

**Ocular Manifestations of Systemic Disease:  
Grand Rounds  
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**Course description:** This course describes several ocular presentations that result from a systemic disease or condition. For each case, the signs, symptoms, ancillary testing requirements, treatment and management, and follow up are discussed.

**“My own best advocate”**

- 23 year old black male presents today for a second opinion. Patient complains of reduced, progressive loss of vision in the right eye. No pain today but noted pain with eye movement four days prior
  - HPI: Both distance and near, OD only. (-) photophobia, (-) headache
- Ocular history of blunt trauma to the right orbit six months prior.
  - Patient did not notice change in vision at that time and did not lose consciousness.
- No significant medical history. No medications and no known allergies
- Patient denies use of recreational drugs, alcohol
- Patient was seen at eye center when eye pain initiated but was advised there was not an ocular problem and to seek a glasses prescription.
- BCVA = 20/200 OD, 20/20 OS
- Color vision
  - OD = Failed, OS =Intact
- Pupils: Grade 2+ APD OD; round and reactive OS
  - Brightness comparison: 40% OD, 100% OS
- Body Temperature: 97.7 degrees F
- Slit lamp examination without pathology
- Goldmann tonometry: 15mmHg OD, 15 mmHg OS
- Dilated fundus examination (see photos)
- Visual field performed (see test results)

***Review of MS, diagnosis, signs, symptoms and treatment***

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**“Nothing “simple” about it”**

- A 38 YO HF presented w C/O of a red growth in the corner of her right eye x 4 months
  - Associated with tearing and itching

- No ocular or medical history
- FHx = MGM w DM
- Pupils RRL – APD
- EOM's, CF WNL OD and OS
- BVA 20/20 O.D, 20/15 O.S.
- IOP: 17mm Hg O.U.
- DFE: C/D 0.3/0.3 in both eyes; normal posterior poles and peripheral grounds

Slit lamp examination: See photos

- Dx: allergic/toxic conjunctivitis
- Mx: Acular q3h O.D., Cold Compresses (CC) QID

At follow up, both three days and one week later, the patient reported a slight improvement in her symptoms, but the clinical findings were unchanged.

- Mx: CPM & CC

Three weeks later: No changes in signs or symptoms.

- Mx: Switched to Patanol b.i.d. O.D., and OTC Benadryl at night. Continue CC

10 weeks after initial presentation: See photos

### ***Review of lymphoma (MALT), diagnosis, treatment options***

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#### **What happens in Vegas...**

- 49 YO HM c/o red eye OS with reduced vision
- Abrupt onset of both 5 days prior
- Had LASIK 5 yrs ago OU
- Allergic to ASA
- Currently taking Motrin for sore throat
- 1 month duration
- Was told was “Viral” infection but sought ENT care → biopsy left side
- Physical exam: Prominent & painful preauricular node left side only
- Color vision: OD 10/10, OS unable to perform
- NO APD ??
- BVA OD 20/30 OS 20/200

- SLX: OD clear; OS mild injection and chemosis, no follicles or papillae, capped meibomian glands OS>OD
- DFE: OD C/D = 0.35 rd; OS 0.0 with mild elevation, disk-into-retina swelling 270 degrees

### ***Review of acquired and congenital syphilis, signs, symptoms, treatment options***

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#### **(Un)Lucky Dog**

- 55 YO WF
- Referred from internal med with c/o red, painful OD after being scratched in the eye by her dog 5 days prior
  - Internal Med docs gave Rx for two oral medications, unknown names
- Using ClearEyes drops
- Vague history of prior ocular injuries
- Vague medical history, hypertensive but not currently managed
- Reports no other medical problems, NKMA
- VA OD 20/25, OS 20/80
- Miotic pupil OS
- SLX: OD clear; OS 4+ florid A/C rxn with 2/4 mm “pink” hypopyon and cyclytic membrane in AC; OS also profoundly injected, chemotic
- IOP OD 12 mmHg, OS 16 mmHg
- Fundus: Normal to BIO OD; OS no view – B-scan grossly normal, no RD
  
- Follow-up.....

### ***Review of intrinsic uveitis and systemic associations; ancillary, laboratory, and radiographic testing***

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#### **“I don’t like the looks of that....”**

- 65 year old white male
- Presents for comprehensive examination
- Heavy smoker
- Last eye exam 20 years prior
- “healthy, no problems, no medications”
- DFE reveals 4x4mm mostly amelanotic lesion off superior temporal arcade, right eye with noticeable elevation

Points for consideration:

- *What are the differential diagnoses?*

- *What are the appropriate tests to conduct at this point?*
- *What is the appropriate management of this case?*

***Review of ocular oncology as related to systemic oncology***

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**Now that you mention it....**

- 22 year old female
- Presents for contact lens fitting
- All findings unremarkable until posterior segment evaluation
- Slightly elevated disks, most prominent inferiorly
- Further probing reveals neurological symptoms

Points for discussion:

- *What is the appropriate management for these borderline cases?*
- *What are the appropriate questions to ask patients with this presentation?*

***Review of idiopathic intracranial hypertension: signs, symptoms, etiology, ancillary testing and neurologic referral***

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**“Here we go again...”**

55 year old black female

Pain, severe, x 8 months OS

H/O HTN x 5 years

H/O rheumatoid arthritis x 20 years

    Previously managed with oral prednisone

    Patient discontinued pred 8-9 months ago

6 years prior: simple episcleritis OD

5 years prior: nodular episcleritis OD

5 years prior: simple episcleritis OS

3 years prior: scleritis OS

    Managed orally and topically

2 years prior: episcleritis vs scleritis

    Aggressive topical management

Co-morbid DES with MGD

    Restasis cost-prohibitive

BVA 20/25 OD, 20/40 OS

Entrance testing unremarkable

Management : aggressive topical steroids, oral NSAIDS, consult with rheumatologist

***Review of arthritis conditions, treatment, ocular findings***