Inclusion Criteria: Postoperative Cardiac Surgical Patient. Diagnosis of JET confirmed by EKG. Patient must have hemodynamic instability due to the arrhythmia.

Exclusion Criteria: Patients without temporary pacing wires

Initial Management
- Adequate sedation
- Electrolytes (especially magnesium)
- Temperature 36°C - 37°C rectal
- Decrease vasoactives (especially dopamine)
- Attempt brief period of atrial pacing over ventricular rate
- Check threshold of wires
- Obtain atrial ECG to document rhythm
- Obtain ECHO to rule out effusion and check function
- Notify Cardiologist

Recommendations/Considerations
The GOAL of treatment is to decrease JET rate just low enough to pace over
- Lower medication doses may be appropriate in preterm neonate or impaired renal function

Secondary Medications/Interventions
Frequently reassess rhythm to determine ongoing need for medication
Consider cooling patient further down to 35°C - 36°C rectal
- Dexmedetomidine infusion start at 0.2 mcg/kg/hr up to max of 1 mcg/kg/hr.
  - Reserve dexmedetomidine load for extreme situations
- Amiodarone 1 mg/kg over 10 minutes. Repeat in 1mg/kg increments to a total dose of 5 mg/kg.
  - Then amiodarone infusion at 5 mcg/kg/min.
  - Give intravenous CaCl prior to amiodarone load
- Procainamide 7-10 mg/kg load over 30 minutes
  - Then procainamide infusion at 40-60 mcg/kg/min
  - Check levels at 4 hours
  - Use with caution if ejection fraction already decreased
- Esmolol infusion at 50-300 mcg/kg/min
  - Consider loading with caution
  - Consider esmolol as first line agent in patients with JET presenting on POD 2 or greater and the patient is not on dopamine and ejection fraction is normal

Tertiary Medications/Interventions
- Sotalol
  - Caution: Must have an EP specialist consultation prior to initiation of Sotalol
  - Strong caution if patient has received Amiodarone
  - Give 1mg/kg intravenous Sotalol over 1 hour. Can consider a second dose in consultation with EP specialist

Consider EP consult if patient does not respond to first pharmacologic agent
References for Junctional Ectopic Tachycardia (JET) Care Guideline


