ST ELEVATION MYOCARDIAL INFARCTIONS (STEMI) TRIAGE GUIDELINE

Subject: ST - ELEVATION MYOCARDIAL INFARCTION (STEMI) TRIAGE GUIDELINE

Reference: N.J.A.C. 8:41-1.1 et seq.

Purpose: To establish guidelines for determining which patients may benefit from transportation directly to a Primary Percutaneous Coronary Intervention (PCI) hospital licensed to perform primary percutaneous coronary intervention.

Scope: This guideline applies to all Advanced Life Support Personnel.

Responsibility: MICU, AMU, and SCTU programs are responsible for monitoring the use of and compliance with this guideline.

Definitions:
- ST Elevation MI (STEMI): a patient presenting with signs and symptoms of Acute Coronary Syndrome (ACS) and ST segment elevation of at least one millimeter in two or more anatomically contiguous leads.
- PCI Hospital: A hospital designated as a PCI center by NJDHSS and providing primary PCI services.

Procedure: The following procedure shall be performed whenever patients present with signs and symptoms suggestive of ACS (consider atypical presentation in female, diabetic, or elderly patients) and for patients with return of spontaneous circulation (ROSC) post-cardiac arrest:

1. The patient shall be appropriately managed within the Advanced Life Support (ALS) scope of practice and in accordance with applicable laws and regulations. (N.J.A.C. 8:41-1.2)
   a. A 12 lead ECG shall be acquired as early as possible during the initial assessment. Serial ECGs should be acquired if initial ECG is non-diagnostic or when the patient’s condition changes.
   b. The presence of the following will classify the patient as a STEMI:
      i. ST segment elevations of at least one millimeter in two or more anatomically contiguous leads OR
      ii. Presumably new Left Bundle Branch Block
   c. ECGs reflecting STEMI shall be transmitted to medical command and/or the receiving PCI hospital at the earliest opportunity.

2. Determine destination hospital in consultation with Medical Command at the earliest opportunity (N.J.A.C. 8:41-9.6):
   a. Transportation directly to a Primary PCI hospital should be considered with the following:
      i. By ground – if the ground transport time to the PCI hospital is less than or equal to 30 minutes.
      ii. By airmedical transport – if the ground transport time to the PCI hospital is greater than 30 minutes.
      iii. By ground – if airmedical transport is not available AND ground transport time to the PCI hospital is less than or equal to 60 minutes.
      iv. Consider weather and time of day (traffic flow) when calculating ground transport times.
      v. Consider and request airmedical transport as early as possible.
vi. If Fibrinolysis is contraindicated in the patient.

b. Transportation to the closest hospital shall be considered when one or more of the of the following are present:
   i. The patient’s airway cannot be managed
   ii. The patient is in cardiac arrest without ROSC
   iii. The patient is hemodynamically unstable as evidenced by the presence of:
       1. altered mental status OR
       2. severe hypotension OR
       3. life threatening arrhythmia
   iv. Airmedical transport is not available AND the ground transport time to the PCI hospital is greater than 60 minutes.

3. Transport to the closest appropriate destination hospital shall be initiated at the earliest opportunity, delayed only by the initial assessment and provision of life-saving care. Further assessment and all adjunctive care should be provided en route to the hospital as circumstances permit or as directed by medical command.
References – STEMI Guidelines


County of Los Angles, Department of Health Services 2006 Emergency Medical Services Agency. St-Elevation Myocardial Infarction Receiving Center Standards.


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Additional References added November 9, 2009