

CPR

Emergency Algorithms & Care Guide



action

HeartMate 3™

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)
- Listen for VAD hum
- Verify power is connected

YES
↓

Start CPR

NO
↓

- 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
↓

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

YES
↓

Start CPR

NO
↓

- Pump/ console change

<1 Minute
↓

VAD

- CentriMag™
- PediMag™

CANNULA TYPE

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

AORTIC VALVE ANATOMY

- Closed (Oversewn)
- Open

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

Berlin Heart EXCOR®

Impella®

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
↓

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

AORTIC VALVE ANATOMY

Closed (Oversewn)

Open

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

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