

Virtual Ophthalmology ~~Exams~~ Assessment

BC Virtual Health Grand Rounds

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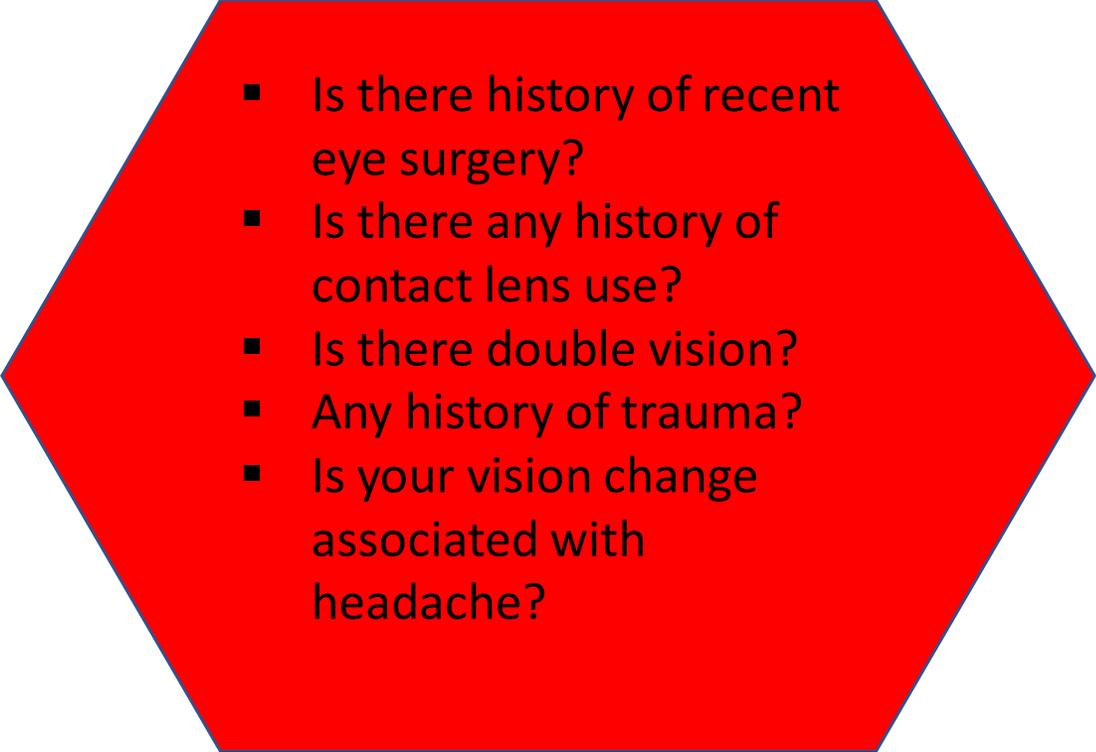
30 min Outline

What I will talk about:

- Identify important eye pathologies that commonly present to primary care
- Distinguish eye pathologies that should not be treated virtually
- Employ virtual eye assessments
- Manage treatment initiation for virtual patients
- Recognize when patients need urgent referral

History

- HPI: Location, onset, severity, timing, aggravating, alleviating
- Vision, irritation, pain, epiphora, redness.

- 
- Is there history of recent eye surgery?
 - Is there any history of contact lens use?
 - Is there double vision?
 - Any history of trauma?
 - Is your vision change associated with headache?

How has this problem affected your vision?

