



**Clinical Pathway: Right Ventricle-Pulmonary Artery  
Conduit Replacement  or  
Pulmonary Valve Replacement**

**Path initiated on** \_\_\_\_\_ (Date)

**Expected length of stay: 4 days**

**Attending physician** \_\_\_\_\_

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*This pathway is a general guideline and does not represent a professional care standard governing providers' obligations to patients. Care is revised to meet the individual patient needs.*

**Eligibility Criteria - Age > 6 mos. No significant comorbidities.**

<b>Timeline</b>	<b>Pre-op*</b>	<b>Day of Surgery*</b>	<b>Post-op Day #1</b>
<b>Unit/Dept.</b>	SDS	OR/CICU	CICU/A6C
<b>Date</b>			
<b>Assessment/Monitoring</b>	Weight, height, vital signs	Vital signs q 15"x2h, per routine	Vital signs q 1-4 hrs
Cardiac		CR monitor, C-line/RA, A-line	CR monitor/telemetry
Resp/Pulm.	Assess breath sounds, O <sub>2</sub> sat.	✓breath sounds, O <sub>2</sub> sat, CT drng	✓breath sounds, O <sub>2</sub> sat, CT drng
Fluid status		Measure I&O. Foley. NG output.	Measure I & O. D/C Foley.
<b>Diagnostics</b>	CXR-PA & lateral EKG, H&P CBC/diff, renal panel, UA, Type & Cross, +/- HCG	On arrival in CICU: CXR, EKG, CBC, PT/PTT, renal panel, Glu, Mg, Ca <sup>++</sup> , ABG. CBC, K <sup>+</sup> , Ca <sup>++</sup> , Glu q 4hrs x 2.	CXR in a.m. a.m. labs: CBC, renal panel, Glu, Ca <sup>++</sup> & ABG CXR post CT removal
<b>Medications/ IV therapy</b>		Antibiotic (Cefazolin) (G11[B]) x 3 doses Dopamine Morphine, midazolam or PCA IV maintenance fluids acetaminophen, ondansetron PRN	D/C antibiotic (Cefazolin) +/- furosemide, D/C dopamine.. Pain meds PRN acetaminophen PRN ondansetron PRN
<b>Treatments/ Procedures</b>		Conduit replacement  Extubation per protocol Mouth care every 4 hrs until extubation	Dressing check D/C chest tube CPT PRN/spirometry q 1 hr while awake D/C arterial line, C-line, foley
<b>Nutrition/GI</b>	NPO 8 hrs prior to surgery if >1 yr old; if <1 yr old, NPO for solids/full liquids 6 hrs prior to surgery. Clear liquids until 4 hrs prior to surgery.	NPO (NG → low continuous suction) ice chips when awake & alert, advance diet as tolerated.	Advance to regular diet as tolerated a.m. weight (D/C NG)
<b>Activity</b>	Ad lib Bath in pm with antibacterial soap	Bed rest	Post CT removal: OOB with assist at least bid Transfer to A6C
<b>Consults/referrals</b>	Anesthesia	(pain service)	
<b>Psychosocial</b>	Psychosocial assessment, emotional support.	Family updated re: patient status.  Patient comfort measures.	Family updated.  Patient comfort measures.
<b>Education</b>	Pre-op teaching re: monitors, ventilator, tubes, lines, etc. CICU tour.	Teaching re: CICU routines, care	Postoperative care.Per Health Topic – "Going Home After Cardiac Surgery"
<b>Discharge planning</b>			Education as above.

\*order set

[ ] Indicates strongest strength of evidence (see guideline for evidence scale).





## Clinical Pathway: Right Ventricle-Pulmonary Artery Conduit Replacement

### EXPECTED OUTCOMES

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Signatures												
Timeline	Pre-op	Day of Surgery			Post-op day #1							
Unit/Dept.	SDS	OR/CICU			CICU/A6C							
Date		D	E	N	D	E	N					
<b>Physiologic</b>	No signs of intercurrent illness. Pre-op tests completed.				Hemodynamic stability. Patient is extubated with stable respiratory status. Extubation time _____				Hemodynamic stability. Normal respiratory function. Chest tube removed without evidence of pneumothorax or effusion. Patient is tolerating liquids. No signs of infection.			
<b>Psychosocial/ Comfort</b>	Family/patient are prepared for surgery.				Family informed. Pain controlled.				Family/patient informed. Increased patient activity with adequate pain control.			
<b>Educational</b>	Family/patient informed. Consent signed.				Family informed.				Family/patient informed. Family has received Health Topic.			
<b>Other</b>									Transfer from CICU.			
<b>Outcome not met due to:</b>	Fever Respiratory Sx Parent anxiety Incomplete tests  Other: _____				Arrhythmia Hypotension Bleeding Inadequate pain control Other: _____  Failed extubation due to: Sedation Pneumothorax Other: _____				Arrhythmia ↑ Chest tube output/effusion Pneumothorax Fever Nausea/vomiting Inadequate pain control  Other: _____			

