

Quick Reference Guide Medtronic Melody Transcatheter Pulmonary Heart Valve

-CHECK WITH MD BEFORE OPENING EQUIPMENT-

“It has been designed for patients who have undergone placement of a valved conduit between RV and PA and now present with significant obstruction or regurgitation requiring replacement of pulmonary valve conduit.”

Additional Personal/Procedure/Preparation

- Anesthetist for General Anesthesia
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- Foley Catheter, extra pillows and foam to put hands above head
- Group and Reserve check and see if MD wants any Pack Cells on hand
- Gel Pad for head, warming blanket OR, wedge for feet for R.int.Jug cannulation

SET UP

- Standard Cath Lab table Setup
- 2 tables taped together for valve preparation- Remove back cabinets from room
- Sterile scissors, Sterile Kelly clamp
- Fill Medrad for multiple injections (Use Multi button)
- Plain I liter bags of N/S and Heparinized 1 liter bags

Equipment required

- 3 6FR-12cm sheaths
1 for RFA, 1 for RFV, 1 for LFV
- 2 Perclose
- 1 18 Fr -30cm sheath
- Laureate .035 Angled 150cm wire-Check before opening
- .035-260cm Amplatz exchange wire-Check before opening
- Lunderquist wire .035 260cm DC
- 14fr Check-Flo 85cm Femerol sheath
- 1 7Fr Balloon Wedge Catheter
- 1 5Fr Multi-track catheter
- Possible Glide wire
- Z-Med II balloon-ASK MD SIZE
- Covered CP STENT-ask MD/Harry for guidance
- Coarctation Stent-Ask Size- Harry for guidance
- Ensemble NU Delivery System-ASK MD- Harry for guidance
- Pulmonary Valve- ASK MD- Harry for guidance
- Catheter Dilatation Balloons- ASK MD- Harry for guidance
- Potential Cook Dilators- ASK MD- Harry for guidance

Sterile Table #2 (Two tables Taped Together)

- Two sterile table covers
- Two Sterile rinsing bowls for Sterile N/S plain 500ml in each bowl (for rinsing bioprosthesis) for minimum 5 minute (in each bowl) to keep device hydrated
- Other bowl as rep requests)

Possible Medications

- Local Zylocaine 2% & Bupivacaine .5%
- Heparin Boluses by Anesthetist
- Ancef 1 gram or Vancomycin as per MD

Procedure Flow in Brief (Based on Recent Flowsheet)

- Pt arrives in lab. Monitoring of Vital signs commenced.
- IV/AL started by Anesthetist
- Anesthetist intubates and ventilates patient, warming blanket applied.(from OR)
- Patients arms positioned above patients head.(need extra pillows, gel pad for head)
- Pt prepared usual sterile fashion-bilateral groin prepared, set up with **Two** transducers
- MD cannulates RFA and LFV and RFV
- Femoral angios may be performed
- One of femoral vein sheaths will be Upsized to 18Fr to accommodate valve delivery
- 7fr Wedge catheter will be introduced via RFV sheath and serially advanced through right heart chambers, to measure and record right heart pressures.
- O2 Saturations may be taken
- ACT intermittently checked as per usual practice
- Wedge catheter will be removed and 5fr Multitrack catheter will be advanced to perform Pulmonary Angios
- Pulmonary Valve measurements and calibrations will be done by MD's
- Covered stent may be prepared and crimped onto Z-Med 11 balloon then advanced across Pulmonary artery
- PA Angios performed and Conduit measured
- Covered Stent will be inflated and deployed, then balloon removed
- Multiple inflations may be done with balloon
- Coartation stent may then be prepared on a Z-Med balloon then advanced across PA stent and then deployed inside PA stent
- Repeated inflations may be performed with additional dilation balloons of MD Choice
- MD may upsize Valvuloplasty balloon as required until satisfied with diameter of conduit
- PA Angios will be repeated and further measurements of PA will be done
- Pulmonic Transcatheter Heart Valve will be prepared as per protocol on Ensemble Delivery system
- Pulmonic Transcatheter Heart Valve will be prepared as per protocol soaking in N/S solution(1st bowl-5min, 2nd bowl-5min)
- Valve crimped onto delivery system then advanced to calcified area in conduit
- Position verified, Inflation commenced and Valve Deployed

- High Pressure Valvuloplasty balloon may be used to post dilate in the Pulmonary Conduit/Valve
- 5Fr Multitrack catheter advanced to measure PA pressures and gradients.
- Final hand injections will be performed, Perclose secured
- Pt will be transferred CCU post procedure