It has not affected my vision

Vision is fine but there are little spots like flies all over

ONLY AT NEAR

A part of my visual field is blocked out

When I'm not wearing my glasses

Fine now.. But was totally greyed out in one eye

When my eyes are tired it seems

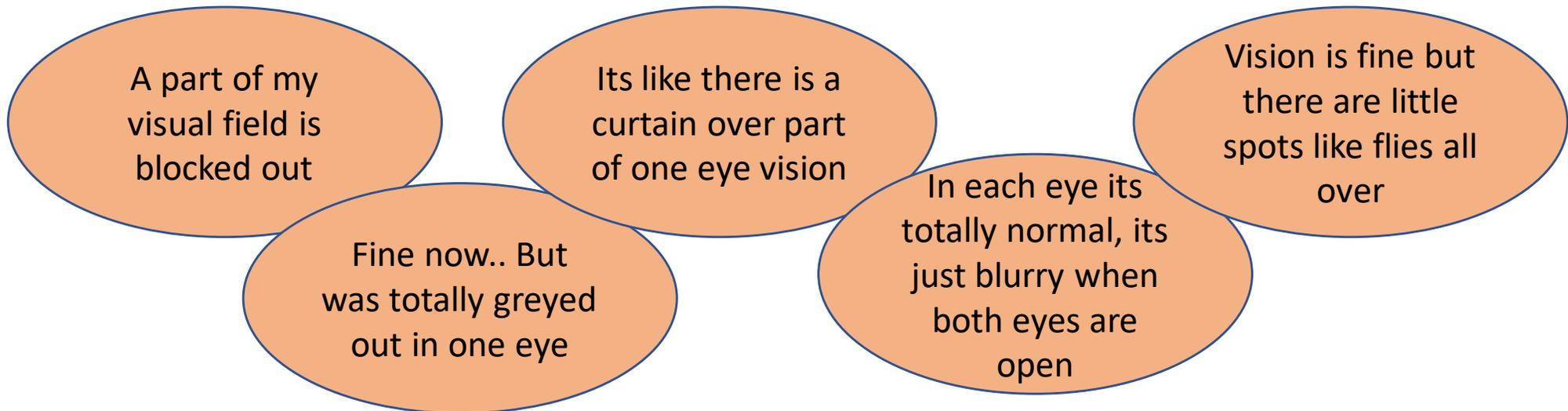
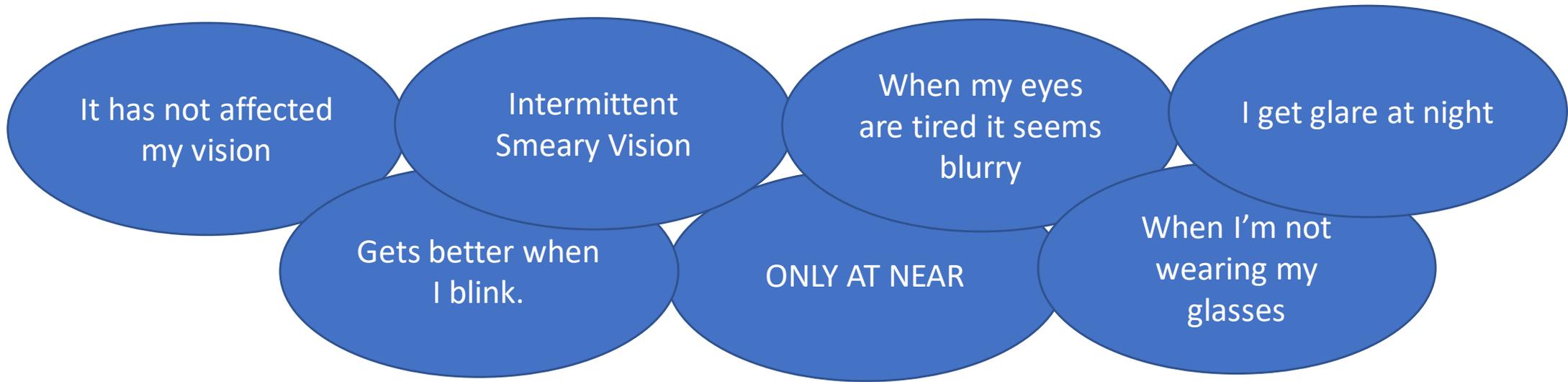
I get glare at night

Its like there is a curtain over part of one eye vision

Gets better when I blink.

