SIMulatED

Royal Darwin Hospital Emergency Department

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# Scenario Run Sheet: 4 month old infant with septic shock and cardiopulmonary arrest

## Scenario Overview

**Estimated Guided Reflection Time:**

**Target Group:**

**Brief Summary:**

## Learning Objectives

**General**

**1. Assessment and management of critically ill infant**

**Scenario Specific**

**1. Assessment and management of airway in infant/ child**

**2. Assessment and management of circulation in infant/ child**

**3. Consideration of differential diagnosis for cardiac arrest in infant/ child**

**4. Consideration of post resuscitation care**

## Equipment Checklist

**Equipment**

**Paeds resuscitation trolley- bag and mask, laryngoscope, ETTs, CO2 monitor, suction, IVC**

**Medications and Fluids:**

**N. Saline, ceftriaxone**

**Documents and Forms**

**Ecg with PEA**

**Diagnostics Available: blood gas, FBC, CXR**

**Baby “Hal” sim**

## Scenario Preparation/Baseline Parameters

**Initial Parameters**

**Temp 34.5 degrees, HR 50, BP not recordable, apnoeic, SaO2 60%RA, pulses difficult to feel, pale and floppy, and not responsive**

**Initial progress:**

**Commence Mx ABC**

**PEA rhythm**

## Participants

**Staff**

**3 doctors, 3 nurses**

**Instructor Roles**

## Additional Information/Medical History

**Demographics: 16 year old mum from Karama, limited social supports, first baby**

**HPC: During day not feeding well, few vomits and sleepy but arousable. This evening 7pm mum noted irregular breathing pattern, very pale and floppy, drove baby to hospital**

**PMH: uncomplicated pregnancy, bottle fed, due 4 months, limited medical contact/ follow up**

## Proposed Scenario Progression

Responds to ALS.

Requires definitive airway, and CPR with return of circulation.

Consideration by team of possible causes by team

## Debriefing/Guided Reflection Overview

**General Opening Questions**

* How was the scenario? (each team member reflects)
* What happened in the scenario – i.e. relay the story to a workmate who wasn’t there

**Scenario Specific Questions**

* What was wrong with the patient?
* What medications/investigations may be required?
* Where does the patient need to go?

**General Wrap-Up Questions**

* What did you find most beneficial about this scenario
* What was the most challenging point in this scenario?
* What would you do differently next time?

## Case Considerations

1. Ax and Mx airway:

 -head position

 -airway manoeuvres

 -selection appropriate resuscitator bag

 - intubation with size 4 ETT

2. Ax and Mx circulation:

 -Ax of inadequacy of circulation ie. HR<60, no pulse, no signs of life

 - CPR

 -IV/IO access

Consideration of causes of cardiac arrest in infant:

 -respiratory failure

 -overwhelming infection

 -Cardiac: electrical- long QT syndrome, WPW; structural-coronary artery abnormalities, myocarditis