



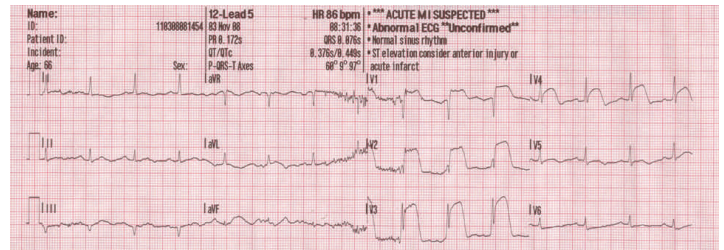
Emergency Medical Services *Partners*

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STEMI Care: Decreasing Time-to-Balloon

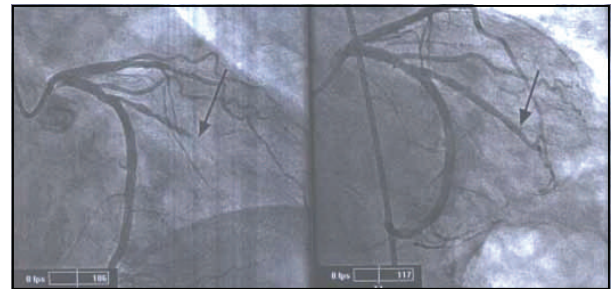
Time is critical when a patient is suffering an acute heart attack. Every minute saved between symptom onset and unclogging a blocked artery decreases the likelihood of death or disability. Here are ways EMS can contribute to shortening time-to-balloon.



- Do an early 12-lead ECG on any patient suspected of Acute Coronary Syndrome.
- Transmit the 12-lead as soon as possible. It is okay to transmit prior to patching.
- Whether you have the ability to transmit 12-leads or not, **EARLY NOTIFICATION** is crucial.
- When you do patch, always [ask for medical control](#) and state up front you are calling a **STEMI Alert** or a **Possible STEMI** alert. Our ED Doctors have the ability to immediately activate the cath lab based on your report and/or 12-lead transmission.
- If possible, disrobe the patient above the waist and put on a hospital gown. This will facilitate doing 12-leads and other care.
- Also, if possible, disrobe the patient below the waist including removing shoes. This will allow quicker access to the groin for cannulation and spare precious time.
- Consider attaching defib pads to all STEMIs. These patients are at immediate risk of cardiac arrest. ALL STEMIs transported to our cath lab have defib pads attached.
- If the cath lab is ready for the patient by your arrival, we may ask you to keep the patient on your stretcher for the brief minutes the patient will be in the ED before starting up to the cath lab. If the patient needs stabilization, we will move the patient to our bed.
- ♦ EMS is always welcome to accompany their patient to the cath lab to observe the procedure.

Cardiac Catheterization

Before and after picture of a coronary artery: In the first photo, the artery is blocked, the tissue beyond is dying due to lack of oxygen. In the cardiac cath lab, a catheter is inserted in the groin and threaded up to the heart where once it crosses the blocked lesion, a balloon is inflated, opening the artery. A small stent is then placed to maintain clear flow. In the second picture, you can see blood flow and perfusion has been restored to the injured heart. This is truly a life-saving time-dependent procedure. Early identification and notification of a STEMI patient by EMS is critical in patient outcome.



12-Lead Transmission

High praise to UCONN Fire Department paramedics John Pickert and Neil Prendergast and AMR EMTs Jan DesRosiers and Lindsay Capowich for their quick response to a man with severe chest pain in Avon. Pickert did an immediate 12-lead ECG, identified

the man as having an ST-elevation MI, and immediately transmitted the 12-lead to John Dempsey Hospital, which had just started accepting 12-lead transmissions from the field. Thanks to the quick actions of the crew, the cardiac cath lab was activated and ready prior to the patient's arrival. The patient was whisked through the ED and up to the lab. The 911-to-balloon time was under an hour. The hospital door-to-balloon time was just 23 minutes! The patient saw great improvement and walked out of the hospital two days later. Great job!



