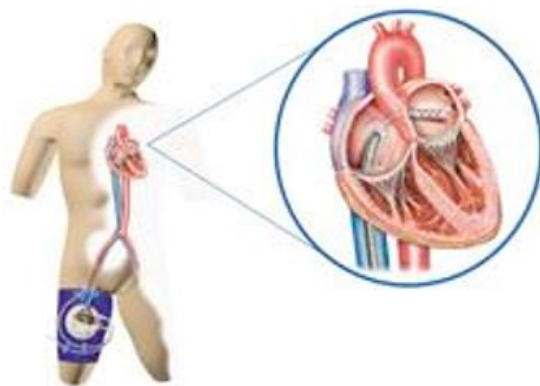


Tandem Heart Quick Guide



Access

- Inserted in the Cath Lab through femoral vein, the inflow cannula is advanced across septum into the left atrium. The inflow cannula pulls blood from LA to external impellar motor. Outflow from motor is returned to patient's arterial circulation via the femoral artery, effectively bypassing the patient's left ventricle.

Patient Management

- Expect arterial line and PA catheter. Device creates non-pulsatile flow so waveforms may appear dampened.
- Monitor MAP to maintain 65-85 mmHg
- Preload dependent and afterload sensitive.
 - Consider CVP target 12-15 mmHg. Hypovolemia may cause decrease in device flow.
 - Consider afterload (SVR) reduction if hypertension causes decrease in device flow. Adjust pressors and consider additional dilatory agents as needed.
- Anticoagulation
 - Consider anticoagulation to target ACT >200 or PTT between 65-80 seconds.
- NIRS
 - Large bore cannulation site may cause alteration in distal perfusion. Consider adding NIRS to cannulated limb.
- Warming
 - The tandem heart does not contain a warmer. Closely monitor patient temperatures and add warming devices (e.g. Bair Hugger, heating lamp) as needed.
- CPR may dislodge cannula. Initiate CPR at the discretion of the attending physician. During CPR, consider decreasing device speed and flow. If CPR initiated, check inflow cannula placement when ROSC achieved.
- Defibrillation will not harm device.

Nursing Assessment and Documentation

- Q1Hour:
 - Assess insertion sites for bleeding or hematoma
 - Assess pulses and distal perfusion
 - Assess pump flow (liters/min) and speed (rpms)
 - Assess patient temperature to monitor for hypothermia

IN CASE OF EMERGENCY, CONTACT THE ECMO PERFUSIONIST ON CALL