



Emergency Medical Services *Partners*

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Prehospital Therapeutic Hypothermia Suspended

The North Central Regional EMS Medical Advisory Committee voted unanimously in January to suspend the regional prehospital therapeutic hypothermia guidelines in light of two recent studies.



The first study, "Effect of prehospital induction of mild hypothermia on survival and neurological status among adults with cardiac arrest: a randomized clinical trial," published in the January 2014 *Journal of the American Medical Association*, showed that while there was no difference in neurologically intact survival between those patients who were cooled prehospitally and those who were cooled in the hospital, those who were cooled prehospitally were more likely to rearrest and more likely to suffer side effects such as pulmonary edema.

The second study, "Targeted Temperature Management at 33 degrees C versus 36 degrees C," published in the December 2013 *New England Journal of Medicine*, showed there was no difference in survival between those patients who were cooled to 33 degrees C and those who were kept normothermic at 36 C.

It is now speculated that it may not necessarily be cooling patients that is leading to improvements in survival, but keeping them from getting a fever that is likely the reason for better outcomes.

Bottom line:
Until such time as there is good evidence of benefit to beginning cooling in the field, therapeutic hypothermic cooling will be done only in the controlled setting of our hospitals.

Evidenced-Based Medicine

"Evidence-based medicine is the conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients." - Dr. David Sackett

For many years, medical decisions were based on conjecture. Oxygen is good. If a trauma patient's blood pressure is low, we can improve it by running two large bore IVs wide open. If someone might have a spinal injury, we can keep it from getting worse by strapping them to a hard backboard. Sometimes they were based on anecdote. The patient was sick and then after we bled him to let out the bad blood or applied a leech to suck out the poisons, he got better, so we are going to bleed and put leeches on all our sick patients.



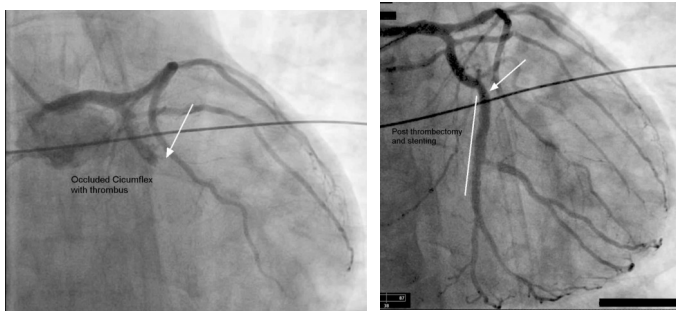
Fortunately, today we are beginning to test what we believe or think might be good for a patient under scientific methods to best analyze risk versus benefit. Evidence based medicine has been seen in many of our latest guidelines. We have increased our dosage of benzodiazepines in status epilepticus, changed our oxygen policy to titrate O₂ Sat to >94%, and put our resuscitation focus on quality compressions and timely defibrillation. This is why we practice permissive hypotension in trauma patients, are moving away from long backboards, and support prehospital CPAP.

Emergency Medicine should always be about doing what is best for the patient. The more we learn, the more our practices will change. We always look for the best evidence based on the highest quality research. We will embrace those therapies that show proven benefit.

STEMI Kudos
Great job by **American Medical Response**



paramedic Jose Matias for his STEMI alert call this month in Avon. His patient had a borderline ST elevation ECG, but was complaining of pain that felt like his first MI. Matias stepped up and called in a STEMI alert. The cath lab was activated prehospitally and when the patient was taken upstairs to the cath lab, a 100% occlusion of the left circumflex was discovered. The lesion was cleared and an additional PCI was done the next day to clear up other blockages. The patient did well and was discharged home in 3 days.



The bottom line. Provide Early Notification. Transmit the 12-lead ECG and call in with a STEMI or Possible STEMI Alert with Medical Control. Let the doctor know the story. Always err on the side of the patient. Matias did so, and consequently on a weekend evening, **John Dempsey Hospital** was able to get its cath lab open and team in place to reperfuse the patient's heart.

More STEMI Kudos

Great job by **UCONN Fire Department** paramedics Thomas Parazino and Joe Speich and Josh Levin for their recent STEMI calls in Farmington. In both cases, the cardiac cath lab was activated prior to patient arrival thanks to the paramedics radio patches and transmission of their 12-lead ECGs. Both patients are home and doing well.



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

Mission Lifeline Update: Way to Go EMS!

Thanks to regional EMS providers, the latest data from the Mission Lifeline Greater Hartford STEMI



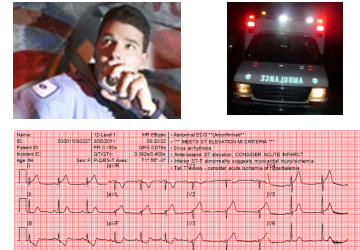
Project shows, our regional Door-to-Balloon (D2B) times for EMS STEMI patients in the Hartford region (all 4 PCI Hospitals) decreased by 5.5 minutes over the last quarter, and our regional First Medical Contact (FMC) (Paramedic at Patient side)-to-Balloon times decreased by 5 minutes!

EMS patient D2B

Q2 - 59 Minutes
Q3 - 53.5 Minutes

EMS FMC

Q2 - 86 Minutes
Q3 - 81 Minutes



Early 12-Lead Acquisition, Early Recognition and Early Notification through the STEMI ALERT process is the key to saving myocardium. Keep up the great work!

February AM EMS CME



**Transplant Patients:
EMS Considerations**
Amy Flores, M.D.



Case Reviews:
Richard Kamin, M.D.

Journal Review:
2014 NEMSP Abstracts -

More of Best of 169 New Studies—Cardiac Arrest Carry Downs, STEMI Mimics, Frequent Flyers, Critical Procedures, More
Peter Canning, Paramedic, R.N.

February 19, 2013 (Wednesday)
8:30 A.M.– 11:30 A.M.
East Farms Fire Department
94 South Road, Farmington, CT

Open to ALL Responders—3 Hours CME

CONTACT US:

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



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