

SUPRAVENTRICULAR TACHYCARDIA GUIDELINE

CONFIRM SVT

Characteristics of SVT

1. HR >220 in infants (>180 in older children) narrow complex
2. No P waves, if present negative in leads II, III, AVF
3. No beat-to-beat variability
4. Abrupt termination

VAGAL MANOUVRES

1. Diving Reflex (Baby – whole face immersed in cold water for 5 seconds, Child – Glove filled with ice water over face.
2. Valsalva manoeuvre (e.g blowing a plunger out on a syringe)

INITIAL RESUSCITATION

1. Secure Airway – High Flow Oxygen
 2. **Assess for symptoms and signs of cardiogenic SHOCK** (symptoms in older child, poor perfusion, hypotension)
 3. Monitoring – continuous ECG monitoring, Saturation, autocyte NIBP q 3min
 - Baseline 12 lead ECG (if delayed use Defib to print out rhythm strip)
 - IV access (large, proximal vein, attach 3-way tap) – Blood gas, electrolytes (K^+ , Na^+ , Ca^{2+} , Mg^{2+})
- CXR - to check for signs of heart failure**

SHOCK ABSENT

VAGAL MANOUVRE

ADENOSINE with continuous ECG recording (print out)

1. 100mcg/kg (max 3mg) IV + rapid flush
WAIT 2 minutes If SVT terminates STOP
2. 200mcg/kg (max 6mg) IV
Wait 2 minutes If SVT terminates STOP
3. 300mcg/kg (max 12mg)
4. **If unsuccessful – Discuss with KIDS** re: 500mcg/kg Adenosine and cardioversion

SHOCK PRESENT

Vagal manoeuvre only if NO DELAYS

Give ADENOSINE, if IV access +, whilst setting up defib

1. **Activate local Paediatric Resus team** – Anaesthesia and Paediatrician
2. **Call KIDS 0300 200 1100 and KIDS will contact BCH Cardiology**
3. If Hypotensive: Cautious Fluid Boluses (5ml/kg) +/- Cautious use of peripheral strength Adrenaline. Reassess liver size with each fluid bolus.
4. If awake will need sedation-analgesia and possible intubation for Cardioversion

SYNCHRONISED DC CARIOVERSION

1st Shock: **1 J/Kg**
2nd Shock and thereafter: **2 J/kg**

Discussion with KIDS and BCH Cardiology for considering Amiodarone and Refractory SVT management