

# Monroe Livingston Region Program Agency

Division of Prehospital Medicine, University of Rochester Mailing Address: 601 Elmwood Avenue, Box 655, Rochester, NY 14642 Physical Address: 120 Corporate Woods, Suite 100, Rochester, NY 14623 Phone: (585) 463-2900 Fax: (585) 473-3516 E-Mail: <u>mlrems@urmc.rochester.edu</u>

To: All EMS Providers

Date: July 23, 2013

### **Re:** Advisory 13-08: Rheos<sup>TM</sup> Devices

There are now approximately 10 patients in the Monroe-Livingston Region with Rheos<sup>TM</sup> devices implanted. The Rheos Baroreflex Hypertension Therapy System<sup>TM</sup> is an implantable device that is used to electrically stimulate the carotid sinus wall. This carotid sinus stimulation decreases the blood pressure of patients who cannot be adequately controlled with conventional therapy. The device is the about the size of an implantable defibrillator and is placed in the right upper chest (Figure 1). Of note, the device will cause moderate 60 Hz artifact on EKG monitoring (Figure 2). If required, the device can be turned off by placing a magnet over it, much like one would do to deactivate a pacer. A temporary deactivation of the device for the time it takes to perform an EKG should not pose any risk to the patient.

How The Rheos<sup>™</sup> System Works

### Figure 1: The Rheos<sup>TM</sup> System

#### 4 The brain sends signals to 3 The baroreceptors other parts of the body to send signals to reduce blood pressure: the brain. The signals a. Vessels are interpreted as a b. Heart rise in blood pressure. c. Kidneys 2 The leads conduct activation energy to the carotid baroreceptors. The device delivers activation energy through the carotid leads. Source: CVRx



# Monroe Livingston Region Program Agency

Division of Prehospital Medicine, University of Rochester Mailing Address: 601 Elmwood Avenue, Box 655, Rochester, NY 14642 Physical Address: 120 Corporate Woods, Suite 100, Rochester, NY 14623 Phone: (585) 463-2900 Fax: (585) 473-3516 E-Mail: <u>mlrems@urmc.rochester.edu</u>

Figure 2: 12-Lead EKG of a patient with implanted Rheos<sup>TM</sup> Device with 60 Hz artifact



Patients with a Rheos<sup>TM</sup> device can receive any and all interventions that are indicated for their prehospital management. In most cases, deactivating the device is not required, as significant EKG abnormalities can still be identified through the interference. This Advisory is provided for general provider knowledge and will not be accompanied by any Protocol or Procedure changes.

With any questions, please do not hesitate to contact the Regional Program Agency.