SIMulatED RDH Emergency Department - Author: Beks Day

# Scenario Run Sheet: Tiny Tachy

## Learning Objectives

**Target Group:** ED Registrars, ED Nurses, ED PCA’s

**General:** CRM principles – particularly around safe defibrillation communication

**Scenario Specific:**

Recognition of SVT

Use of vagal manoeuvres and escalating doses of adenosine

Safe synced defibrillation of resistant SVT with haemodynamic compromise.

## Scenario Overview

**Brief Summary:**

12 month old presents with lethargy and “not behaving normally”. Had a similar episode that lasted a few hours 3 weeks ago – seen by GP but had improved spontaneously. Noted to have a HR of 260 at triage. Cool peripheries and reduced activity. Initially normal BP but drops to 50/30 when vagal and adenosine attempts fail. No prodrome to the illness. Child in NCT and obvious SVT on ECG. Attempts to revert all fail until child is safely defibrillated with a synced DC shock.

|  |  |  |  |
| --- | --- | --- | --- |
| Intro Time | Scenario Time | Debrief Time | Soundbite |
| 1 min | 20-25min | 20 mins | 10 mins |

## Observers’ Engagement Task

## Equipment Checklist

|  |  |
| --- | --- |
| **Patient** | Baby mannequin (10kg weight) |
| **Monitoring:** | ISIM. Defib paddle monitoring |
| **Docs and Forms** | Paed obs chart |
| **Other Equipment** | ICE |
| **Consumables** | Defib pads |
| **Medications** | Adenosine |

|  |  |
| --- | --- |
| **Sim Props** | CXR – NAD  ECG – SVT during, WPW post reversion |

## Participants

**Staff: 3x doctors, 3x nurses**

**Instructor Roles: FACEM on the phone**

**Confederates: Mum – concerned but not upset or intrusive.**

## Additional Information/Medical History

**Demographics: 12 months old from Cullen Bay. Parents present.**

**PMH: No issues. 1 similar self resolving episode 3 weeks ago – not Ix further by GP**

**HPC: Term, no issues aside from occasional childhood viruses, fully vaccinated, developing well.**

## Proposed Scenario Progression

Identify tachycardia and put child onto monitoring to determine that narrow complex

Get ECG to identify SVT

Attempt vagal manoeuvres – ice, gag

Adenosine in escalating doses 100mcg/kg, 200mcg/kg, 300mcg/kg

When BP drops and baby becomes flat for sync shock 1J/kg then 2J/kg – will revert on 2nd shock

Can give 0.15mg/kg midaz pre shock as sedative

Post defib care – ensure adequate ABC

Repeat ECG to demonstrate WPW pattern with delta wave and short PR

## Scenario Preparation/Baseline Parameters

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Stage 1 (arrival)** | Progression Trigger | **Stage 2 (deterioration)** | Progression Trigger | **Stage 3 (post defib)** |
| **RR** | 30 | 36 | 30 |
| **SpO2** | 98% | 98% | 98% |
| **HR/Rhythm** | 260 | 260 | 140 |
| **BP** | 80/60 | 50/30 | 80/60 |
| **T** | 37.2 | 37.2 |  |
| **Other** | NAD |  |  |
|  |  |  |  |

## Debriefing/Guided Reflection Overview

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| --- | --- |
| **Opening Gambit** | **Anticipated themes:**  There’s a certain sense of unease about delivering an electric current for me……I don’t know about everyone else?? |
| **Exploration with key players** | Start with nursing – what happened in that case?  Run me through that case team leader |
| **Engaging the general group** | What did the rest of the group think the big issues where in that case |
| **Sharing facilitator’s thoughts** |  |
| **Any other questions or issues to discuss?** |  |
| **Summary** |  |

## The Soundbite

**To follow**

**Review of the management options for SVT in paeds**

General Feedback Prompts/Examples:

Opening Gambit:

* What did you feel were your specific challenges there?
* Let’s talk.
* Can you describe to me what was happening to the patient during that scenario?
* Can you describe to me what was going on?
* What was important to you in choosing to manage that situation?
* Can you tell me what your plan was and to what extent that went according to plan?
* That seemed to me to go smoothly, what was your impression?
* That looked pretty tough. Shall we see if we can work out together what was going on there so that you can find a way to avoid that situation in the future?

Exploration with key players

* Questions to deepen thinking
* Questions to widen conversation
* Introduce new concepts; challenge perceptions; listen and build
* So what you’re saying is…
* Can you expand on…
* Can you explain what you meant by…
* When you said…
* I noticed that you…

Engaging the general group

* Let’s check with the rest of the group how they reacted to you saying that.
* Did you [scenario participants/observers] feel the same?
* What did you [scenario participants/observers] want from [scenario participant] at that point?
* What ideas or suggestions has anyone else got for how to deal with that situation?

Sharing facilitator’s thoughts

* Use advocacy with inquiry to share your observations and explore their perception
* What does the protocol say on…..
* What do you think was happening ….?
* How do you think … would respond to…. ?
* What about next time…..?
* Do you think there’s anything to be gained from…?

Any other questions or issues to discuss?