest pain of cardiac origin represents a tremendous challenge. This protocol should be utilized whenever cardiac chest pain is suspected. Whenever there is question as to whether or not you should utilize this protocol, contact medical control for further guidance.

INFORMATION NEEDED

__Discomfort or pain: OPQRST, Previous episodes
__Associated symptoms: Weakness, nausea, vomiting, diaphoresis, dyspnea, dizziness, palpitations, "indigestion"
__Medical history (cardiac history, other medical problems, including hypertension, diabetes or stroke)

OBJECTIVE FINDINGS

__General appearance: level of distress, skin color, diaphoresis
__Signs of CHF (peripheral edema, respiratory distress, distended neck veins)
__Lung sounds
__Interpretation of EKG rhythm
__Assessment of pain
__Vital Signs

TREATMENT

__Reassure patient and place in position of comfort, or supine if patient's systolic BP is < 90.
__ Pulse oximetry
__Oxygen 2-6 L/min by nasal cannula or Non-rebreather mask at 10-15 L/min
__Assess patient: primary, secondary and history
__IV NS with standard tubing at KVO rate (NO microdrip/minidrip tubing)
__ Cardiac Monitor
__**NTG** 0.4 mg lingual spray or sublingual tablet, repeat q 5 min. if SBP > 100 mmHg
(IV not required prior to 1st dose of NTG administration but IV should be started before subsequent doses of NTG)
__ BABY **ASA 81 mg FOUR** tablets chew and swallow
__If discomfort persists; contact Medical Control for permission to give **Morphine Sulfate** 2-4 mg slow IV push unless allergy exists, repeat as indicated if SBP > 100mmHg, to total dose of 10 mg.
__If dysrhythmia is present, and persists after treatment above, see DYSRHYTHMIA Protocol(s)

TREATMENT (cont)

__If hypotension develops, give 500cc fluid challenge, titrate to SBP>90 mm Hg.
__12 lead EKG, if available

Documentation for Adherence to Protocol:

__Presence of PQRST history
__Vital signs before/after NTG administration
__Cardiac rhythm documentation
__Oxygen administration
__IV placement
__NTG unless hypotension or Viagra or Levitra w/in past 12 hrs. Documented
__ASA unless allergy documented
__Prehospital screening for thrombolytic therapy administered

Medical Control Contact Criteria

__Contact Medical Control if any question exists as to whether or not this protocol should apply i.e. atypical sounding chest discomfort.
__Prior to administration of Morphine Sulfate
__Additional treatment for ongoing pain when BP<100

PRECAUTIONS AND COMMENTS

- Minimize scene time and notify the receiving hospital as soon as possible.
- Suspicion of Acute Coronary Syndrome (ACS) is based upon patient history. Be alert to patients likely to present with atypical symptoms or "silent AMI's": women, elderly and diabetics.
- **Nitroglycerin** is contraindicated in patients who have taken Viagra or Levitra within the past 12 hours.
- Administer **Morphine** slowly IV to avoid respiratory depression and/or hypotension; be ready to support ventilations and have naloxone available.
- Consider other potential causes of chest pain: pulmonary embolus, pneumonia, aortic aneurysm and pneumothorax.
- See next page:

- If transport time permits, ask the following questions to assist in determining eligibility for thrombolitic therapy:

PREHOSPITAL SCREENING FOR THROMBOLYTIC THERAPY*:

HAVE YOU HAD ANY OF THE FOLLOWING CONDITIONS WITHIN THE LAST MONTH?

Stroke YES__ NO__
Surgery YES__ NO__
Bloody Stools or Vomit YES__ NO__
Black Stools YES__ NO__
Coffee Ground Vomitus YES__ NO__
Are you pregnant? YES__ NO__
Do you have a bleeding tendency (e.g. hemophilia) YES__ NO__
Do you take a blood thinner such as Coumadin? YES__ NO__
Do you have a brain aneurysm or brain cancer? YES__ NO__
Did your symptoms start more than 2 hours ago? YES__ NO__

A "no" answer to all of the above questions makes the patient a stronger candidate for thrombolytic therapy.

PHYSICAL:
Is the patient's blood pressure persisting (>15 minutes) SBP > 180 or DBP > 120?
YES__ NO__
Is the patients GCS < 15? YES__ NO__

**** A "no" answer to the above two questions makes the patient a stronger candidate for thrombolytic therapy.***

REGION I EMERGENCY MEDICAL SERVICES
STANDING MEDICAL ORDERS
EMT – Paramedic

SMO: Chest Pain of Suspected Cardiac Origin

Overview: Patients with acute nontraumatic chest pain are among the most challenging patients cared for in EMS. They may appear seriously ill or completely well and yet remain at significant risk of sudden death or acute myocardial infarction. Sorting out which patient is experiencing chest pain of cardiac origin represents a tremendous challenge. This protocol should be utilized whenever cardiac chest pain is suspected. Whenever there is question as to whether or not you should utilize this protocol, contact medical control for further guidance.

