

Topic #6: Evaluate a patient with eye trauma

This post describes the ophthalmology learning objectives on the evaluation of patients with eye trauma that are covered on the Medical Council of Canada Qualifying Examination (MCCQE). The resources presented here should be sufficient to help you pass the MCCQE exam and have a basic understanding of a patient with eye trauma in a primary care or emergency setting.

Learning Objectives

6(a): Take a focused history with regards to the mechanism of injury and associated pain or vision loss

6(b): Take a focused past ocular history relevant to eye trauma

6(c): Perform a focused exam as outlined in [Topic #2](#)

6(d): List and describe the common manifestations of eye trauma including

- Eyelid laceration*
- Canalicular injury*
- Corneal abrasion
- Corneal foreign body*
- Corneal laceration (open globe) *
- Chemical injury*
- Hyphema*
- Ruptured globe*
- Vitreous hemorrhage*
- Traumatic retinal detachment*

6(f): Describe the presenting signs and symptoms of these diagnoses and generate a differential diagnosis based on the elicited history and exam

6(g): Describe the initial management and urgency of referral for these diagnoses

6(h): Describe the importance of ruling out globe rupture before manipulating the eye

Note: *Urgent and red flag conditions have been denoted with a red Asterix. These warrant urgent referral to an ophthalmologist.

Primary resources

These resources cover learning objectives a-h, meeting all of the learning objectives.

- Eye Trauma Lecture (Tim Root): <https://timroot.com/eye-trauma-lecture-2/>
 - Objectives a-h
- Eye Trauma Assessment: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4790160/>
 - Objectives a-c
- Assessment and Management of Ocular Trauma (The University of Iowa): <http://webeye.ophth.uiowa.edu/eyeforum/tutorials/trauma.htm>
 - Objectives a-h

Additional resources

These resources provide more comprehensive information about learning objective d, and will allow you to expand on your understanding.

- Corneal Abrasions (AAO): <https://www.aao.org/eye-health/diseases/what-is-corneal-abrasion?page=home>
- Hyphema (CanadiEM): <https://canadiem.org/medical-concept-hyphema/>
- Foreign Body Removal (Merck Manuals): <https://www.merckmanuals.com/en-ca/professional/eye-disorders/how-to-do-eye-procedures/how-to-remove-a-foreign-body-from-the-eye>
- Eyelid laceration, canalicular injury (EyeWiki): https://eyewiki.aao.org/Eyelid_Laceration

Other Undergraduate Medicine Resource Pages

Topic #1: Describe the anatomy of the eye and the visual system

Topic #2: Perform a basic eye exam

Topic #3: Evaluate a patient with acute vision loss

Topic #4: Evaluate a patient with chronic vision loss

Topic #5: Evaluate a patient with a red or painful eye

Topic #7: Evaluate a patient with an eye movement abnormality, diplopia, or pupillary disorders

Topic #8: Evaluate pediatric ophthalmic presentations

Topic #9: Ocular Pharmacology

Topic #10: Evaluate a patient with ocular manifestations of systemic disease