Common Eye Conditions
Every Primary Care Clinician Should Know

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The Eye Exam
- Eye Vital Sign
- Near Vision Card
- Held at 14 inches
- Glasses as needed

Pupils
- Look for afferent pupillary defect
- Swinging flashlight test
- +APD indicates optic nerve or large retinal lesion

Disclosure
I have no financial interest in any of the products mentioned in this presentation.

http://www.drbanker.com/images/Nearvision.gif

http://img.tfd.com/ElMill/thumb/F0P-24-S2958.jpg
Motility

- Six extraocular muscles
- Test cardinal fields of gaze

Confrontational Visual Fields

- Cover eyes on same side
- Hold fingers midway between
- Normal per eye: 60-60-60-90

Penlight Exam

- Lids
- Lashes
- Conjunctiva/Sclera
- Cornea
- Iris/Pupil
- Lens
- Puncta

Anterior Chamber Depth

- Deep chamber: illumination of nasal iris
- Shallow chamber: shadow on nasal iris
- Dilation: Phenylephrine 2.5%, Tropicamide 1%
Fundoscopy

- PanOptic or Direct Ophthalmoscope
- Evaluate optic nerve, retinal vessels, macula

Primary Care Ophthalmology

The Red Eye

- URI
- Clear or mucous discharge
- Lymphadenopathy
- Contagious!
- Treat for comfort

Viral Conjunctivitis
Bacterial Conjunctivitis
- Purulent discharge
- Culture
- Staph, Strep, Hflu
  - Polymixin/Trimethoprim
  - Fluoroquinolones
  - **NOT** Tobra or Gent
- GC, chlamydia
  - Systemic Rx

Allergic Conjunctivitis
- History of atopy
- Conjunctival edema
- Itchy!
- Topical antihistamines
  - Elestat
  - Zaditor
  - Patanol
- Visine tachyphylaxis

Blepharitis
- Redness, itching, “grit”, dry eyes
- Rosacea, Staph, Demadex
- Warm compresses, baby shampoo, artificial tears
- Doxycycline, Azithromycin

Herpes Simplex
- When to refer: V1, V2
  - Red eye
  - Eye pain
  - Change in vision
- Acyclovir
Herpes Zoster

- Hutchinson’s sign: nasociliary nerve
- Treat Post-Herpetic Neuralgia: Lyrica, Neurontin, TCA’s

Uveitis

- Inflammation of vascular tissue
- Auto-immune
- Infectious
- Toxic
- Masquerade
- May require immunosuppression

Angle Closure Glaucoma

- Headache
- Loss of vision
- Firm eye
- IV Diamox, Mannitol
- Glaucoma gtt’s
- Surgical treatment

Subconjunctival Hemorrhage

- Valsalva, HTN, anticoagulants, eye rubbing, spontaneous
- In the setting of trauma: refer
Corneal Abrasion
- Pain!
- Loss of epithelium
- Not infected
- Erythromycin ung
- Artificial Tears
- Patching

Corneal Foreign Body
- Iron is toxic
- Surgical treatment

Hyphema
- Severe eye trauma
- Risk of rebleed
- Risk of glaucoma

Ruptured Globe
- Peaked pupil
- Brown tissue outside the eye
- CT scan **NOT MRI**
- Fox shield, NPO
Common Diseases of Aging

Cataract
- Painless progressive loss of vision with age
- Also caused by DM, XRT, trauma, medications
- Difficulty reading, driving, glare
- Outpatient surgery

Glaucoma
- Chronic progressive optic neuropathy
- Loss of visual field
- Risk factors: age, tobacco, race, family hx
- Medications may have systemic interactions

Macular Degeneration
- Risk factors: age, UV, tobacco, Family Hx
- Loss of central vision
- Dry form: AREDS vitamins, stop smoking
- Wet form: anti-VEGF injections
Disorders of the Eyelid and Orbit

- Chalazion
  - Blocked oil gland
  - Inflammation
  - Warm compresses
  - Incision/curettage

- Cellulitis
  - Preseptal vs Orbital
  - Preseptal: full EOM, no proptosis, quiet eye
  - Treat PO Abx
  - Orbital: proptosis, strabismus, inflamed eye
  - Treat IV ABx

- Thyroid Orbitopathy
  - Proptosis
  - Strabismus/Diplopia
  - Corneal exposure
  - Optic nerve compression
  - 131-I may aggravate
  - Surgical treatment
Disorders of the Retina

Retinal Detachment
- Flashes/Floaters
- Loss of vision/field
- Sudden, painless
- Surgical treatment

Diabetic Retinopathy
- Microvascular disease
- Bleeding
- Macular edema
- Neovascularization
- Glucose/BP control
- Laser ablation
- Anti-VEGF

Hypertensive Retinopathy
- Mild: arteriolar narrowing
- Mod: cotton wool spots, hemorrhages
- Severe: disc edema, vessel leakage, infarcts
HIV/CMV Retinopathy

- Microvascular disease
- Annual exam if CD4>200
- CMV retinitis

Retinal Artery Occlusion

- Embolic: cardiac echo, carotid doppler
- Vasculitic (GCA)

Retinal Vein Occlusion

- Hypertension
- Glaucoma
- Young patients: hypercoagulable

Neuro-Ophthalmology
Stroke

- Homonymous field defect
- Location of lesion is contralateral + upside-down

Pituitary Adenoma

- Compression of nasal fibers at optic chiasm
- Bitemporal hemianopia

Temporal Arteritis

- Acute vision loss
- Headache, jaw claudication, scalp tenderness, proximal myalgias, constitutional symptoms
- ESR and CRP
- Prednisone 100mg QD
- Temporal artery biopsy

Optic Neuritis

- Loss of vision
- Pain with EOM
- +/- disc edema
- Multiple Sclerosis
- Steroids
**Pseudotumor Cerebri**

- Headache, tinnitus
- Papilledema
- Vision loss
- Female, overweight
- Medication-induced
- LP: opening pressure

**Horner Syndrome**

- Anisocoria in the dark
- Mild ptosis
- Acute and painful: R/O carotid dissection

**Third Nerve Palsy**

- Anisocoria in the light
- Severe Ptosis
- EOM paresis
- Microvascular
- PCA/PCom aneurysm

**Thank You!**