Paediatric Emergencies in Primary Care Online Course



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Learning Outcomes

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

- 1. Identify the steps in clinical assessment of the child presenting with acute illness
- 2. Describe the clinical markers for assessing respiratory distress in a paediatric patient.
- 3. List the common ways in which a serious ill neonate may present for medical assessment.
- 4. List the **RED Flags** in the history that indicate a high risk for progressive asthma
- 5. Identify the clinical findings in foreign body airway obstruction
- 6. Describe the clinical features suggestive of cardiac arrest

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 with a total course time of 8 hours.

The five topics are

- 1. Red Flags for Serious illness in a child / Vomiting and Dehydration
- 2. Approach to Respiratory distress in the young child
- 3. Assessment of the Febrile infant
- 4. Acute Asthma : Red Flags for severe asthma / Acute management
- 5. The Child with Cardiac arrest secondary to Drowning

Outline of the Program

1. Red Flags for the Seriously ill Child (90 mins)

Module summary: The young child with acute illness presents major challenges to the clinician due to incomplete history (eg the infant who is unable to report symptoms), difficulties with examination (eg the crying or uncooperative child) and the subtle features of serious disease that may be easily overlooked or missed. In this topic we examine the clues (or Red Flags) in the history and clinical findings on examination that should alert us to the presence of serious illness in the child.

Interaction/Assessment:

- Chapter Reading: ABCDs of Emergency Medicine Approach to the Seriously III Child
- Video eTutorial : Paediatric Assessment
- Video eTutorial: Clinical Features for Serious Illness in a Child
- Interactive Clinical Casebook Red Flags for Serious Illness
- Topic Quiz Red Flags for the Seriours Illness

Clinical Resources/Further Reading

- Clinical Management Summart: Preparing for Paediatric Resuscitation
- Clinical Management Summary: Paediatric Dehydration
- Paediatri Pain Management A Pragmatic Approach
- Guideline for Paediatric Dehydration (RCH Melbourne)

2. Acute Respiratory Distress in the Child (90 mins)

Module summary: The young child with severe respiratory distress is arguably one of the most frightening experiences to manage as a clinician. The child is visibly struggling to breath and this is exacerbated by the fear of the child and parental anxiety. The interactive clinical case explores the recognition and assessment of respiratory distress in the child and considers the differential diagnosis and some of the common conditions that may cause respiratory distress in the young child.

Interaction/Assessment:

- Chapter Reading: ABCDs of Emergency Medicine: Acute Bronchiolitis
- Chapter Reading: ABCDs of Emergency Medicine: Upper Airway Emergencies in the Young Child
- Video eTutorial: Paediatric Respiratory Distress
- Interactive Clinical Casebook Paediatric respiratory distress
- Topic Quiz Paediatric Respiratory Distress

Clinical Resources/Further Reading

• Clinical Management Summart: Viral Croup

3. Approach to the Seriously Ill Febrile Child (90 mins)

Module summary: The febrile child presents major challenges to the clinician due to incomplete history, difficulties with examination and particularly in the neonate subtle presenting features of serious disease. In this module the clues or "red flags" to recognising and treating the seriously ill child with a fever and approach to the febrile neonate.

Interaction/Assessment:

- Chapter Reading: ABCDs of Emergency Medicine: Approach to the Febrile Child
- Video eTutorial: Seriously Ill Child with Fever
- Interactive Clinical Casebook Febrile neonate
- Topic Quiz Febrile neonate

Clinical Resources/Further Reading

- Clinical Management Summart: Paediatric Sepsis
- Clinical Management Summart: Antibiotics in Severe Infections

4. Acute Asthma (90 mins)

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:

- Chapter Reading: ABCDs of Emergency Medicine: Paediatri Acute Asthma
- Video eTutorial: Acute Severe Asthma
- Interactive Clinical Casebook Paediatric asthma
- Topic Quiz Paediatric Asthma

Clinical Resources/Further Reading

- Clinical Management Summary: Acute Asthma
- National Asthma Council: Guidelines for Acute Asthma
- Paediatri Resuscitation Chart Weight, Vital signs, Drugs, Equipment

5. Managing the Child with Cardiac Arrest

Module summary: Cardiorespiratory arrest in the child is most commonly the result of severe hypoxaemia or hypotension and may be caused by a wide variety of life-threatening conditions including trauma, drowning, upper airway obstruction, congenital heart disease and sepsis. Cardiac arrest should be suspected in the child who is unresponsive to voice or touch (eyes closed, no verbal response, no movement) and who is not breathing or has gasping respirations.

With COVID19 the approach to resuscitation has been reviewed and specific recommendations with respect to Basic CPR have been developed by the Australian Resuscitation Council. These are discussed in the second of the two interactive cases below

Interaction/Assessment:

- Chapter reading: ABCDs of Emergency Medicine: Paediatric Advanced Life Support (Includes COVID19 Recommendations)
- Video eTutorial: Foreign Body Airway Obstruction
- Interactive Clinical Casebook Airway Foreign Body

- Interactive Clinical Casebook Drowning and COVID19
- Topic Quiz The Child in Cardiac Arrest

Clinical Resources/Further Reading

- BLS during COVID19: Australian Resuscitation Council
- Advanced Life Support in Infants and Children: Australian Resuscitation Council
- FB Airway Obstruction Flow Chart: Australian Resuscitation Council
- National COVID-19 Clinical Evidence Taskforce

6. Final Post Course Assessment Quiz (30 mins)

Final Course Quiz – Paediatric Emergencies in Primary Care