INFORMATION NEEDED

__Discomfort or pain: OPQRST, Previous episodes
__Associated symptoms: Weakness, nausea, vomiting, diaphoresis, dyspnea, dizziness, palpitations, "indigestion"
__Medical history (cardiac history, other medical problems, including hypertension, diabetes or stroke)

OBJECTIVE FINDINGS

__General appearance: level of distress, skin color, diaphoresis
__Signs of CHF (peripheral edema, respiratory distress, distended neck veins)
__Lung sounds
__Interpretation of EKG rhythm
__Assessment of pain
__Vital Signs

TREATMENT

__Reassure patient and place in position of comfort, or supine if patient's systolic BP is < 90.
__ Pulse oximetry
__Oxygen 2-6 L/min by nasal cannula or Non-rebreather mask at 10-15 L/min
__Assess patient: primary, secondary and history
__IV NS with standard tubing at KVO rate (NO microdrip/minidrip tubing)
__ Cardiac Monitor
__ **NTG** 0.4 mg lingual spray or sublingual tablet, repeat q 5 min. if SBP > 100 mmHg
(IV not required prior to 1st dose of NTG administration but IV should be started before subsequent doses of NTG)
__ BABY **ASA 81 mg FOUR** tablets chew and swallow
__If discomfort persists; give **Morphine Sulfate** 2-4 mg slow IV push (unless allergy exists), repeat as indicated if SBP > 100mmHg, to total dose of 10 mg.
__If dysrhythmia is present, and persists after treatment above, see DYSRHYTHMIA Protocol(s)

TREATMENT (cont)

__If hypotension develops, give 500cc fluid challenge, and **Dopamine** 5 to 20 mcg/kg/min IV infusion; titrate to SBP>90 mm Hg. (Start at 10mcg/kg/minute and titrate up in increments of 5mcg/kg/minute until SBP >90 or maximum of 20 mcg/kg/minute reached.

__12 lead EKG, if available

Documentation for Adherence to Protocol:

__Presence of PQRST history
__Vital signs before/after NTG administration
__Cardiac rhythm documentation
__Oxygen administration
__IV placement
__NTG unless hypotension or Viagra or Levitra w/in past 12 hrs. Documented
__ASA unless allergy documented
__Prehospital screening for thrombolytic therapy administered

Medical Control Contact Criteria

__Contact Medical Control if any question exists as to whether or not this protocol should apply i.e. atypical sounding chest discomfort.
__Contact Medical Control if any question exists as to the best option for the patient
__Additional treatment for ongoing pain when BP<100

PRECAUTIONS AND COMMENTS

- Minimize scene time and notify the receiving hospital as soon as possible.
- Suspicion of Acute Coronary Syndrome (ACS) is based upon patient history. Be alert to patients likely to present with atypical symptoms or "silent AMI's": women, elderly and diabetics.
- **Nitroglycerin** is contraindicated in patients who have taken Viagra or Levitra within the past 12 hours.
- Administer **Morphine** slowly IV to avoid respiratory depression and/or hypotension; be ready to support ventilations and have naloxone available.
- Consider other potential causes of chest pain: pulmonary embolus, pneumonia, aortic aneurysm and pneumothorax.
- See next page:

- If transport time permits, ask the following questions to assist in determining eligibility for thrombolitic therapy:

PREHOSPITAL SCREENING FOR THROMBOLYTIC THERAPY*:

HAVE YOU HAD ANY OF THE FOLLOWING CONDITIONS WITHIN THE LAST MONTH?

Stroke YES__ NO__
Surgery YES__ NO__
Bloody Stools or Vomit YES__ NO__
Black Stools YES__ NO__
Coffee Ground Vomitus YES__ NO__
Are you pregnant? YES__ NO__
Do you have a bleeding tendency (e.g. hemophilia) YES__ NO__
Do you take a blood thinner such as Coumadin? YES__ NO__
Do you have a brain aneurysm or brain cancer? YES__ NO__
Did your symptoms start more than 2 hours ago? YES__ NO__

A "no" answer to all of the above questions makes the patient a stronger candidate for thrombolytic therapy.

PHYSICAL:
Is the patient's blood pressure persisting (>15 minutes) SBP > 180 or DBP > 120?
YES__ NO__
Is the patients GCS < 15? YES__ NO__

**** A "no" answer to the above two questions makes the patient a stronger candidate for thrombolytic therapy.***