

Ventricular Assist Devices

Bay Area VAD Centers

Stanford – Palo Alto
 Lucile Packard – Palo Alto
 California Pacific Med. Ctr. – SF
 UC San Francisco – SF
 UC San Francisco – Mission Bay
 Kaiser Santa Clara – Santa Clara

Assess the patient

E Because there may be no palpable pulse, utilize other parameters for patient assessment (e.g., LOC, skin signs, capillary refill and EtCO₂).

Assess the device

If the patient's condition appears to be related to their VAD, and it is safe and reasonable, it is preferred to transport the patient to their Bay Area VAD Center unless the patient has any of the following conditions, which warrant transport to a closer hospital:

Exit to appropriate TP and transport to any approved receiving facility

Minor medical or trauma with adequate perfusion

Stroke

Stroke patients (eg., AMS, acute severe headache, seizure, vomiting, hemiparesis, etc.)

Chest Pain: STEMI

STEMI patients

Trauma

Trauma patients

Exit to appropriate TP

Cardiac arrest or critical patients with unstable perfusion

Notify receiving facility.
 Consider Base Hospital for medical direction

Device information, implant center, and VAD Coordinator contact number may be located on the device itself, on the refrigerator, or medical alert bracelet

If a caregiver is present, yield to their advice.

You are authorized to take orders from professionals at the LVAD Center, as long as they are within your scope of practice.

For continuous flow devices (no palpable pulse), auscultate the left upper quadrant of abdomen or over the heart and listen for the "hum" of the device

Determine if the device has power

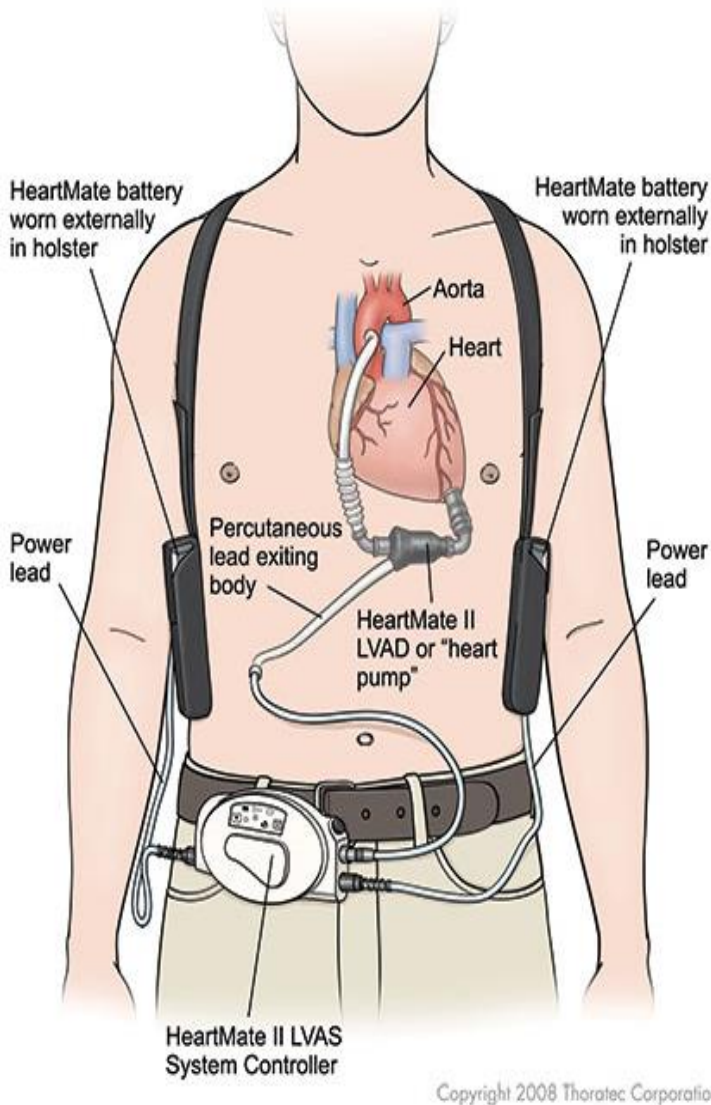
- If the device has power, it does not necessarily mean it is working properly
- If the device has power, you will see lights or pump giving you information
- The display will tell you the liters per minute of blood flow

Check the device for secure connections and properly charged batteries

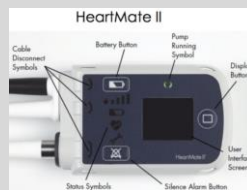
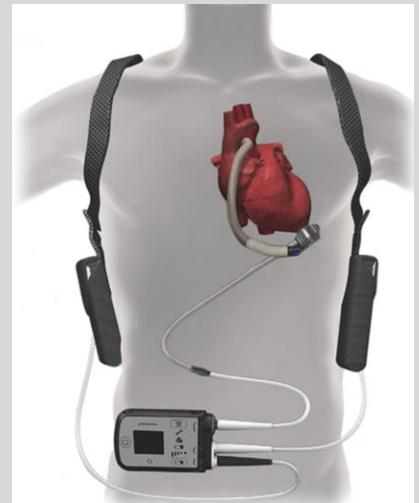
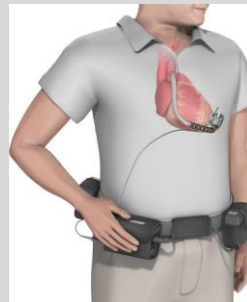
A malfunctioning pump should beep. If the pump is functioning with good flow, CPR is not indicated.

General Treatment Protocols

Ventricular Assist Devices



VAD CENTER	24-HOUR HOTLINE
Stanford Health Care	(650) 617-4216
Lucille Packard Children's Hospital at Stanford	(650) 497-8000 Ask for - 4LVAD
California Pacific Medical Center	(415) 600-1051 Heart Transplant
UC San Francisco	(415) 443-5823
Kaiser Santa Clara	(408) 851-1000 Cardiology MCS



General Treatment Protocols

Pearls

- Patients may be cardioverted or defibrillated if symptomatic, but asymptomatic dysrhythmias do not require treatment.
- Chest compressions can be performed, but only if you are certain the pump is not working and/or no flow through the VAD.
- Treatment should otherwise follow appropriate treatment guidelines.
- Contact the Base Hospital with questions or if directed by patient's caregiver or LVAD Center personnel to do something outside of your protocol.
- If possible, the patient's family member or caregiver should accompany the patient in the ambulance, and all related VAD equipment, including spare batteries, should also be transported with the patient.
- In arrest situations, determine if a POLST/DNR or advanced directive is available. Many VAD patients have made end of life care decisions.