

OhioHealth Emergency Medical Services

NEWSLETTER FOR EMS PROFESSIONALS

When Everything Old is New Again

Learning from the past and finding wisdom in our experiences, we introduce the NEW *OhioHealth EMS e-Newsletter*. What first began in 1982 as the *Grant Hospital LifeFlight Log*, followed by the *LifeLink Log*, is now the newest way for you — our valued EMS partners and colleagues — to stay in the know.

Since the start of the trauma program, LifeFlight helicopter and paramedic school, we have been proud to serve the entire OhioHealth system. And now, we are beyond thrilled to announce the electronic resurrection of this publication.

As an OhioHealth clinical program that encompasses all central Ohio and OhioHealth EMS services in one program, *WE* are here to help. To best serve our patients, we have Emergency Department (ED) EMS coordinators, EMS patient care follow-ups, initial EMT basic and paramedic school training, EMS continuing education, special-event EMS crews, EMS medical directors, operational support services and our community paramedic resources all in one place.

For the past 11 years, we have come together to serve at a greater level with our annual OhioHealth EMS Conference. Held each year on the Monday and Tuesday of national EMS week, this year's event falls on May 21 and 22. Our 2018 keynote speaker will discuss personal motivation and the American College of Surgeon's Rural Trauma Care. Additional breakout tracks will include EMS continuing education sessions, community paramedics and interactive simulation labs.

This year, the exhibit hall interactive simulation labs will include a trauma room, cardiac catheterization lab and a neurology intervention lab. New for 2018 is a "Talk with the Doc" area, which affords one-on-one discussions and Q&As with our experts. The exhibit area will also display national and local fire and EMS vendors as well as EMS-related OhioHealth services. As always, the conference is FREE of charge and you can register through EventBrite at OhioHealthEMS.com.

Again, welcome to the NEW *OhioHealth EMS e-Newsletter* — *WE* hope you find it useful and stay connected.

Holly Herron, DNP, RN, CNP, CNS, CCRN, CEN, EMT-P

Educational Calendar

OhioHealth EMS Quarterly Updates

April 7, August 11 and November 3, 2018

OhioHealth EMS Regional Quarterly Updates

June 2, September 6 and October 18, 2018

OhioHealth Neuroscience Symposium

April 26-27, 2018

The Ohio EMS Conference

May 21-22, 2018

OhioHealth Trauma Care

December 4-5, 2018

Click [here](#) for more information.

Case Study

Last month, a 33-year-old male came to the ED via EMS after injuring his left thigh with a chainsaw. Having applied a belt to his thigh, he was able to slow bleeding until a combat tourniquet could be applied above the wound to stop the bleeding. (Click [here](#) to see images.)

After thorough examination, wound exploration and repair, the patient was discharged home the next day. Because this man knew how to control life-threatening bleeding until help arrived, he likely saved himself from massive blood loss — or death!

In honor of 'National Stop the Bleed Day' on March 31, 2018, OhioHealth trauma will be offering a FREE class at OhioHealth Grant Medical Center from 11 a.m. to 1 p.m. Attendees will gain hands-on experience and learn how to apply tourniquets to stop life-threatening bleeding. For more information, contact Stacey Wickham at (614) 566.9808.



In the Field

EMS was dispatched for a 57-year-old female with previous history of hypertension complaining of a severe headache with sudden onset while shoveling snow. The patient was alert and oriented to person, place and time with initial vital signs BP 246/154, P 72 R 18. However, during evaluation by EMS, the patient became less responsive and, by time she arrived to the ED, had a GCS = 3.

A sudden onset headache, with exertion and rapidly declining mental status, are all highly concerning for intracranial hemorrhage and — most likely — aneurysm. The rapidly declining mental status may make airway control a looming priority in a pre-hospital setting.

For pre-hospital intubation, attention should be paid to medications that would mitigate and/or not contribute to increased intracranial pressure. For example, ketamine has historically been described as potentially increasing intracranial pressure. While some recent evidence suggests this might not be the case, most would recommend other choices for induction.

Lidocaine has been historically used to blunt the rise in intracranial pressure with intubation. Various degrees of evidence suggest the potential for harm is extremely low, making it a reasonable choice for pre-medication.

More progressive systems have advocated the use of “heads-up intubation” and elevation of the head at 15-30 degrees, which may be beneficial to a patient such as this. In addition, for patients with no trauma history, head-of-bed elevation at 30 degrees may help mitigate increases of intracranial pressure.

This patient should be called a pre-hospital stroke alert. Ultimately, CT was confirmatory of subarachnoid bleed and a cerebral aneurysm that required clipping.

Straight from the Heart

Despite improving survival in recent years, morbidity and mortality remain extremely high in cardiogenic shock. In September 2017, the American Heart Association issued the first scientific statement summarizing the contemporary management of cardiogenic shock. The statement detailed the pathophysiology and pathogenesis of the condition as well as clear differentiation of different shock phenotypes.

Cardiogenic shock is a systolic blood pressure less than 90 mm for greater than 30 minutes with or without inotropic support and associated with clinical signs of hypoperfusion. The majority of cardiogenic shock patients are related to ST elevation MIs, which can have a hemodynamically diverse presentation. The two different shock phenotypes are the classic “cold and wet” and the vasodilatory/euvolemic “cold and dry.” Treatment should be based on identification of the hemodynamic phenotype.

The first major breakthrough in shock treatment was achieved by the randomized SHOCK trial that demonstrated an early invasive strategy coupled with PCI or CABG, resulting in a long-term survival advantage. This helped the development of standardized cardiogenic shock protocols and teams, which will hopefully lead to outcome improvements in the future.

Director's Corner

We first transitioned to a system department by taking on-site EMS departments and resources from each of the OhioHealth hospitals in central Ohio and consolidating them into one coordinated effort. Increasing our resources to meet the ever-changing needs of healthcare, we can be more connected to EMS. This approach allows us to best serve you — the first link in the chain of care for our patients because we all know those first minutes of care are precious and most heavily influence our patients' outcomes.

Research findings tell us that open and consistent communication with you — our EMS providers — maximize the care and quality outcomes of our patients. Our hope is to be easily accessible as well as readily available and responsive to the needs of EMS everywhere, every time. We value our connection with you as clinical educators for initial and ongoing continuing education and for services such as EMS medical direction, continued quality improvement processes and community paramedic resources.

On behalf of our patients, we thank you. Without your partnership we would not be what we are. Because together, we are stronger.

Holly Herron, DNP, RN, CNP, CNS, CCRN, CEN, EMT-P

Contact Us

Visit us at **OhioHealthEMS.com** for more information about our clinical, educational, and operational resources for Emergency Medical Services.