

CPR Emergency Algorithms & Care Guide



action

HeartMate 3™

Unresponsive Patient
Provide adequate ventilation & Assess perfusion

Adequate Perfusion?
MAP goal _____

YES

NO

Treat non-VAD causes for AMS

- Stroke
- Hypovolemia
- Bleeding
- Hypoxia/hypoventilation
- Arrhythmias
- Sepsis

Is the VAD working?

- Assess flows (volume/afterload)
- Listen for VAD hum
- Verify power is connected

YES

NO

Start CPR

• Check driveline
• Controller/battery change

<1 Minute

If no improvement in MAP, **start CPR**

AORTIC VALVE ANATOMY

- ☐ Closed (Oversewn)
☐ Open

CentriMag™/PediMag™

Unresponsive Patient
Provide adequate ventilation & Assess perfusion

Adequate Perfusion?
MAP goal _____

YES

NO

Treat non-VAD causes for AMS

- Stroke
- Hypovolemia
- Bleeding
- Hypoxia/hypoventilation
- Arrhythmias
- Sepsis

Is the VAD working?

- Assess flows (volume/afterload)
- Assess pump (motor, magnet), console, and circuit
- Verify power is connected

<1 Minute

YES

NO

Start CPR

• Pump/console change

<1 Minute

If no improvement in MAP, **start CPR**

VAD

- ☐ CentriMag™
☐ PediMag™

CANNULA TYPE

- ☐ Temporary (If yes, CPR only at discretion of code leader)
☐ Berlin (long term)

AORTIC VALVE ANATOMY

- ☐ Closed (Oversewn)
☐ Open

Unresponsive Patient

Provide adequate ventilation & Assess perfusion

Adequate Perfusion?

BP goal _____

YES
↓

Treat non-VAD causes for AMS

- Stroke
- Hypovolemia
- Bleeding
- Hypoxia/hypoventilation
- Arrhythmias
- Sepsis

NO
↓

Is the VAD working?

- Membrane filling and ejecting adequately (Consider vol./afterload)
- Verify power is connected

YES
↓

Start CPR

NO
↓

Assess and treat VAD related causes:

- Cannula disruption
- Membrane rupture
- Driveline disconnected or air leak
- IKUS/Active Driver malfunction

If no improvement in BP, **Hand Pump** (Rate: 60–80)
Rotate pumper q2min

If no improvement in BP, **Start CPR**

< 1 Minute

< 1 Minute

< 1 Minute

AORTIC VALVE ANATOMY

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- ☐ Open

Unresponsive Patient

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Adequate Perfusion?

MAP goal _____

YES
↓

Treat non-VAD causes for AMS

- Stroke
- Hypovolemia
- Bleeding
- Hypoxia/hypoventilation
- Arrhythmias
- Sepsis

NO
↓

Is the VAD working?

- Assess flows (volume/afterload)
- Assess pump placement signal, motor current, and purge pressure/flow
- Verify power is connected

YES
↓

Reduce P Level and Start CPR

NO
↓

Assess and treat VAD related causes:

- Pump malposition
- Pump failure
- High purge pressure/low purge flow state
- Console failure

If no improvement in MAP, **Reduce P Level and Start CPR**

< 1 Minute

< 1 Minute

< 1 Minute

Authors: Kerry Schindler, MSN;
Anna Joong, MD; Stephanie Hope, BSN;
Sabrina Law, MD; Jennie McAllister, NP;
Mary Mehegan, BSN; David Peng, MD;
Michelle Ploutz, MD; Asma Razavi, MD;
Allison Reichhold, NP; Anita Sen, MD;
Katie Simpson, MD; Madeleine Townsend, MD

Contributing Centers: Morgan Stanley Children's Hospital of New York Presbyterian, St. Louis Children's Hospital, Primary Children's Hospital, Texas Children's Hospital, Cleveland Clinic Children's Hospital, Rady Children's Hospital San Diego, C.S. Mott Children's Hospital, Children's Hospital Colorado, Lurie Children's Hospital of Chicago

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