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
  o HPI: Both distance and near, OD only. (-) photophobia, (-) headache
• Ocular history of blunt trauma to the right orbit six months prior.
  o 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
  o OD = Failed, OS = Intact
• Pupils: Grade 2+ APD OD; round and reactive OS
  o 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

“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

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**

**(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 cyclitic 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**

“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?
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**

“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