In each eye its totally normal, its just blurry when both eyes are open

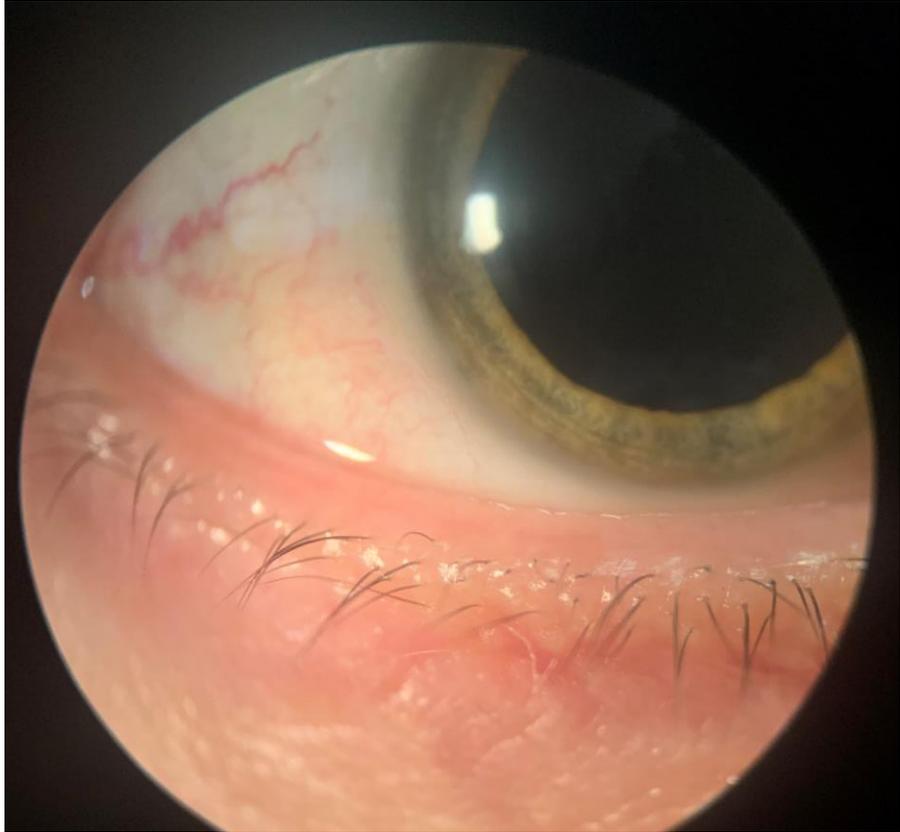
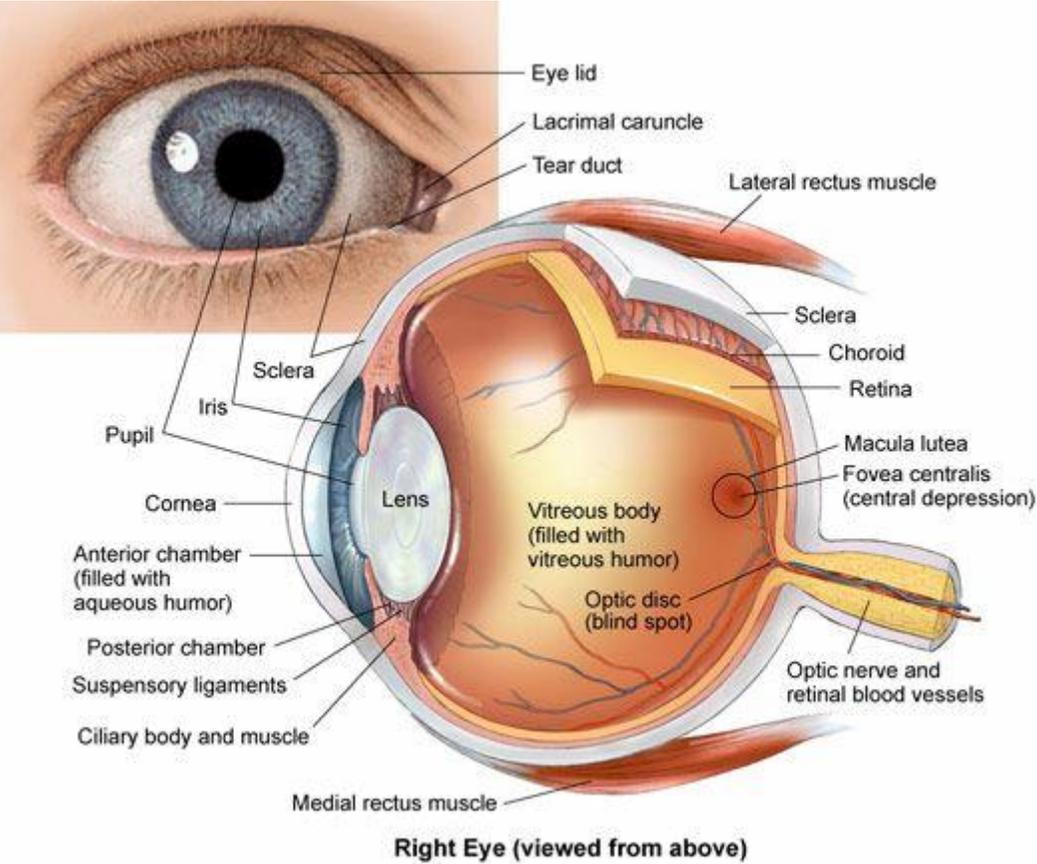
Intermittent Smearly Vision



When the tear film or corneal epithelium is disrupted the vision change is often transient!



