Cardiac Scenario 1 – PACIFIC

This is a Teaching Scenario. Some flexibility in how it progresses is possible according to individual learner needs.

History {initial candidate briefing prior to arrival of child}

You are called to the paediatric ward where a 12 year old girl is an inpatient. She has known rheumatic heart disease and has acute carditis and prolonged PR interval on ECG. Her monitor has been going off due to tachycardia

Estimated Weight 30kg.

Initial impression {provide information as candidate assesses child and applies monitoring}

She is agitated and looks pale. HR 190 and irregular, BP 79/51, RR 40, SpO2 89% room air. Airway is patent, Chest is clear, Systolic murmur, CRT 2 sec

Clinical Course {to be given to candidate as they progress}

As she is being reassessed, she starts turning blue and becomes unresponsive, apnoeic and pulseless. The monitor shows VF
She remains in VF until after the 2nd shock.

INSTRUCTORS INFORMATION

Key Treatment Points

Airway & breathing	Establish airway patency
	BVM ventilation with 100% O_2
	Consider LMA/intubation
Circulation	VF protocol
	IV/IO access
General Therapy	Uninterrupted BLS

Diagnosis Rheumatic Heart Disease (RHD), Arrhythmia, Cardiopulmonary arrest, Ventricular fibrillation

Learning objectives

At the end of this session participants should be able to:

- Apply the structured approach to management and diagnosis during cardiac arrest
- Perform BLS/ALS effectively and safely
- Recall and apply the ALS VF/VT algorithm in their own practice
- Recall and apply the 4 Hs/Ts in their own practice

APLS: Cardiac Scenario 8

This is a Teaching Scenario. Some flexibility in how it progresses is possible according to individual learner needs.

History {initial candidate briefing prior to arrival of child}

You are called urgently to the resuscitation area in the Emergency department where a 6 year old has been brought in collapsed.
History of pyrexia and lethargy throughout the day.
Estimated weight 20 kg

Initial impression {provide information as candidate assesses child and applies monitoring}

Child is grey and floppy
As child is exposed a purpuric rash is evident on the limbs and trunk

Clinical Course {to be given to candidate as they progress}

The monitor shows a sinus rhythm, but the child is unresponsive, apnoeic and pulseless. The child remains in PEA until oxygenation is established, the 2nd dose of adrenaline given and fluid therapy is underway.

INSTRUCTORS INFORMATION

Key Treatment Points ☑

Airway & Breathing	Establish airway patency	
	BVM ventilation with 100% O_2	
	Consider LMA/intubation or arrange for intubation	
Circulation	PEA protocol	
	IV/IO access	
	Fluid bolus 10 mls/kg	
General Therapy	Uninterrupted BLS	

Diagnosis: Cardio-respiratory arrest – PEA. Circulatory collapse secondary to septic shock

Learning objectives

At the end of this session participants should be able to:

- Apply the structured approach to management and diagnosis during cardiac arrest
- Perform BLS/ALS effectively and safely
- Recall and apply the ALS PEA algorithm in their own practice
- Recall and apply the 4 Hs/Ts in their own practice

Potential Issues to be Discussed

- PEA protocol, 4 Hs/Ts
- Septic shock management.
- Sepsis assessment and management. Used with permission and endorsed by the Paediatric Improvement Collaborative

https://www.rch.org.au/clinicalguide/guideline_index/SEPSIS_assessment_and_management/