# APLS: Cardiac Scenario 5

*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 to a collapsed infant. The 4/12 old infant had cardiac surgery and repair of a Tetralogy of Fallot, 10 days earlier. He had been transferred to the local hospital from the tertiary referral unit for ongoing management of poor weight gain. He has been found limp and lifeless in his cot.
Recorded weight 5 kg.

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

A nurse is ventilating the child with a bag-valve-mask and there is no spontaneous respiratory effort. The child is pulseless. There is an intravenous line in situ in the antecubital fossa.

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

The monitor shows VF. The child remains in VF until satisfactory ventilation with oxygen, chest compressions and a total of 3 DC shocks have been given (i.e. after adrenaline, amiodarone). A sinus rhythm with output is then achieved.

**INSTRUCTORS INFORMATION**

**Key Treatment Points** ☑

| | | |
|---|---|---|
| **Airway & Breathing** | Establish airway patency | |
| | BVM ventilation with 100% $O_2$ | |
| | Consider LMA/intubation | |
| **Circulation** | VF protocol | |
| **General Therapy** | Uninterrupted BLS | |

**Diagnosis:** Cardiorespiratory arrest – VF, congenital cardiac disease

**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 6

*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}

Sam, a 2 week old infant, is brought into the Emergency department by his parents. He has a week long history of cough and wheeze. On arrival he is pale and floppy. Estimated weight 4 kg.

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

Unresponsive, pulseless and apnoeic.

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

There is ROSC when ventilation with oxygen and chest compressions are established, and two doses of adrenaline have been given. A slow sinus rhythm rapidly becomes a sinus tachycardia with good output. Temperature 34.8.

**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 protocol | |
| | IV/IO access | |
| **General Therapy** | Uninterrupted BLS | |
| | Rewarm | |

| |
|---|
| **Diagnosis:** Cardiorespiratory arrest - asystole. Hypoxia secondary to apnoea from bronchiolitis. Hypothermia |

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