The Anatomy that matters



Improving the tear film is the safest and most effective ophthalmic treatment you can offer your patients.



Twice Daily Routine – Follow-up if not better

1. Warm Compresses
2. Gently clean the lash margins with some mild dilute soap
3. Gentle pressure on the lids
4. Artificial tears

Do not refer unless this routine has failed!
Too many appointments!



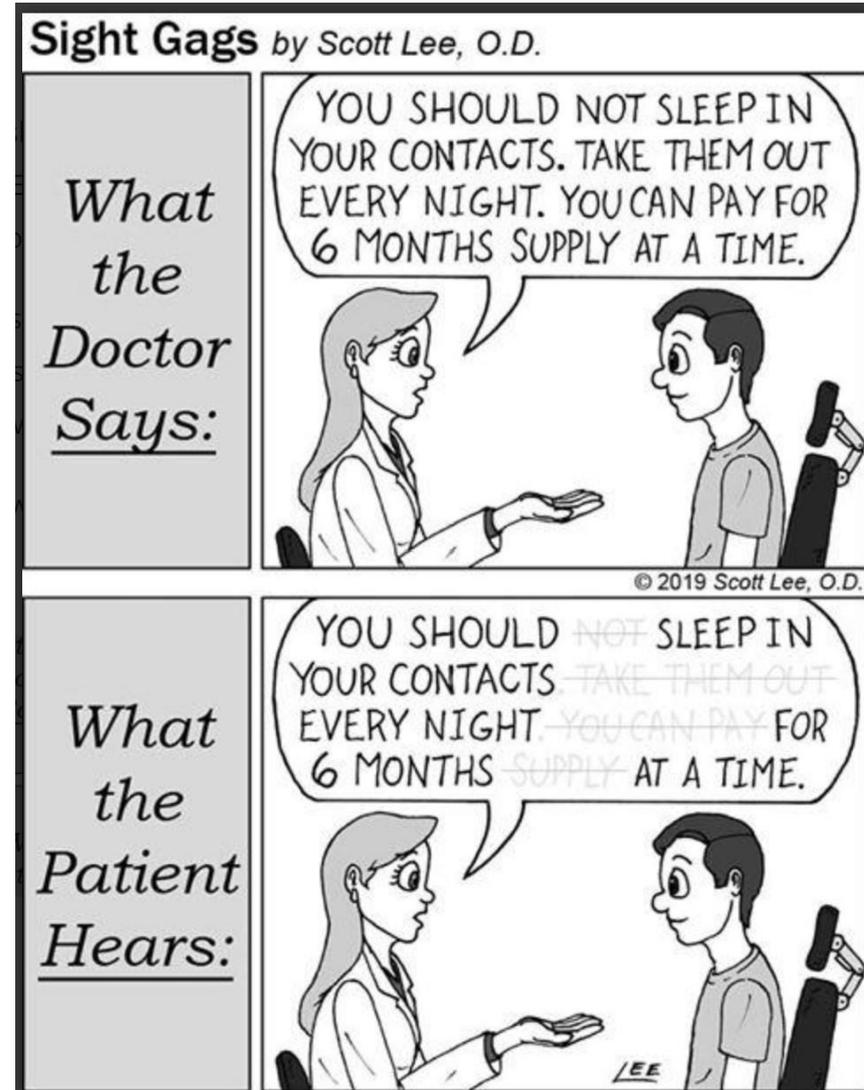
28 year old with 1 week history of redness and irritation, now an eyelid nodule

