

ALS/Illness Scenario 1 Refresher Course

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 working in an emergency department. The ambulance calls and tell you they are bringing in a 12 month old infant who has had bloody diarrhoea. Her local doctor has been managing her. Today she has become very drowsy and the local doctor called the ambulance.

Estimated weight 9 kg.

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

As the ambulance crew arrive at the hospital the child suddenly becomes blue and unresponsive.

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

Initially she is not breathing and has no pulse. ECG shows VF.

ROSC after CPR, VF protocol including, DC shocks x3, adrenaline and amiodarone.

If electrolytes are requested K is 9.8 mmol/L. BSL 4.3 mmol/L.

Seeking further advice or methods to treat hyperkalemia should then follow.

INSTRUCTORS INFORMATION

Key Treatment Points



Airway	Establish airway patency	
	Consider LMA/iGel/intubation or arrange for intubation	
	High flow O ₂ via face mask when spontaneous ventilation and ROSC. Titrate O ₂ flow to SpO ₂ 94-99%.	
Breathing	BVM ventilation with 100% O ₂	
Circulation	VF protocol.	
	IV access, electrolytes and BSL	
	10 ml/kg fluid bolus	
Specific Therapy	Search for reversible cause of VF.	
	Treatment, advice for hyperkalemia.	

Diagnosis: VF arrest due to hyperkalemia caused by acute renal failure (child has Haemolytic Uraemic Syndrome)

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 VF/VT ALS algorithm in their own practice
- Recall and apply the 4 Hs/Ts in their own practice
- Recall and apply the acute management of severe hyperkalemia

Points for Discussion/Resources

Given history of diarrhoea a fluid bolus would be a desirable treatment between shocks.

APLS 7th Ed Hyperkalemia Management Algorithm

