OhioHealth

# Emergency Medical Services

NEWSLETTER FOR EMS PROFESSIONALS

Winter 2019

## Fighting Falls, Fractures and Frostbite with Foresight

Winter has arrived in Ohio. And with more people on ladders hanging lights, hunters perched in tree stands and slick sidewalk conditions, we will see more fall injuries, particularly among the elderly.

Fracture stabilization, careful log rolling, pain control and suspicion of unseen blood loss (especially in femur fractures) should stay top of mind. While it's unusual to see penetrating injuries, all manner of blunt injuries occur with a fall, including extremity and spine fractures as well as abdominal and head wounds.

Patients are also at risk of coagulopathy and hemodynamic compromise while they wait for help to arrive, with even brief exposure to the elements. And simple maximal voluntary contractions can be compounded by hypothermia if the patient is not found rapidly. Be sure to remove wet clothing immediately. Practice passive warming by wrapping the patient in warmed linens and active warming using warmed IV fluids as available. The same principles of warming apply to frostbite as well, using caution with fragile tissue. These patients should be transferred to facilities equipped to treat burns and thermal injuries.

As we prepare for the season ahead, be careful, stay warm and keep your skills sharp. I am grateful for your hard work and dedication to the communities you serve.

See you in the trauma bay!

*Josh Hill MD, FACS*
*Trauma Surgeon*
*OhioHealth Grant Medical Center Level 1 Trauma Program*

## IN THE FIELD

### "Close to Home" Takes on New Meaning

*Kathy Taylor, BSN, RN*
*STEMI Coordinator; Cardiac Outcomes Manager*

OhioHealth has opened several freestanding emergency departments in central Ohio in recent years, offering patients a faster, more affordable and convenient way to find medical illness and injury treatment. But when a patient requires advanced tertiary care, a quick connection is critical.

In October, a 75-year-old female arrived at an OhioHealth freestanding ED in Grove City with chest pain and dyspnea. The patient was being treated for pneumonia, but her dyspnea had worsened. After a 12 lead electrocardiogram (EKG), the ED physician determined she had ST elevation in her inferior and lateral leads. A STEMI alert was activated for a transfer to OhioHealth Grant Medical Center's catherization laboratory.

Local EMS are often best suited for transports in life-threatening situations given their close proximity to the patient. On this occasion, Jackson Township responded within minutes, transporting the patient swiftly and safely to Grant.

Once at Grant, the STE on the patient's 12 lead EKG revealed another cardiovascular emergency called Takatsubos syndrome (also called Apical ballooning or broken heart syndrome), a condition that causes the heart muscle to become extremely weak. The left ventricle also becomes enlarged and does not pump blood well to the rest of the body. Patients with this condition are treated with heart-failure medications, such as beta blockers, ACE inhibitors or diuretics. In this case, the patient was started on a low-dose beta blocker and discharged to home two days later.

This is just one example of how established protocols to quickly engage local EMS and prepare a more equipped care site within the OhioHealth system for the patient's arrival save precious time, and patient lives.

## SERVICE LINE FEATURE

### Spinal Motion Restriction

*Robert A Lowe, MD, FACEP, FAEMS*
*Medical Director, OhioHealth EMS*

In May 2018, the National Association of EMS Physicians (NAEMSP) and the American College of Surgeons Committee on Trauma (ACS-COT) released a joint position paper that states:

- "Spinal immobilization" is an archaic term that should no longer be used. The acceptable term is "spinal motion restriction."
- Coop stretchers and ambulance cots are acceptable devices for spinal motion restriction.
- If a backboard is used initially, it is acceptable to remove the back board once the patient is moved to an EMS cot by EMS prior to transport or hospital arrival.
- Penetrating trauma does not require spinal motion restriction.
- In children:
  - Age alone is not a mandatory reason to initiate spinal motion restriction, even if communication challenges increase your suspicion. A list of indications for spinal motion restriction is provided in the document.
  - Padding voids is still appropriate, and a vacuum mattress may be an acceptable means of accomplishing both spinal motion restriction and padding of voids.

## EDUCATION CALENDAR

**EMS Quarterly Updates**

Grant Medical Center
January 19

**EMS Regional Quarterly Updates**

Grady Memorial Hospital
March 9

Additional Outreach Education opportunities

## CASE STUDY

It's not uncommon for trauma patients to also be stroke patients. See how one patient with a scalp laceration wound up needing a mechanical thrombectomy.

READ MORE

## DIRECTOR'S CORNER

### Innovations in "Out of Hospital" Trauma Care

*Holly Herron, DNP, RN, CNP*
*Paramedic*

Beginning in February, OhioHealth will offer a two-hour course to local Fire and EMS departments highlighting changes in trauma care beyond hospital walls, including a review of initial assessment and management of trauma patients in the field. The course can be customized to meet your department's needs and areas of interest, and a four-hour extended option will also be available.

The trauma course will be taught by trauma surgeons, educators, and simulation experts from OhioHealth Grant Medical Center's Trauma Services and OhioHealth EMS.

Contact Grant trauma educator Elizabeth Naber, RN, at (614) 566.9726 or Elizabeth.Naber@OhioHealth.com for more information, or to schedule this course on-site at your department. Please let her know if you have specific trauma cases or types of trauma care you would like us to cover.

## FAST FACTS FOR COLD EMERGENCIES

*Robert A Lowe, MD, FACEP, FAEMS*
*Medical Director, OhioHealth EMS*

- Traditionally, "Not Dead until Warm and Dead" requires immersion in near freezing water and rapid core cooling that suspends a metabolic state.
- It is not possible to survive cold exposure that results in a frozen torso or airway.
- When a patient is buried in snow, survival is possible if an "airway pocket" is present, but:
  - If snow is packed in the airway, the patient will not survive.
  - A successful resuscitation has never been performed on patients buried in an avalanche longer than one hour, or at a depth of more than six feet.