



Emergency Medical Services

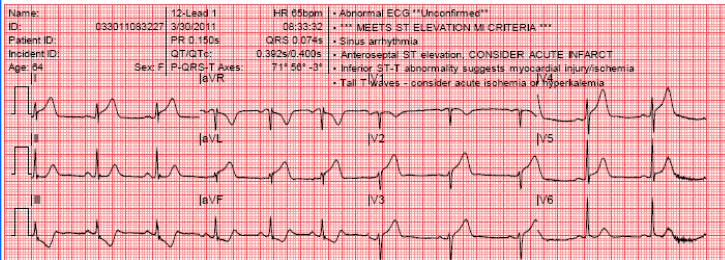
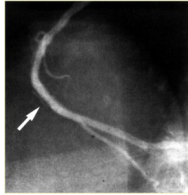
Partners

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EMS STEMI CATH LAB ACTIVATION NEW JDH PROCEDURE

Effective March 1, 2012 John Dempsey Hospital will be initiating a new procedure that will allow EMS providers to automatically activate our cardiac cath lab for patients with acute coronary syndrome who meet defined criteria.



Thanks to EMS responders and their ability to interpret 12-lead ECGs, our initial STEMI alert procedure has been very successful in decreasing patient's door-to-balloon times and leading to many successful outcomes. Many patients, who were in extremis suffering massive heart attacks, walked out of the hospital into their family's embraces, just days after undergoing cardiac catheterization.

Our new procedure (outlined on Page 2) is designed to further reduce door to balloon time by encouraging paramedics to perform rapid STEMI assessment, and to quickly contact John Dempsey Hospital for cath lab activation prior to transporting when the patient's presentation is unambiguous. This will provide more lead time to our cath lab so they will be ready on or as close to patient arrival as possible.

Medics can simply state "Activate the cath lab. I have a 56-year old patient with chest pain and a diagnostic 12-

lead showing an inferior MI. We are thirty minutes out. I'll be back to you later with more details."

If the patient does not meet the criteria, but medics still believe the patient is having a STEMI, they should ask for a STEMI Alert and discuss their finding with the ED MD, who may then activate the cath lab.

On arrival, if the cath lab is ready, EMS should be prepared to transport the patient directly to the cath lab on their stretchers if directed so by the ED doctor.

Early notification and activation will save lives and limit morbidity.

John Dempsey Hospital Automatic EMS STEMI Cath Lab Activation Criteria

If patient meets all the following STEMI criteria:

1. Active chest pain or equivalent symptoms (nausea, SOB)
2. 12-Lead ECG of good quality showing STEMI
 - A. ST-elevation
 - i. ≥ 2 mm in 2 contiguous leads (V1-V4), and/or
 - ii. ≥ 1 mm in 2 contiguous leads (limb, V5-V6)
 - B. QRS duration ≤ 0.12 seconds
 - C. *****ACUTE MI***** or equivalent prints on 12-lead ECG; paramedic agrees

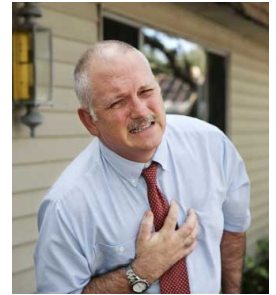
Contact Medical Control for STEMI ACTIVATION from scene or as soon as possible. Do Not Delay Notification. Transmit 12 lead EKG if capable but this is not required to activate cath lab.

JOHN DEMPSEY HOSPITAL EMS STEMI CATH LAB ACTIVATION PROCEDURE

EMS Phase One - STEMI Identification - Patient Contact (Suspected ACS)

Perform a rapid assessment and 12-Lead. If patient meets all the following STEMI criteria:

1. Active chest pain or equivalent symptoms (nausea, SOB)
2. 12-Lead ECG of good quality showing STEMI
 - A. ST-elevation
 - i. ≥ 2 mm in 2 contiguous leads (V1-V4), and/or
 - ii. ≥ 1 mm in 2 contiguous leads (limb, V5-V6)
 - B. QRS duration ≤ 0.12 seconds
 - C. *****ACUTE MI***** or equivalent prints on 12-lead ECG; paramedic agrees



• Abnormal ECG *****Unconfirmed*****
• ***** MEETS ST ELEVATION MI CRITERIA *****
• Sinus rhythm

• Widespread ST elevation, CONSIDER ACUTE INFARCT
• Marked precordial ST depression, CONSIDER ACUTE INFARCT

• ***** ACUTE MI SUSPECTED *****
• Abnormal ECG *****Unconfirmed*****

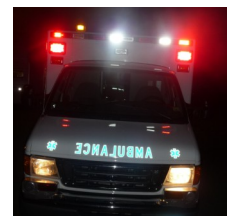
QRS 0.076s



Contact medical control immediately to activate John Dempsey Hospital cardiac catheterization lab. Call CMED and ask for **“Medical Control for a STEMI Activation.”** Your patch may be brief. **“Activate the cath lab. I have a 56 year –old male with chest pain and a diagnostic 12-lead showing an inferior MI. We’re 30 minutes out. We’ll be back with more details once we are enroute.”** If you do not have a portable radio capable of reaching CMED, call CMED by phone at **860-769-6051** and ask for a patch. Speak loudly and clearly. Transmit 12 lead EKG as soon as possible but this is not required to activate the cath lab. The sooner the cath lab is activated, the better the patient outcome.

EMS Phase 2 - EMS Treatment and Transport

Continue with routine ACS care by protocol including monitor, IV access, and as indicated O2, ASA, narcotic analgesic, NTG, etc. Apply DEFIB pads. Move patient to ambulance. Contact medical control with **“STEMI Alert”** and provide further details/update on patient status.



(Note: If patient does not meet the narrow criteria above, but you still feel patient could be having a STEMI, contact Medical Control with **“STEMI Alert,”** discuss your reasons with emergency physician, who may activate cath lab based on your description and/or any transmitted 12-lead.)

Phase 3- Arrival in ED.

Have current vitals, latest EKG, medication list and brief history ready. You will be met by an M.D. and registrar. Be prepared for directions to move the patient directly to the cath lab (ideal for stable patients) or to an ED patient care room for acutely unstable patients (CPR, requiring intubation, pressors), or if the cath lab not yet ready for patient.



Note: If time /circumstances permit, disrobe patient and cover with sheet or hospital gown.