

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

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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 (motor, magnet), console, and circuit
- Verify power is connected

< 1 Minute

YES
↓

Start CPR

NO
↓

- 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

Berlin Heart EXCOR®

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

<1 Minute

YES
↓

Start CPR

NO
↓

Assess and treat VAD related causes:

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

<1 Minute

AORTIC VALVE ANATOMY

☐ Closed (Oversewn)

☐ Open

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

<1 Minute

If no improvement in BP,
Start CPR

Impella®

Unresponsive Patient

Provide adequate ventilation & Assess perfusion

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

<1 Minute

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

<1 Minute



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

<1 Minute

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