

(2-52) General: Ventricular Assist Device

Criteria

- Any request for service that requires evaluation and transport of a patient with a Left Ventricular Assist Device (VAD)

EMT

- ABCs and vital signs
- Airway management and appropriate oxygen therapy
- Treat airway obstruction or respiratory distress per protocol. Treat medical or traumatic condition per protocol
 - Assess pump function and circulation by listening to the motor of the pump over the heart and observing the green light on the system control device
 - Assess perfusion, based on mental status, capillary refill, and skin color. The absence of a palpable pulse is normal for patients with a functioning VAD; they may not have a detectable blood pressure
 - Perform CPR only if there is no evidence of the pump functioning (no pump noise) and the patient is unresponsive
 - Notify the appropriate receiving facility ASAP of an incoming patient with a VAD, regardless of the patient's complaint
 - Take the patient's power unit and batteries to the emergency department
 - Trained support member must remain with the patient
 - Do not delay transport to the hospital



EMT STOP

ADVANCED

CC

PARAMEDIC

If hypotensive (defined as poor perfusion, based on mental status, capillary refill, or skin color):

- Place patient in a supine position, if possible
- Establish IV/IO access and administer a 500 mL normal saline bolus
- If a patient does not have evidence of adequate perfusion and oxygenation with treatments, follow conventional resuscitation protocols
- Reassess and repeat up to 1000 mL total. Contact medical control for additional fluid boluses



ADVANCED, CC, AND PARAMEDIC STOP



MEDICAL CONTROL CONSIDERATIONS

- Termination of resuscitation
- Consider norepinephrine 2 mcg/min titrated to 20 mcg/min if needed after the fluid bolus is complete to maintain MAP > 65 mmHg or SBP >100 mmHg
- Consider consultation with a VAD program provider

Key Points/Considerations

- Community patients with VADs are typically entirely mobile and independent
- Keep device and components dry
- Fully charged batteries and the emergency power pack can provide 24-36 hours of power
- Trained support members include family and caregivers who have extensive knowledge of the device, its function, and its battery units. They may act as a resource to the EMS provider when caring for a VAD patient
- Patients are frequently on three different anticoagulants, and are prone to bleeding complications
- Patient may have VF/VT and be asymptomatic. Contact medical control for treatment instructions
 - The rhythm may appear abnormal at the patient's baseline. Interventions should be directed toward the primary presenting problem, rather than the rhythm itself

