

A. Introduction

This protocol applies to the management of all patients who have a ventricular assist device (VAD) implanted. A ventricular assist device is a mechanical pump that is used to support heart function and blood flow in people who have weakened hearts. **When a VAD patient is encountered, remember that these patients, along with their families, have been well trained in the care of themselves and their devices. LISTEN TO THEM!** The patient, family and/or the device will have the phone number for the VAD coordinator on call. **Call immediately for assistance.**

B. Assessment and care

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1. Initial Assessment (**Protocol 1**)*
 - a) In a majority of these patients, a pulse and blood pressure may not be palpable.
 - b) A pulse oximetry reading may not be possible to obtain when assessing the VAD patient.
2. Establish and maintain a patent airway (**Protocol 7**)
3. Administer supplemental oxygen via the most appropriate means (**Procedure 1**) **
4. If the patient is unconscious and / or unresponsive to stimuli, listen to the patient's chest (epigastric region). **If you hear the whirling sound of the VAD, DO NOT PERFORM CPR.** The VAD device has been surgically placed into the left ventricle and CPR could dislodge this device, causing death.
5. **Locate the device usually found at the patient's waist.**
 - a) Look at the controller and identify which device is in place.
 - b) Locate the colored sticker and match this to the color coded EMS guide found in the attachment to this protocol.
 - c) Consult with the VAD coordinator to intervene appropriately based on the type of alarm and device.
 - d) If the VAD coordinator cannot be contacted, follow the instructions on the color coded EMS guide to perform the following tasks:
 - Assess all connections and ensure that they are secured
 - Check battery status and replace as needed according to the EMS guide
 - If battery replacement fails, locate the patient's secondary controller and follow the instructions on the EMS guide to replace the controller.

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1. Establish IV access (**Procedure 13**).
2. Perform a 12 Lead ECG with continuous cardiac monitoring (**Procedure 22**)
3. DO NOT administer Aspirin or Nitroglycerin. Treat cardiac signs and symptoms as needed **only** after consulting with the VAD coordinator.

Note: When to perform CPR:

CPR must be considered a LAST RESORT for VAD patients. Only when connections are confirmed to be secure, battery replacement fails and the secondary controller fails is CPR an option. When this occurs, AND the patient is unresponsive, pulseless, and apneic AND there is no activity auscultated from the device, follow (PROTOCOL 9) and attempt resuscitation.

C. Transport

1. ALL VAD patients will be transported **by RESCUE to the nearest VAD Center** regardless of their complaint, hemodynamic or airway status. The on call VAD coordinator will provide notification to the VAD team in addition to your radio report. There are 2 VAD centers in South Florida:
 - a) Ryder Trauma Center
 - b) Memorial Regional Hospital
2. Consider Air Rescue when the VAD patient is assessed to be critically ill or injured and the transport time is extended. (**Protocol 4**)
3. When performing the radio report, inform the staff at Ryder Trauma that this is NOT A TRAUMA ALERT. Only declare a trauma alert if the patient is injured and meets trauma alert criteria.
4. Patients always carry a “backup bag” which contains 2 extra fully charged batteries, and a second controller. Be sure to always bring this emergency backup equipment with them to the hospital.

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