APLS: Cardiac Scenario 1

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 general paediatric ward. A 12 month old who had been admitted for gastroenteritis has suddenly collapsed. A nurse is performing chest compressions and another is giving bag valve mask ventilation with oxygen. The child had been born with a Tetralogy of Fallot and has undergone multiple operations.
Estimated weight 10 kg

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

Apnoeic and pulseless.

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

Monitor shows VF.
The infant remains in ventricular fibrillation until the second shock. Sinus rhythm and output is then restored.

INSTRUCTORS INFORMATION

Key Treatment Points ☑

Airway & Breathing	Establish airway patency	
	BVM ventilation with 100% O_2	
	Consider LMA/intubation or arrange for intubation	
Circulation	VF protocol	
	IV/IO access if not in situ	
General Therapy	Uninterrupted BLS	

Diagnosis: Cardiorespiratory 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 2

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}

A 5 year old boy is brought to the Emergency department in the arms of his distressed parents. They say he was found unconscious in bed this morning having gone to sleep late the previous night with tummy ache.
Estimated weight 20 kg

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

No response, apnoeic, pulseless.

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

Initially in asystole: after ventilation with oxygen, chest compressions and one dose of adrenaline, the rhythm on the monitor remains asystole. After the 2nd cycle the rhythm is noted to be organised but there is still no pulse nor signs of life. Ventilation with oxygen and chest compressions continue and with a fluid bolus and a further dose of adrenaline the heart rate increases and a pulse can be felt.

Additional History and Observations

Bruising of different colours on abdomen. Distension of abdomen.

INSTRUCTORS INFORMATION

Key Treatment Points ☑

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

Diagnosis: Asystole/PEA, non-accidental injury, sepsis – bowel perforation

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 and asystole algorithm in their own practice
- Recall and apply the 4 Hs/Ts in their own practice