

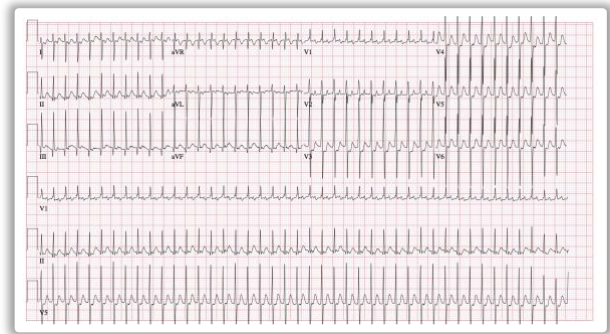
Quick Case

NEONATAL SVT



Case Intro

A 2 week old, term baby with no antenatal or perinatal concerns is brought in by parents due to being unsettled for a few hours and grizzly when trying to feed. Brought to resus by the triage nurse as found to have HR 240.



ECG Courtesy of Life In The Fast Lane

Practical Aspects

Get Senior Help if needed.

Move the CosyCot to the middle of the room, hooked up, heater on, all within a minute or so. It is much easier to get stuff done when it's not up against the wall.

Apply Monitoring, including BP cuff, check glucose.

Confirm diagnosis - ECG.

Print Resus sheets from computer.

Find the cognitive aids.

Clarify roles with others in the room.

Don't forget the **bubbles** PARENTS! (ok you can also have bubbles!) You will need to carefully explain everything, especially if you are doing Ice water immersion.





Treatment Option 1: Vagal Manoeuvre for Neonate

If stable, facial immersion in ice water is the way to go. Attach baby to a cardiac monitor, wrap firmly with leads coming out by feet (see pics left and below!) Then, immerse the whole face in ice water slurry for five seconds. No need to occlude the nostrils. This technique is safe and 90% effective in terminating an SVT.

Where is the ICE at Nth Shore? send someone to ADU.
Where is the ICE at Waitakere? In the Staff Tea-room.

Treatment Option 2: Adenosine

This is both therapeutic and occasionally diagnostic. Give through a large vein (antecubital fossa) using a three way tap close to the cannula. Record a rhythm strip as the response may help the diagnosis of the underlying tachycardia even if the tachycardia does not terminate (use the defibrillator rhythm strip).

Give adenosine on one port by rapid IV push, closely followed by saline flush through other port .

Dose at 100 micrograms/kg then 200 micrograms/kg then 300 micrograms/kg (max 12 mg).



Treatment Option 3: Cardioversion

Use if there is no response to adenosine and/or there is evidence of shock. Consider calling a Paediatric Emergency in this circumstance unless sufficient senior support is already present.

If the patient is conscious, give IV sedation/anaesthesia prior to DC cardioversion. Give a synchronous DC shock at 0.5-1 J/kg. Further shocks at 2 J/kg may be necessary.

On Going Care & Follow Up

Get a 12 Lead ECG once sinus rhythm has been achieved. Discuss with Paediatrics at Waitakere, and/or the on call Paediatric Cardiologist. Disposition will depend on these discussions.



Want to learn more??? Then check out these links:

<https://www.starship.org.nz/guidelines/tachyarrhythmia-in-infants-and-children/>

<https://litfl.com/ecg-case-082/>

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