ABCDs of Eye Emergencies Online Course



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Learning Outcomes

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

- 1. List the important "Red flags" for the Eye indicating a high risk for serious eye disease
- 2. Identify sight threatening complications that may be recognised and treated in the emergency department.
- 3. List important injuries that can occur in the context of trauma to the eye
- 4. Describe the procedure for clinical assessment of the patient presenting with acute visual disturbance
- 5. Describe the important classes of drugs used for the management of acute eye conditions

Summary of the e-Learning Program

The e-learning is interactive and requires the clinician to consider a series of blood gases and identify key abnormalities. The mastery quiz incorporates both formative and summative assessment components. There are 5 topics with a total course time of 8 hours.

The five topics are:

- 1. Eye Examination and Red Flags for serious disease
- 2. Differential diagnosis and treatment of conditions presenting with red eye
- 3. Assessment and Management of Eye Injury
- 4. Differential diagnosis and management of Acute Visual Disturbance
- 5. Pharmacology of eye medications

Outline of the Program

1. Assessment of the Eye / Red Flags

Module summary: Assessment of the patient presenting with an acute eye begins by establishing a history of the problem and associated eye symptoms. Begin by looking for "Red Flags in the Eye"; these are clinical features in the presenting history and examination that indicate an increased risk for serious disease. The module reviews history and examination in the eye patient and identifies abnormal findings indicating serious eye disease.

Interaction/Assessment:

- Reading: Structured Eye Examination
- Interactive Tutorial: Eye Examination and Red Flags
- Topic Quiz Module 1

2. The Acute Red Eye: Diagnosis and Treatment

Module summary: The patient with a "Red eye" is one of the most common eye presentations. Causes vary widely from mild self limiting disease through to disease that may cause loss of sight in one or both eyes. It is not uncommon for serious disease to be missed in patients and a careful history and examination is essential. In this topic we explore a series of clinical cases that illustrate the differential diagnosis and management of the red eye.

Interaction/Assessment:

- Reading: Acute Red Eye
- Case Simulation The Red Eye (Part 1)
- Case Simulation The Red Eye (Part 2)
- Topic Quiz Module 2

3. Eye Injury: Assessment and Acute Management

Module summary: Injury to the eye may involve the eyelids (eg lacerations, subtarsal foreign body), conjunctiva (subconjunctival haemorrhage, laceration), cornea (abrasions, lacerations, foreign body), anterior chamber of the eye (hyphaema, lens dislocation), posterior chamber (vitreous haemorrhage) and retina (detachment). Careful assessment is essential in all cases to avoid missing subtle penetrating injuries and significant concomitant injury with blunt trauma to the eye.

Interaction/Assessment:

- Reading: Eye Injury Assessment and Management
- Case Simulation: Eye Injury (Part 1)
- Case Simulation: Eye Injury (Part 2)
- Topic Quiz Module 3

4. Acute Visual Disturbance: Assessment and Acute Management

Module summary: Patients presenting with sudden visual disturbance or severely impaired vision should be managed as a medical emergency. They require urgent assessment and in many cases immediate referral for ophthalmology assessment. In some patients associated symptoms of a red eye and/or severe pain may point to the probable cause. However there are a group of patients where examination of the anterior eye (ie periorbital tissues, conjunctiva, cornea, pupil and anterior chamber) is normal. These patients are referred to as having a "quiet eye" and represent a distinct diagnostic group. They are the focus of this module.

Interaction/Assessment:

- Reading: Painless Acute Visual Loss Assessment and Management
- Case Simulation: Acute Visual Disturbance (Part 1)
- Case Simulation: Acute Visual Disturbance (Part 2)
- Topic Quiz Module 4

5. Pharmacology of Eye Drugs

Module summary: There are a wide variety of specialised drugs used for the management of eye disease and trauma. These include topical antibiotics, mydriatic agents, vasoconstrictors, antihistamines and local anaesthetics. It is important to become familiar with these agents and recognise in what circumstances they are contraindicated and the potential adverse effects that may be expected with their use. In this module we explore all the major groups of drugs that are likely to be used in the management of the patient with an acute eye presentation and examine specific diseases where multiple agents are often required.

Interaction/Assessment:

- Interactive Tutorial Eye Pharmacology
- Topic Quiz Module 5

6. Final Post Course Assessment

Final Course Quiz (1) Final Course Quiz (2)