**For each met outcome, initial = met      \* = not met (see progress notes)**



## Clinical Pathway: Right Ventricle-Pulmonary Artery CONDUIT REPLACEMENT

Path initiated on \_\_\_\_\_  
(Date)

Expected length of stay: 4 days

Attending physician \_\_\_\_\_

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*This pathway is a general guideline and does not represent a professional care standard governing providers' obligations to patients. Care is revised to meet the individual patient needs.*

### Eligibility Criteria - Age > 6 mos. No significant comorbidities.

Timeline	Post-op day #2	Post-op day #3	Post-op day #4/Discharge
<b>Unit/Dept.</b>	CICU/A6C	A6C	A6C
<b>Date</b>			
<b>Assessment/Monitoring</b>	Vital signs q 2-4 hrs.	Vital signs q 4 hrs.	Vital signs q 4 hrs.
Cardiac	Cardiac monitor/Telemetry	Telemetry discontinued	
Resp/Pulm.	✓ breath sounds, D/C pulse ox	Assess breath sounds	Assess breath sounds
Fluid status	Measure I & O	Measure I & O	
<b>Diagnostics</b>	(CXR post CT removal)	+/- CXR CBC	CXR (PA & Lateral)
<b>Medications/ IV therapy</b>	Pain meds – Acetaminophen, acetaminophen/codeine prn ibuprofen scheduled +/- furosemide	Pain meds – Acetaminophen, acetaminophen/codeine prn ibuprofen scheduled FeSO <sub>4</sub> for Hct less than 30% +/- furosemide	Pain meds
<b>Treatments/ Procedures</b>	Dressing change/incision ✓  Incentive spirometry (G12[B]) (D/C chest tube) (D/C C-line)	Incision check. Bandaid on CT site 48 hr. post chest tube removal. Incentive spirometry (G12[B])	Incision check
<b>Nutrition</b>	Regular diet. Weight	Regular diet. Weight	Regular diet. Weight
<b>Activity</b>	OOB – ambulate outside of room if chest tube out.	OOB – ambulate outside of room tid +.	Ambulate outside of room.
<b>Consults/referrals</b>			
<b>Psychosocial/Comfort</b>	Patient comfort measures. Family/patient support. Assess discharge readiness.	Patient comfort measures. Family/patient support. Assess discharge readiness.	Patient comfort measures. Family/patient support.
<b>Education</b>	Per Health Topic – “Going Home After Cardiac Surgery”	Per Health Topic – “Going Home After Cardiac Surgery”	Per Health Topic – “Going Home After Cardiac Surgery”
<b>Discharge planning</b>		Assess discharge readiness. Review f/u appointments. Discharge prescriptions written.	Review f/u appointments Fax discharge communication form to referring physician.

\*order set

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### EXPECTED OUTCOMES

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Signatures												
Timeline	Post-op day #2				Post-op day #3/Discharge				Post-op day #4/Discharge			
Unit/Dept.	A6C			A6C			A6C					
Date		D	E	N		D	E	N		D	E	N
<b>Physiologic</b>	Hemodynamic stability. Normal respiratory function Regular diet tolerated. No signs of infection. Increased activity.				Hemodynamic stability. Normal respiratory function. Regular diet tolerated. No signs of infection. Baseline activity level.				Hemodynamic stability. Normal respiratory function. Regular diet tolerated. No signs of infection. Baseline activity level. Incision healing.			
<b>Psychosocial</b>	Family/patient informed regarding discharge needs. Increased patient activity with adequate pain control.				Family/patient informed regarding discharge needs. Increased patient activity with adequate pain control.				Family/patient ready for discharge.			
<b>Educational</b>	Family/patient has received Health Topic. Family/patient teaching in progress.				Family/patient demonstrates comprehension of discharge instructions.				Family/patient demonstrates comprehension of discharge instructions.			
<b>Other</b>									Discharge to home			
<b>Outcome not met due to:</b>	Arrhythmia Vomiting Fever Inadequate pain control. Persistent chest tube drng. Other: _____				Arrhythmia Vomiting Fever Inadequate pain control Family unable to assume home care. Other _____				Arrhythmia Vomiting Fever Inadequate pain control Family unable to assume home care. Other: _____			

**For each met outcome, initial = met      \* = not met (see progress notes)**