

Tetralogy of Fallot Repair Guideline

Admit to CVICU POD #0

- **Sedation**
 - Intermittent fentanyl (1mcg/kg IV q 1 hour PRN pain)
 - Dexmedetomidine infusion (0.5 mcg/kg/hour IV)
- **Respiratory**
 - PEEP 5
 - Ventilator mode
 - SIMV-PRVC
 - SIMV-PC
 - Early extubation
 - Utilize extubation readiness testing
- **Cardiac**
 - Vital sign goals
 - HR < 150
 - Oxygen saturation > 92%
 - Blood pressure per age normal
 - Temperature control/avoidance of fever
 - CVP 5-10 mmHg
 - Monitor for low cardiac output syndrome
 - Consider milrinone infusion
 - Consider epinephrine infusion
 - Monitor CVP
 - Consider maintaining higher CVP
 - Continuous atrial ECG monitoring for 6 hours and then PRN
 - Monitor and trend Etometry T3 data
- **Renal**
 - Consider gentle diuresis 6-8 hours post-admission
- **GI**
 - Start clears 2 hours after successful extubation
- **Heme**
 - Monitor for bleeding

Common Complications

- **Tamponade**
 - Consider fluid bolus
 - Consider echocardiogram
 - Notify cardiologist
 - Notify surgeon
 - Consider bedside/catheterization lab drainage
- **Junctional ectopic tachycardia**
 - Refer to *Junctional Ectopic Tachycardia Guideline*
- **Right ventricular diastolic heart failure**
 - Consider echocardiogram
 - Evaluate RVOT, RV function, residual VSD
 - Minimize positive pressure
 - Consider iNO (*Refer to Patient Care Policy I-1004 Inhaled Nitric Oxide (iNO) Protocol*)
 - Monitor urine output
 - Monitor lactate
 - Consider milrinone infusion
 - CVP goal 7-12 mmHg
- **Heart block**
 - Consider A-V temporary pacing
 - Minimize dexmedetomidine use
- **Oral feeding difficulty**
 - Consult Feeding Team
 - Refer to *CVICU Feeding Protocol*
- **Bleeding**
 - Consider checking CBC
 - Consider PRBC transfusion
 - Measure coagulation panel and replace factors as indicated
 - Consider Factor 7 administration
 - Perform TEG
 - Call surgeon

POD #1

- **Evaluate RV function**
 - Consider echocardiogram
 - Wean milrinone infusion to off
 - Consider mild IV diuresis
- **Advance diet**
- **Minimize positive pressure ventilation**
 - Wean HFNC
- **Discontinue arterial line**
- **Discontinue bladder catheter**
- **Analgesia and anxiolysis**
 - Consider ketorolac in consultation with surgeon
 - Wean off dexmedetomidine
 - Mobilize/ambulate per developmental normal
 - Establish normal sleep-wake cycle

Discharge Criteria

- Discharge teaching complete
- Discharge echocardiogram complete
- Pain controlled on oral medication
- Clear chest radiograph
- Ambulatory (per age normal)
- Normal sinus rhythm unless cleared by EP, cardiologist and surgeon

POD #2

- Consider removal of chest tubes
- Discuss possible need for aspirin with surgeon and cardiologist
- Change to oral diuretic regimen
- Transition to oral pain medication PRN
- Complete discharge teaching

Patient Education

- Refer to CVICU unit specific education

Clinical Practice Guideline Created By:
Robert B. Kelly, MD, FAAP – CVICU Medical Director

Tetralogy of Fallot Repair References

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