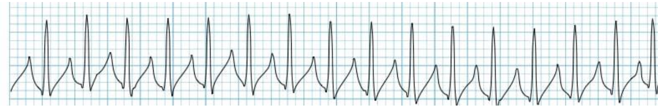
NORTH EAST & CUMBRIA TRANSPORT AND RETRIEVAL

NECTAR pathway for management of paediatric supraventricular tachycardia



Primary assessment using ABCDE approach

- Maintain airway & start FM-O2
- Monitor HR, BP, SpO2, temp. , cap. Refill & conscious level
- 12 Lead ECG
- Obtain IV access and check blood gas and electrolytes

Diagnosis of SVT:

- Regular HR, no beat to beat variability
- HR > 220 for infants & > 200 for child
- Narrow QRS < 120 ms
- Invisible P wave or seen after QRS

History Taking

- Infants - pallor, dyspnoea, poor feeding.
- Older children - palpitations , chest discomfort
- History of syncope or symptoms of heart failure
- Previous history of heart surgery or arrhythmias
- Any known illness or regular medications

Assess for clinical signs of shock e.g. low BP, decreased conscious level

YES --- Unstable

CALL EARLY

Conference call with CARDIOLOGY via NECTAR

- Call for **urgent** Anaesthetic/ICU help
- Give 10mls/kg 0.9% saline over 5-10min & reassess
- Keep low threshold for intubation
- Get second IV/IO access

Synchronised DC cardioversion

- 1 J/kg
- Still in SVT -- 2 J/kg
- Still in SVT ----- last attempt 2 J/kg
- If not intubated --- use sedation before DC cardioversion

- **REDISCUSS WITH CARDIOLOGY**
- **BE PREPARED TO DO CPR**

Important tips for unstable patients

- ✓ Use Ketamine/Roc for intubation
- ✓ Resuscitation drugs on standby
- ✓ Adrenaline infusion on standby
- ✓ Keep 20ml/kg volume bolus ready
- ✓ Consider insertion of central & arterial lines

Adenosine Administration tips

- ✓ Preferable large bore IV located at or above the antecubital
- ✓ Push adenosine with a "3-way tap" attached to the hub of the catheter & a 10 ml flush on the other attachment
- ✓ Commence rhythm strip before administering adenosine

NO --- Stable

Vagal manoeuvres

- One side carotid sinus massage
- Covering the face with an ice pack for 30 sec

Still in SVT

Adenosine

- 100 microg/kg (max 3mg) IV ------- wait for 2 min.
- Still in SVT - 200 microg/kg (max 6mg) IV -- wait for 2 min.
- Still in SVT - 300 microg/kg (max 12mg) IV -- wait for 2 min.

Still in SVT

- Discuss with paediatric cardiology team
- If patient becomes hypotensive--- follow unstable pathway

Resolved SVT

- Consider routine referral to paediatric cardiology team for follow up

R.Abouelella V3.0 - Review due 2024