

Topic #4: Evaluate a patient with chronic vision loss

This post describes the ophthalmology learning objectives to evaluate a patient with chronic vision loss 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 chronic vision loss in a primary care setting.

Learning Objectives

4(a): Take a focused history with regards to the timing, severity, monocular or binocular nature, pain or redness associated with the vision loss

4(b): Take a focused past ocular history relevant to chronic vision loss

4(c): Take a focused systemic medical history relevant to chronic vision loss

4(d): Perform a focused clinical exam as outlined in [Topic #2](#)

4(e): List and describe the pathophysiology of the common causes of chronic vision loss including:

- Refractive error - myopia, hyperopia, astigmatism, presbyopia
- Cataract
- Glaucoma
- Macular degeneration
- Diabetic retinopathy
- Hypertensive retinopathy

4(f): List and describe the chronic manifestations of systemic diseases such as

- Sickle Cell disease or trait
- Human Immunodeficiency Virus/ Immunocompromised patients
- Autoimmune conditions such as systemic lupus erythematosus, sarcoidosis, and rheumatoid arthritis

4(g): Describe the presenting signs and symptoms of these diagnoses and generate a differential diagnosis based on the elicited history and exam, understanding that some of these may present in an acute manner

Primary resources

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

- Chronic vision loss (MEDSKL): <https://medskl.com/module/index/chronic-visual-loss>
 - Objectives a-e, g, h
- Acute vision loss (Merck Manual): <https://www.merckmanuals.com/en-ca/professional/eye-disorders/symptoms-of-ophthalmologic-disorders/acute-vision-loss>
 - Objectives a-e, g, h
- Ocular Manifestations of Systemic Diseases (US Pharmacist): <https://www.uspharmacist.com/article/ocular-manifestations-of-systemic-diseases>

- Objective f

Additional resources

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

- Most common eye problems – Signs, symptoms and treatment options (IrisVision): <https://irisvision.com/most-common-eye-problems-signs-symptoms-and-treatment/>
 - Objective e
- Hypertensive retinopathy (Merck Manual): <https://www.merckmanuals.com/en-ca/professional/eye-disorders/retinal-disorders/hypertensive-retinopathy>
 - Objective e
- Sickle cell retinopathy (EyeWiki): https://eyewiki.aao.org/Sickle_Cell_Retinopathy
 - Objective f

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

Topic #6: Evaluate a patient with eye trauma

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