

Red Eye

The red eye is a frequent presentation in general practice. While most commonly benign or self-limiting, the red eye may be due to serious sight-threatening causes and require urgent management. A systematic approach to this condition is essential. Slit lamps are uncommon in Australian general practice and GPs need to have satisfactory skills in eye examination and ophthalmoscopy. GP registrars are likely to have had some experience in assessing the red eye in the ED setting – however, supervisors need to assess registrar competence in managing this condition in the general practice setting, and appropriately facilitate learning of the necessary knowledge and skills.

TEACHING AND LEARNING AREAS 	<ul style="list-style-type: none"> • Common and serious causes of the red eye, and patterns of presentation • Key features on history – pain, discharge, visual loss etc. • Clinical examination skills for assessing the red eye, including use of topical fluorescein and anaesthetic • Indications for investigations • Management of common presentations • Indications for referral (urgent and non-urgent) and appropriate pathways 				
PRE-SESSION ACTIVITIES	<ul style="list-style-type: none"> • Read the 2016 Australian Doctor How to Treat Red Eye article 				
TEACHING TIPS AND TRAPS 	<ul style="list-style-type: none"> • Red eye + reduced vision should be regarded as an emergency • Pain causing eye closure, and resolution of pain with topical anaesthetic drops, suggests a local corneal cause • Recurrent episodes of unilateral red eye suggests iritis or HSV keratitis • Investigations are rarely required for simple subconjunctival haemorrhages • Consider gonorrhoea in patients with copious purulent conjunctivitis • Consider allergy if the patient is using OTC topical preparations • Mast cell stabilisers are useful for chronic allergic conjunctivitis • Avoid corticosteroid eye drops if there is any risk of HSV • Preauricular lymphadenopathy is a diagnostic feature of viral conjunctivitis • Viral conjunctivitis can last up to 3-4 weeks • Antibiotic eye drops have no role in viral conjunctivitis and can cause an allergic reaction • Strict hand hygiene is essential to reduce spread of viral conjunctivitis • Consider blepharitis in patients with recurrent bacterial conjunctivitis • Only use one drop of fluorescein when staining eyes • Avoid eye pads in children under 3 due to the risk of amblyopia • Consider bacterial keratitis in contact lens wearers – refer any contact lens wearer with a painful red eye 				
RESOURCES 	<table border="1"> <tbody> <tr> <td data-bbox="335 1868 430 1966">Read</td> <td data-bbox="430 1868 1498 1966"> <ul style="list-style-type: none"> • 2010 AAFP article – Diagnosis and Management of Red Eye in Primary Care • RCH Clinical Practice Guidelines Red Eye </td> </tr> <tr> <td data-bbox="335 1966 430 2029">Watch</td> <td data-bbox="430 1966 1498 2029"> Acute red eye – practical approach for primary care – 48 min lecture, Australian, 2013 </td> </tr> </tbody> </table>	Read	<ul style="list-style-type: none"> • 2010 AAFP article – Diagnosis and Management of Red Eye in Primary Care • RCH Clinical Practice Guidelines Red Eye 	Watch	Acute red eye – practical approach for primary care – 48 min lecture, Australian, 2013
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FOLLOW UP & EXTENSION ACTIVITIES	Registrar to undertake clinical reasoning challenge and discuss with supervisor				

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Clinical Reasoning Challenge

Your last patient of the day is Matthew, aged 48, who presents to your surgery as an emergency 'fit-in'. He complains about a red and very painful left eye since this morning. He also says that light hurts his left eye and he keeps it closed.

QUESTION 1. What are the most important causes of a painful eye to consider at this stage? List, in note form only, up to five most important causes.

- 1 _____
- 2 _____
- 3 _____
- 4 _____
- 5 _____

QUESTION 2. What are the MOST IMPORTANT elements of examination of Matthew's eye? List up to five MOST IMPORTANT elements of examination.

- 1 _____
- 2 _____
- 3 _____
- 4 _____
- 5 _____

QUESTION 3. Matthew reveals that he wears contact lenses and slept with them in last night. What is the MOST IMPORTANT next step in management? List the single MOST IMPORTANT next step.

- 1 _____

Red Eye

ANSWERS

QUESTION 1

What are the most important causes of a painful eye to consider at this stage? List, in note form only, up to five most important causes.

- Acute glaucoma
- Iritis/uveitis
- Foreign body/trauma
- Corneal ulcer
- Bacterial keratitis
- Scleritis/episcleritis

QUESTION 2

What are the MOST IMPORTANT elements of examination of Matthew's eye? List up to five MOST IMPORTANT elements of examination.

- Visual acuity
- Inspection under magnification (including lid eversion)
- Pupillary reaction
- Fluorescein staining
- Fundoscopy
- Palpate globe

QUESTION 3

Matthew reveals that he wears contact lenses and slept with them in last night.

What is the MOST IMPORTANT next step in management? List the single MOST IMPORTANT next step.

- Urgent referral to ophthalmologist