



# EMS NEWS



January 2010

## *Drug of the Month: Adenosine*

**AKA:** Adenocard

**Class:** Anti-Arrhythmic

**Actions:** Slows conduction time through the AV node as well as block re-entry pathways through the AV node (such as that associated with Wolf-Parkinson-White).

**Indications:** Used in the management of stable, narrow-complex tachycardia, typically at a rate > 150.

**Contraindications:** Known hypersensitivity to the drug.

**Precautions:** If the rhythm is determined to be a rapid atrial fibrillation, the use of adenosine may be stopped.

**Dose:** 6mg may be repeated twice at 12mg. Pediatric dose: 0.1mg/kg (max 6mg).

**Route:** Rapid IVP followed by a saline flush.

**Other:** Stable patients are those who have a normal mental status, show no signs of inadequate perfusion (pallor, diaphoresis, etc), and deny complaints of chest pain and shortness of breath. The presence of any of these symptoms makes the patient unstable and synchronized cardioversion becomes the appropriate management. It should be noted that the stable patient may complain of palpitations or a fluttering sensation in their chest, but no pain.

For pediatric patients, adenosine may be considered in children less than 2 years of age with a heart rate > 220 and in children greater than 2 years of age with a heart rate > 180. Also, under the Academy of Medicine protocol, a call to medical control needs to be initiated prior to any treatment for narrow complex tachycardia. Management of pediatrics in narrow complex tachycardia tends to be less aggressive than that for adults. This is because pediatric patients typically have a healthier cardiovascular system than do adults and can tolerate longer periods of tachycardia. The medical control physician should be contacted to determine what treatment, if any, is the best course of action for the EMS provider.

## **Use of Tourniquets in EMS**

New in the Academy of Medicine protocols for 2010 is the use of tourniquets for a life threatening extremity hemorrhage. As a result of the research from uses in the military, tourniquets have been found to save lives with minimal risk of developing an ischemic limb. Tourniquets should only be used to control life-threatening hemorrhage for which direct pressure and elevation of the extremity could not control the bleed. If a tourniquet is used, the time of application should be marked on or near the tourniquet itself as these devices have a limited amount of time they can remain in place (time periods are product specific). A tourniquet should not be applied over a patient's clothing, or over a joint. Keep in mind that these devices are for use only in the rare case of a life-threatening extremity wound. Amputation, for example, does not necessitate the use of a tourniquet. Bleeding from amputation can often be controlled with direct pressure. If your department has recently placed one of these devices in service, be sure to familiarize yourself with the equipment; and, keep the device in mind when confronted with a bleed that is difficult to control.

## **EMT-Basic and Paramedic Refreshers**

The Division of EMS is considering the possibility of conducting a Paramedic and/or EMT-Basic Refresher—possibly as early as March, 2010. If your agency would be interesting in hosting this class, please contact [Joshua Borkosky](#) as soon as possible. The cost of these classes has not been determined; however, there would be a discount for members of the host department. Also, anyone interested in attending either class should contact [Joshua Borkosky](#). Please include days of the week and time of day when you are most likely to be available. We will do our best to accommodate as many people as we can.

## **EMS Division Looking for Local Agencies to Host Con Ed Classes**

Throughout the year, The Division of EMS will be conducting various certification courses for continuing education. The majority of these courses are taught by ER Physicians from the UC College of Medicine—many of which are active as Medical Directors of local EMS agencies. The courses we offer include PEPP, AMLS, PHTLS, and AHA ACLS Renewal. These are 16 hour courses conducted over 2 days (with the exception of ACLS—1 day, 8 hours). We are currently looking for a department to host a PEPP class in March or April, 2010. There is a discount on the course fee for members of

the host department with a minimum of 7 students from said department. More classes will be scheduled throughout 2010. If you are interested in hosting one of these courses in 2010, contact [Kay](#).

## **Upcoming EMS Educational Opportunities**

### Cardiac Cath Lab:

The Cardiac Catheterization Lab at University Hospital is once again open to paramedics in the region on Friday each week for observation time. Four hours of CEUs will be awarded. You must be **pre-registered** to attend. For information or to register, contact [Kay](#).

### Online Continuing Education:

We are now offering an opportunity for EMS providers to take 10 hours of continuing education on-line. This is done through the UC blackboard system with registration at the UC Emergency Medicine website. **This education is termed “distributive” and is accepted in Ohio, KY, Indiana (and many more states) as well as National Registry.** These are video lectures with PowerPoint by physicians and will be updated regularly. The individual cost of 10 hours is \$60.00. Register at the UC Emergency Medicine website below. For department subscriptions contact [Kay](#). Topics include medical and trauma such as stroke, 12 leads, toxicology, head/neck/face injuries and more!

### Other Con Ed Classes:

The division of EMS has been conducting ACLS Renewal, PEPP, PHTLS, and AMLS on a rotating basis each month running throughout 2009. For a one year package that includes all 4 classes and the online con. ed. – a total of 66 hours of CE – the cost is \$350.00. You will have “loaner” books for most classes to cut down on costs. Completion of the full CE package will meet the core requirements for paramedic recertification in Ohio, Kentucky, and for National Registry. Each month (except for July and August) we will offer one of the above classes. You will have one year to complete your classes. The upcoming class schedule is listed below:

February: **Free Con-ed.**—Feb. 3, 7pm – 9pm: Burlington FD

Topic: To Be Determined (no pre-registration required)

February: PHTLS—Feb 16 and 18 (16 hour class)

Location: Delhi Twp Fire Department

March: **Free Con-ed.**—March 2, 1pm – 3pm: Sharonville FD

Topic: To Be Determined (no pre-registration required)

March: AMLS—March 3 and 4 (16 hour class)

Location: Burlington Fire Department

\*More to follow (including PEPP and ACLS) in 2010

To register for any of the above classes, click the link below:

<https://www.uc.edu/EmerMed/register/>

## ***Job Opening:***

### EMS Education Coordinator

This position is for the Department of Emergency Medicine to coordinate the EMS Education provided by the University of Cincinnati, Department of Emergency Medicine to the EMS Community. It includes the promotion of the education program, coordination of classes and the provision of the educational programs.

Recommended requirements:

- Bachelor's degree strongly preferred
- Minimum 3 years of directly related EMS experience
- Minimum 2 years as an EMS educator.
- Ohio State certified paramedic or Nationally Registered Paramedic (NREMT-P) preferred
- Ohio State EMS Instructor
- AMLS, PEPP, PHTLS Instructor preferred.

Salary: Commensurate with qualifications

Deadline for applications: Feb 15, 2010

For more information contact: Kay Vonderschmidt, 513-558-5786 or email – [vondermk@ucmail.uc.edu](mailto:vondermk@ucmail.uc.edu)

## **General Info:**

### **Contacts:**

Kay Vonderschmidt: [vondermk@ucmail.uc.edu](mailto:vondermk@ucmail.uc.edu)

Joshua Borkosky: [borkosja@ucmail.uc.edu](mailto:borkosja@ucmail.uc.edu)

### **Disclaimer:**

All the educational information contained in this Newsletter is obtained from reputable publications and internet sites. Information on specific dosages and treatments is largely based on the Southwest Ohio Academy of Medicine Paramedic Protocols. The information is designed to pique your interest and possibly spur further research. It is no way intended to supersede any policies, procedures, or protocols in place at your EMS agency.