Chain of Survival

When a patron collapsed in the exercise room of the Cornerstone Aquatics Center in West Hartford recently, staff applied their defibrillator and started CPR. Responders from **West Hartford Police** and **West Hartford Fire Departments** along with paramedics from **American Medical Response** arrived within four minutes and took over care. Thanks to solid CPR, effective bag valve mask ventilation, and three more defibrillations, the patient had pulses and blood pressure restored and was breathing on his own. Once at the hospital, he was further stabilized in the ED, and then underwent emergency cardiac catheterization and induced hypothermic cooling. After six days at John Dempsey Hospital, the patient was discharged with full neurological recovery.

AMR Paramedic Chris Dennis, who managed the call, had high praise for the prehospital teamwork displayed by the united Cornerstone staff, police, fire and ambulance response. We second that praise. Congratulations to all involved. You were steel links in the chain of survival.

Airway Reminder

Per regional guidelines, immediate intubation is not necessary in cardiac arrest. An LMA, King LT, or a combi-tube is an acceptable alternative advanced airway to an ET tube. The gold standard is not an ET tube, but an effectively managed airway.



Think Solu-Medrol



Solu-Medrol (Methylprednisolone) is a beneficial medication that is underused prehospitally. An anti-inflammatory glucocorticoid steroid, Solu-medrol should be administered early in the treatment of patients presenting with severe allergic reaction, asthma of greater than 2 hours, or COPD. While paramedics will not see the drug's benefit during their time with the patient, studies have shown early administration of corticosteroids significantly reduces admission rates. The adult dose is 125 mg slow IV push. The pediatric dose is 2/mg/kg (max 125 mg).

UCONN Health Center EMS Web Site

For news, educational information, CME schedule and past copies of our newsletter *Partners*, check out our web site at:

uconnems.uhc.edu

October Quarterly Evening CME

We are pleased to announce John Dempsey Hospital will be sponsoring a quarterly EMS Symposium open to all members of the EMS community and public. Our first event will be Wednesday evening October 20, 2010 at 7:00 P.M. in the Keller Auditorium at the UCONN Health Center. Topics include:

"It's Tuesday Coach, lemme go back in..." Concussions in the student-athlete—Gary Wiemokly, OEMS Chief, M.P.H.

It Depends...A not so easy answer to the majority of critical questions EMS responders encounter—Richard Kamin, M.D.

The Latest from AHA—A Summary of the recently released AHA 2010 recommendations for CPR and Advanced Cardiac Care—Peter Canning

Free parking available in main hospital lot at the top of the hill. Pizza and refreshments will be provided at 6:30 P.M.

October Monthly Morning CME

All EMS providers are welcome to join us at our monthly Thursday morning CME held on October 7, 2010 at 9:00 A.M. This month's topics include:

Main Lecture: **Therapeutic Hypothermia in Return of Spontaneous Circulation from Cardiac Arrest** Justin B. Lundbye M.D. FACC

Journal Review: **Are Scoop Stretchers suitable for use on spine-injured patients?** *American Journal of Emergency Medicine*, September 2010

Case Reviews: Review of recent EMS cases brought to the John Dempsey Hospital including an evisceration, a GI bleed, two cases of unstable ventricular tachycardia and a cardiac arrest save.

Meetings are held on the first Thursday of each month in the ground level conference room of the Administrative Resources Building (ASB) located by the helipad. 3 hours CME are given. 4 if assigned articles are read. For questions about CME or to obtain a copy of journal article, send an email to Peter Canning at canning@uhc.edu or call at (860) 679-3485. Free parking is available in the lower lot of the Medical Arts & Research Building (MARB) next to the ASB: There are two levels of parking at the MARB. Both levels have general, convenience and patient parking. Please be attentive to the posted signs.

CONTACT US:

Any questions or suggestions about EMS? Looking for patient follow-up?



Contact EMS Coordinator Peter Canning at canning@uhc.edu or call (860) 679-3485.