UNMH Cardiology ST Elevation MI Activation Guideline

LEVEL 1 Cardiology Alert Activation

Patients who meet BOTH of the following criteria:

- Significant STE as defined below.
- Onset of sustained chest pain $\leq 12$ hours ago, even if not present now.

**Significant STE:**

- 1 mm elevation in two contiguous inferior leads (2, 3, aVF) or 2 mm in 2 contiguous anterior leads (v1-v6)
- STEs may also be demonstrated on right-sided chest leads, posterior leads (v7-v9), in lead aVR.
- *NOTE:* Neither a LBBB by itself nor a computer interpretation of “STEMI” by itself are considered significant.

Level 1 Cardiology Alert page will be sent to the following (our current STEMI pages):

- EM Providers
- EDRU pagers
- ED Charge Nurse
- Cardiology Cath Attending
- Cardiology Cath Fellow
- Cardiac Cath Lab Nurse
- Cardiac Cath Lab Technicians

LEVEL 2 Cardiology Alert Activation

Patients who meet ANY of the following criteria:

- ST elevation on ECG not enough to call STEMI, but still characteristic of STEMI.
- ST elevation with sustained (not stuttering) chest pain longer than 12 hours.
- ST elevation with relative contra-indication to PCI but PCI might be considered to relieve pain (e.g., severe dementia, terminal disease with short life expectancy, inability to give informed consent.)
  Non-diagnostic ECG changes (including LBBB) with continuing symptoms very suspicious for ischemia.

Level 2 Cardiology Alert page will be sent to the following with an expectation of a 5 minute response time from either the Cardiology Fellow or Attending (please include provider call back number in the page to facilitate response):

- EM Providers
- Cardiology Cath Attending
- Cardiology Cath Fellow
• EM Charge Nurse

Special Situations

• **ST elevation on pre-hospital monitor (ECG transmitted by Lifenet):** If the story is convincing for MI (or no story available) and the STE on pre-hospital monitor is diagnostic then call LEVEL 1 alert before arrival. Otherwise ECG stat on arrival. **This is our current practice.**

• **ST-elevation on pre-hospital monitor (no Lifenet transmitted ECG):** If the story is convincing for MI and the pre-hospital team sees a STEMI on their monitor (but cannot transmit) then call LEVEL 1 alert before arrival. Otherwise ECG stat on arrival. **This is our current practice.**

• **ST elevation on initial ECG but subsequent ECG is normal:** Call LEVEL 1 alert (“Once a STEMI, always a STEMI”)

• **Out of hospital cardiac arrest with post-arrest showing STEMI:** Call LEVEL 1 alert.

• **Out of hospital cardiac arrest without STEMI on post-arrest ECG:** No LEVEL 1 alert. Call cardiology fellow if indicated.

• **V-fib cardiac arrest with ROSC, post-ROSC ECG does not show STEMI:** No STEMI alert, get urgent cardiology consult (Cardiology literature has come to consensus that there is no benefit for urgent catheterization).

• **Cardiac arrest with ongoing CPR:** No STEMI alert. Consider ECMO.

• **Ongoing symptoms suggestive of ischemia without STEMI:** Urgent cardiology consult. **This is our current practice.**

• **Cardiogenic shock:** call interventional attending and get echo BEFORE going to cath lab.

• **STEMI on ECG but unable to determine time of onset:** This would include patients who are severely demented, sedated, unconscious. No LEVEL 1 or 2 alert. Get urgent cardiology consult.

• **SRMC STEMI Alerts. No change to current practice.** SRMC team alerts Dispatch for an SRMC STEMI and communication occurs between SRMC provider and On-Call Cath Fellow and/or Attending. If the patient is accepted in transfer to UNMH as a Level 1 STEMI, please alert Dispatch as the patient is leaving SRMC to activate a Level 1 STEMI for UNMH.

**ER Team Communication with Dispatch for All STEMI Alerts (Level 1, Level 2, SRMC):** Please tell Dispatch the type of alert (Level 1, Level 2 or SRMC), the current location of the patient (EDRU, Sandia or Manzano Pod, SRMC), and please provide a direct call back number.

**References:**


ESC 2017 STEMI Guidelines

Document history:
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