

Emergency Medical Services

Partners

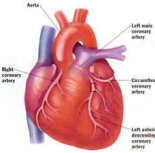


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UCONN Top Heart Doctors

When a STEMI alert is called at John Dempsey Hospital, the hospital's emergency and cardiology staffs prepare to receive, assess and rapidly transport the patient to the cath lab for life-saving intervention. Two of our doctors, who are regularly seen by EMS in the ED, were just named to the US News and World Report's list of America's Top Doctors. Congratulations to Head of Cardiology Michael A. Azrin, M.D. and Bruce T. Liang, M.D. Both have been actively involved in EMS feedback and education efforts, and are major reasons behind the success of UCONN's STEMI program.



Nitroglycerin and Chest Pain

While nitroglycerin is a staple of EMS treatment for suspected ischemic chest pain, it comes with several significant contraindications. Nitro should be withheld from patients who are hypotensive (SBP <90 Hg or >30 mm Hg below baseline) as well as patients with severe bradycardia (<50 per minute), tachycardia (>100 per minute) **in the absence of heart failure** and in patients with right ventricular infarction. Generally, with evidence of AMI and normotension, do not reduce SBP to < 110 mm Hg. If patient is hypertensive, do not decrease mean arterial pressure (MAP) by >25% from initial MAP. Nitro is also contraindicated with the use of phosphodiesterase inhibitors with 48 hours. Because studies have failed to show the treatment benefits of NTG in the setting of AMI, in the presence of low blood pressure, its use might prevent patients from being able to receive ace inhibitors, which have been proven to decrease morbidity and mortality.

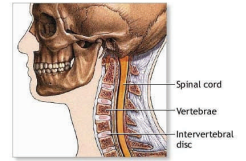
Source— AHA 2010 Guidelines



QA/QI — Selective Spinal Immobilization

In the North Central Region paramedics are allowed to selectively omit spinal immobilization for patients who meet certain criteria.

There is also a movement to expand this protocol statewide to EMTs, as well. However, the protocol requires adherence. There have been a number of calls lately into area hospitals, including John Dempsey where patients who sustained cervical fractures arrived via EMS without board and collar. All of these calls involved elderly patients. In all cases, the patients had demonstrable spinal tenderness on palpation. The mechanism of injury in these cases has ranged from falling down several stairs to falling out of a wheelchair.



While paramedics should review the entire region protocol, there are three relevant points that should be kept in mind.

1. Patients with “positive mechanism or questionable mechanism (including patients with trauma above the clavicle, falls, MVAs, trauma to the spine head or neck, abrupt accelerating, decelerating or rotational forces)” should have stabilization maintained and undergo a spinal assessment.
2. “If patient has pain on palpation of spinous process of cervical, thoracic or lumbosacral spine, immobilize.”
3. “Extra caution must be used in pediatric and geriatric patients. When in doubt, immobilize.”

Spinally immobilizing an elderly patient is not always the most comfortable experience for them. Be certain to use extra padding to fill in the gaps and consider pain management and anti-nausea medication if indicated.

Bristol STEMI

Bristol Hospital EMS paramedic David Landi and AEMT partner Carolina Baiz responded to the home of a pale

elderly male with substernal chest pressure radiating to his back, neck and arms that was nonreproducible by palpation or movement. A 12-lead ECG revealed ST elevation in leads II, III, and AVF. Landi and Baiz rapidly transported the patient to John Dempsey Hospital for STEMI care, contacting medical control en route for a STEMI alert. Head of Cardiology Dr. Michael Azrin and ED Physician Dr. Richard Kamin met the patient on arrival in the ED and with the help of the ED and cardiology staffs facilitated his rapid transport up to the cath lab where the patient was found to have a 100% occlusion of the right coronary artery. Azrin cleared the blockage and inserted three drug eluting stents in the affected artery to ensure blood flow. The patient was home with his family four days later. Another success for the EMS-JDH STEMI team! Keep up the great work!



Immobilization Kudos

Great job by **Farmington Fire** EMTs Zachary Higley and John Krause and **American Medical Response** EMTs Jared Weber and Matthew Behunial for carefully spinally immobilizing a 77-year-old female in **Farmington** who rolled out of bed and complained of neck pain. The patient had a C2/C3 fracture.



Also kudos to a crew from **Simsbury** ambulance (waiting on crew names) who properly immobilized an 86-year old male who fell over backwards, hitting his head. He suffered a C5/C6 fracture.

Remember, particularly in the elderly, even low falls, can cause cervical fracture. Always follow regional guidelines. Never discount neck pain. Be vigilant and err always on the side of the patient.

More Cardiac Kudos

Great work by JDH sponsored **East Windsor Ambulance** paramedics Dave White, Mike Tyburski and John Koenig for their STEMI care and early notification for a patient with chest pain they transported to a local hospital.



Nice job by **American Medical Response** paramedic Curtis Neff and EMT Lafaiete Sousa for their care to a 60-year-old female from **West Hartford** with intermittent chest pain who suffered a non ST-elevation MI. Neff administered ASA and Nitroglycerin, and did a 12-lead ECG while en route to JDH.



Both patients had excellent outcomes.

Latest Door to Balloon Research

A new study in the *American Journal of Emergency Medicine* reveals the two most effective ways to reduce critical door-to-balloon time in ST-segment elevation myocardial infarction (STEMI), are "emergency physician activation of the cardiac catheterization laboratory and **prehospital** activation of the STEMI alert process." Since employing both strategies, John Dempsey Hospital has shown a substantial improvement in door-to-balloon times, with many great patient outcomes. Remember early notification saves lives!

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

UPCOMING 2011 MORNING CME SCHEDULE

Our monthly CMEs are held the first Thursday of the month in Keller Auditorium at 9:00 A.M. Each CME consists of a general lecture, case reviews and journal article review. Selected additional topics may be added. 3 Hours CME are given. 4 Hours with completion of journal article. Upcoming dates/topics include:

September 1, 2011

ECG Interpretation/Burns

October 6, 2011

Allergic Reactions/Anaphylaxis

November 3, 2011

Cold Emergencies

December 2011

Skill Sessions (2 Hours)

Date, Location TBA

Keller Auditorium (located in Main Hospital Building)

Enter main door, take escalator down one floor.

Parking Notice:

Daytime parking in main lot at top of hill is now limited to visitors and patients. If you are unable to find parking, please park in lower lots and take shuttle bus. Thanks.

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.