

ABCDs of the Critically ill Child Online Course Program



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Accreditation: RACGP (Activity Number: 394758) & ACRRM (Activity Number: TBA) for the 2023-2025 triennium

Learning Outcomes:

At the completion of the workshop the participants should be able to:

1. Discriminate the clinical features that indicate serious illness in a child
2. Prioritise the immediate management of the child with serious or life threatening illness
3. Differentiate the clinical features that indicate life threatening acute anaphylaxis
4. Structure the immediate management of the patient with acute anaphylaxis
5. Outline the clinical findings and immediate management of the child with life threatening asthma
6. Discriminate the clinical findings and management of the child with circulatory shock due to severe dehydration
7. Prioritise the management of the child presenting with status epilepticus

Summary of the e-Learning Program

The e-learning is interactive and requires the clinician to consider a range of the clinical problems and scenarios and provide a response. At the end of each topic a summative quiz is used to evaluate learning and understanding of the topic material. There are five topics, each expected to take the medical practitioner 90 minutes to complete with a total course time of 8 hours.

The five topics are

1. Resuscitation of the Critically ill Child
2. Airway Obstruction : Anaphylaxis
3. Breathing : Acute Severe Asthma
4. Circulation : Paediatric Vomiting and Dehydration
5. Disability : The Fitting /child

Outline of the Program

1. ABCDEs : Approach to the Seriously Ill Child

Module Summary: The seriously ill child presents major challenges to the clinician. In this topic, we discuss the immediate priorities in the assessment and management of the seriously ill child focusing on the identification and treatment of the immediate threats to life, including airway obstruction, hypoxia, circulatory shock and hypoglycaemia. This topic provides the framework for approaching the seriously ill child and is the foundation for the remaining topics in the course.

Interaction/Assessment:

- Video eTutorial : ABCDs of the Critically Ill Child (5 mins)
- Interactive Clinical Casebook: The Seriously Ill Child (Formative assessment : 60 mins)
- Topic Quiz – Seriously Ill Child (Summative assessment : 30 mins)

Clinical Resources/Further Reading

- ABCDs of Emergency Medicine: Approach to the Seriously Ill Child
- Clinical Management Summary: Paediatric Sepsis
- Clinical Management Summary: Antibiotics in Severe Infections
- Paediatric Resuscitation Chart – Weight, Vital signs, Drug doses, Equipment

2. Airway : Acute Anaphylaxis

Module Summary: Anaphylaxis is a severe hypersensitivity reaction characterised by cardiovascular collapse and respiratory compromise. Symptoms develop rapidly, often within several minutes (but may develop within seconds to as long as an hour), after contact with the allergen. Management involves assessment the patient's airway, breathing and circulation and the immediate administration of Adrenaline. Additional therapies include nebulised Salbutamol, IV Fluids, IV Glucagon, Vasoпрессors and Steroids.

Interaction/Assessment:

- Interactive Clinical Casebook : Airway : Acute Anaphylaxis (Formative assessment : 60 mins)
- Topic Quiz – Acute Anaphylaxis (Summative assessment : 30 mins)

Clinical Resources/Further Reading

- ABCDs of Emergency Medicine: Paediatric Acute Anaphylaxis
- Clinical Management Summary: Acute Anaphylaxis
- Paediatric Anaphylaxis Guideline: RCH – Melbourne
- Paediatric Resuscitation Chart – Weight, Vital signs, Drug doses, Equipment

3. Breathing : Acute Asthma

Module Summary: Acute asthma is a common presenting symptom in children and may range from the mild attack with minimal increased respiratory effort to severe respiratory distress that may proceed to the development of life threatening hypoxia. In this module we will look at how to assess and treat the young child presenting with acute asthma.

Interaction/Assessment:

- Interactive Clinical Casebook : Hypoxia : Severe Asthma (Formative assessment : 60 mins)
- Topic Quiz – Severe Asthma (Summative assessment : 30 mins)

Clinical Resources/Further Reading

- ABCDs of Emergency Medicine: Paediatric Acute Asthma
- Clinical Management Summary: Acute Asthma
- National Asthma Council: Guidelines for Acute Asthma
- Paediatric Resuscitation Chart – Weight, Vital signs, Drug doses, Equipment

4. Circulation : Paediatric Vomiting and Dehydration

Module Summary: Vomiting with dehydration is a common complication of a variety medical and surgical disorders in children. In the following module we consider a young child who presents with dehydration and review the clinical findings of mild, moderate and severe dehydration and consider the options for management including oral, nasogastric and intravenous fluid administration.

Interaction/Assessment:

- Interactive Clinical Casebook : Paediatric Vomiting and Dehydration (Formative assessment : 60 mins)
- Topic Quiz - Paediatric Vomiting and Dehydration (Summative assessment : 30 mins)

Clinical Resources/Further Reading

- ABCDs of Emergency Medicine: Paediatric Vomiting and Dehydration
- Clinical Management Summary: Paediatric Dehydration
- Guideline for Paediatric Dehydration: RCH Melbourne
- Paediatric Resuscitation Chart – Weight, Vital signs, Drug doses, Equipment

5 Disability : The Fitting Child

Module Summary: Visibly frightening, the child with status epilepticus is at serious risk of physical injury, airway obstruction and hypoxia. Prolonged fitting may cause serious brain injury or death. Urgent intervention is required to ensure a clear airway, correct hypoxia and control the seizure. In this topic we review the immediate management priorities in the child with status epilepticus and the current options for pharmacological control of the seizure.

Interaction/Assessment

- Interactive Clinical Casebook : CNS : Status Epilepticus (Formative assessment : 60 mins)
- Topic Quiz – Status Epilepticus (Summative assessment : 30 mins)

Clinical Resources/Further Reading

- ABCDs of Emergency Medicine: The Fitting Child
- Acute Seizure: Clinical Guideline (RCH Melbourne)
- Clinical Management Summary: Status Epilepticus
- Paediatric Resuscitation Chart – Weight, Vital signs, Drug doses, Equipment

6 Final Post Course Assessment Quiz

- Final Course Quiz – ABCDS of the Critically Ill Child (Summative assessment: 30 mins)