



Common Eye Conditions in Primary Care

N. Maxwell Scoville, MD
Assistant Professor - Clinical
Comprehensive Ophthalmology/Hospital Ophthalmology
The Ohio State University Wexner Medical Center

MedNet21
 Center for Continuing Medical Education

THE OHIO STATE UNIVERSITY
 WEXNER MEDICAL CENTER

Objectives

- Review key aspects of an ophthalmic HPI
- Review key aspects of a basic ophthalmologic exam
- Apply principles above to common ophthalmologic cases

Reasons patients seek care

- Pain
 - "My eye is hurting"
- Vision change
 - "I've had a change in my vision"
- Appearance
 - "Something with my eye looks off"

If more than 1 → more worried

History of Present Illness

- Inciting event: trauma, illness, none, etc
- Course: improving, worsening, waxing/waning
- Modifying factors: relieving or exacerbating
- Associated symptoms

Ophthalmology Vitals

- Visual Acuity (VA)
- Intraocular pressure (IOP)
- Pupils



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Ophthalmology Exam

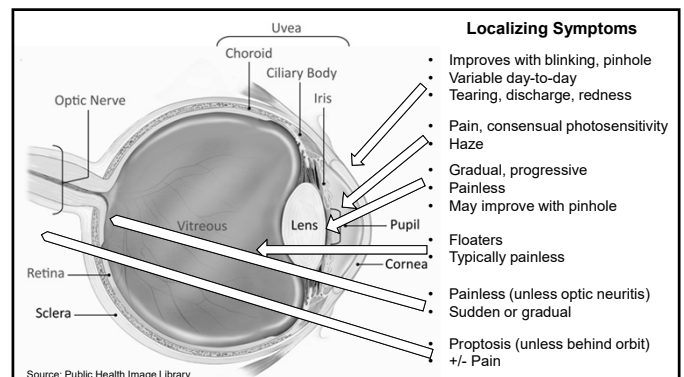
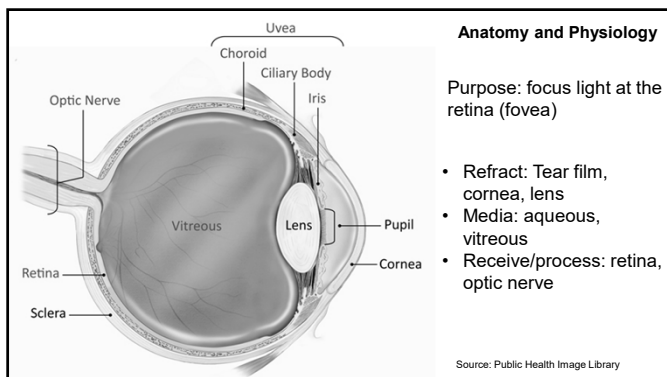
- Confrontational Visual Fields
- Extraocular movements
- Adnexa
- Conjunctiva/Sclera
- Cornea



Community Eye Health
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<https://www.glenabbeyvision.ca/dry-eye-management>
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Case 1: Infectious Conjunctivitis

- 3 days
- Tearing
- Redness
- Irritation
- Good vision
- Normal pressure
- Normal pupils



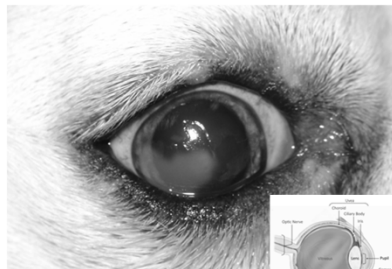
Source: Public Health Image Library

Management Tips

- Check for pre-auricular and submandibular lymphadenopathy
- Typically resolves without treatment
- Antibiotic drops if persistent or severe purulence
- Cold compresses + chilled artificial tears

Case 2: Corneal abrasion

- Trauma
- Tearing
- Photosensitivity
- Pain
- Variable vision
- Normal pressure
- Normal pupils



Management Tips

- Antibiotic ointment (erythromycin – cheap)
- NO topical anesthetic Rx
- Ibuprofen + Tylenol
- Resolves 2-3 days (quicker if young/healthy)

Case 3: Corneal ulcer

- Poor contact lens use
- Tearing
- Photosensitivity
- Pain
- Decreased vision
- Normal pressure
- Normal pupils



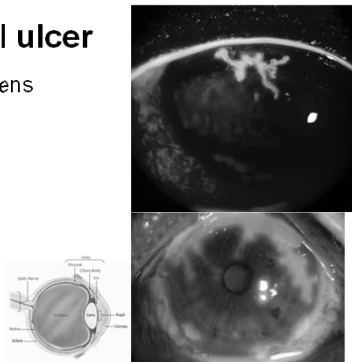
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Management Tips

- Ophthalmology same day or next day
- Moxifloxacin + Polymyxin B Sulfate and Trimethoprim (Polytrim) drops every 1-2 hours while awake
- Contact lens hygiene education

Case 4: Corneal ulcer

- No trauma or contact lens
- +/- cold sore history
- Irritation
- Variable vision
- Pressure may be high
- Normal pupils