Management same as previous.
If chronic and recurrent add Abx ung and Doxy PO



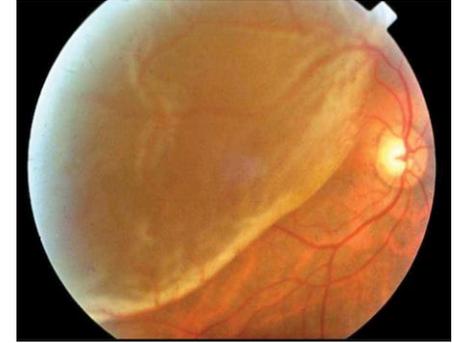
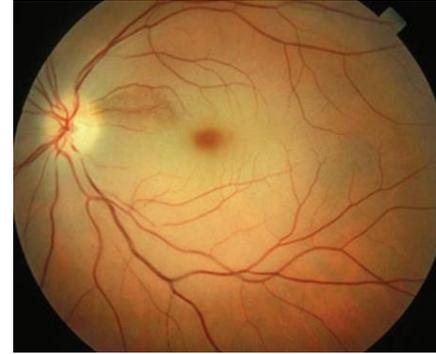
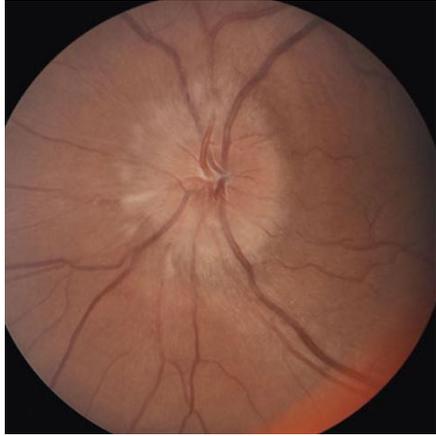
Hot Tip!

- If your patient is a contact lens wearer and has a complaint of eye redness, discomfort +/- blurred vision
- The cause is the contact lenses
 - Your patients will refute this!
 - D/C Contact lens use immediately!
- Topical Abx, Lubricating drops, Lid Care! Close follow-up.



What about the vision loss presentations?

- Patients with vision loss (total or persistent) need in person assessment.



Painless
Sudden vision
loss

Non-arteritic Ischemic optic neuropathy

CRAO

Ischemic Optic Neuropathy

Retinal Detachment

- **SEND TO THE EMERGENCY DEPARTMENT OR CALL ON CALL OPHTHALMOLOGY**
- **GIANT CELL ARTERITIS CAN PRESENT AS AION, DOUBLE VISION OR CRAO!!! IF YOUR PATIENT IS OLD WITH ANY OF THESE, ORDER THE CRP AND SEND TO EMERGENCY!**

When to log onto Facetime??

- You have made the diagnosis by history and want visual confirmation.

Chalazion

Subconjunctival Hemorrhage

- You want to endlessly frustrate yourself with a two hour attempt at a vision check.

Virtual Eye Exam

- Cover one eye and look at a door frame.
 - Is it straight horizontally and vertically, are there breaks or waves
- Now Switch to the other eye... How is it different.
- Try reading newsprint with one eye at a time then with both eyes open.
- If you want to be a hero... monocular assessment of something bright red. If a patient reports red desaturation it is specific but not sensitive.

Always remember the critical elements of an exam you cannot test virtually:

- Pupils
- Pressure
- Eye Movements
- Visual Fields



*“Are you sure I have glaucoma?
I took an online vision test
and it said my eyes are fine.”*

- NLP (no light perception)
- LP (light perception)
- HM (hand motions)
- CF (count fingers 1',3',6')

What does 20/20 mean?
 Numerator is always *the distance at which the test was taken* and the denominator is *the distance at which the letter subtends 5 minutes of arc.*

It's math....It's standardized!

E	1	20/200
F P	2	20/100
T O Z	3	20/70
L P E D	4	20/50
P E C F D	5	20/40
E D F C Z P	6	20/30
F E L O P Z D	7	20/25
D E F P O T E C	8	20/20
L E F O D P C T	9	
F D P L T C E O	10	
P E Z O L C F T D	11	

No Vision

Terrible Vision

Bad Vision

Good Vision



iPhone 12 mini



iPhone 14 Pro Max



Key Take Aways

- If your patient has new painless vision loss they need an emergent, IN PERSON, assessment.
- Your history is critical
- Warm compresses, lid care and artificial tears can and should be employed as a first line of many ocular surface conditions.



References & Links

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