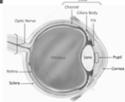
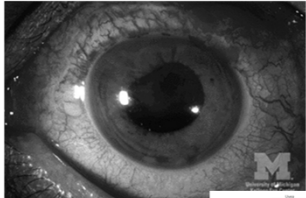


Management Tips

- Ophthalmology same day or next day
- Moxifloxacin 4 times daily
- NO steroid drops
- Valacyclovir 1g TID or Acyclovir 800mg 5x daily

Case 5: Uveitis

- Spontaneous onset
- Pain
- Photosensitivity
- No tearing
- Decreased vision
- Variable pressure
- Irregular pupil

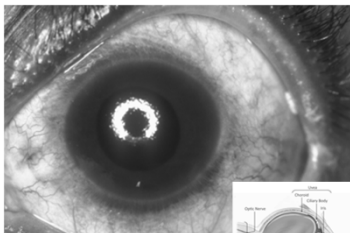


Management Tips

- Let vitals dictate urgency

Case 6: Acute Glaucoma

- Spontaneous onset
- Pain
- Headache
- No tearing
- Decreased vision
- High Pressure
- Minimally reactive pupil

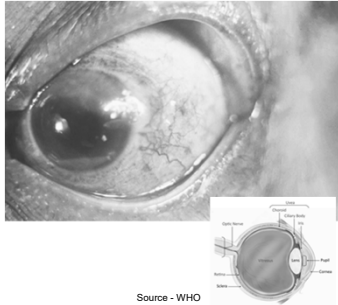


Management Tips

- Same day Ophthalmology or Emergency Department
- Timolol, Brimonidine, Dorzolamide, Latanoprost drops
- Acetazolamide (Diamox) 500mg

Case 7: Hyphema

- Trauma or Diabetes
- Pain
- Photosensitivity
- Decreased vision
- High pressure
- Minimally reactive pupil



Source - WHO

Management Tips

- Same day Ophthalmology or Emergency Department
- Shield over the eye
- Activity restrictions (no heavy lifting, bending over)
- No aspirin or NSAIDs

Case 8: Herpes Zoster Ophthalmicus

- Spontaneous onset
- Variable vision
- Variable pressure
- Variable pupils



Management Tips

- Let vitals dictate urgency to see ophthalmology
- Zoster does what it wants
- Watch out for floaters
- Valacyclovir 1g 3x daily or Acyclovir 800mg 5x daily
- Avoid topical steroids

Case 9: Cellulitis

- Preseptal: trauma
- Orbital: cold/sinus infection
- Typically good vision
- Eye pressure
 - Preseptal: normal
 - Orbital: may be high
- Pupils
 - Preseptal: normal
 - Orbital: may have APD



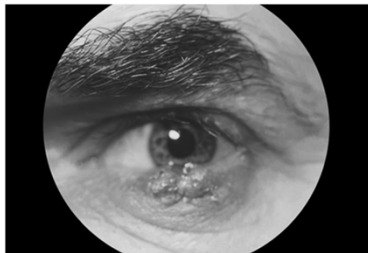
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Management Tips

- Preseptal
 - Oral antibiotics for at least 48 hours (Augmentin +/- Bactrim)
 - Close follow-up, ok with primary care
- Orbital
 - Needs IV antibiotics, blood cultures, CT scan
 - Send to Emergency Department

Case 10: Eyelid Lesions

- Inflammatory/infectious
 - Chalazion
 - Hordeolum
- Benign
 - Papilloma
 - Inclusion cysts
 - Skin tags
- Malignant
 - Basal cell, squamous cell, etc.



Source: Public Health Image Library

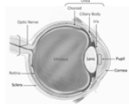
Tips

- Inflammatory lesions
 - Hot compresses frequently
 - Antibiotic/steroid ointment
 - Ophthalmology in 4-6 weeks
- Benign vs Malignant – concerning signs
 - Loss of eyelashes (madarosis)
 - Ulceration/bleeding
 - Growing

Case 11: Acute vision loss

- Painless
 - Ischemia (optic neuropathy, retinal artery/vein occlusion)
 - Retinal detachments
 - Cerebrovascular accident (CVA)
- Painful
 - Giant cell arteritis
 - Optic neuritis

Emergent Ophtho Eval
Stroke evaluation

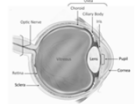


Source - WHO

Case 12: Flashes and floaters

- Vitreous detachment vs Retinal tear/detachment
 - "black spots"
 - "bright flashing white lights"
 - Unilateral, no headache
- Vitreous hemorrhage
 - Diabetes
 - "previous episodes"
 - "black or red floaters"
- Migraine with aura
 - "kaleidoscope"
 - "headache, light sensitive, nausea"
 - Bilateral, lasts several minutes to hours

Treat headache
Ophtho same day



Source - WHO

Case 13: Acute Diplopia

- Weird eye → Orbit
 - Tumor
 - Cavernous sinus pathology (infection, blood clot)
- Normal eye → Brain
 - CVA
 - Tumor
 - Aneurysm
 - Giant cell arteritis

Emergent Ophtho/Neuro Eval
MRI Brain +/- Orbits wwo



Source - WHO

Summary

- Good history and exam (especially ocular vitals) → effectively and safely manage some ophthalmic problems and know when and how quickly to refer to ophthalmology or send to the emergency department