Managing Patients With Multiple Conditions

Deepak Gupta, OD
deegup4919@hotmail.com

10 y.o. male here for routine exam

- VA sc 20/200 OD, 20/40 OS
- Chief complaint: None – VA appears stable. Right eye has always been worse than left
- Entrance exam otherwise normal
- SLE normal
- K's OD 44.50/46.00 OS 44.00 MCAR
- Cover Test: Ortho
- Retinal exam: normal
- During refraction, child not very cooperative so difficult for you to accurately assess vision with manifest refraction.

Two issues:

BCVA OD

Inc C/D

Options for handling vision problem

- Refract with trial lenses
- Retinoscopy
- Cycloplege and then Auto-refract

You opt for cycloplegic auto-refraction

- MR: OD -1.50 -1.75 x 110 20/30
  OS -1.00 SPH 20/20

What are the causes of amblyopia?

1. Uncorrected tropia
2. Certain refractive errors
3. Obstruction of visual axis at young age

Form Deprivation

- Usually occurs before the age of 6-8 years
- When the physical obstruction along the line of sight prevents the formation of a well-focused high contrast image on the retina

Form Deprivation

- Most common reason: congenital cataract
- Other reasons:
  - Lid ptosis obstructing line of sight
  - Corneal opacity alone line of sight

Strabismic Amblyopia

- Most common
- Usually has early onset, before age 6
- Uncorrected tropia

Refractive Amblyopia

- Isoametropic Amblyopia
- Anisometropic Amblyopia

Isoametropic Amblyopia

- Uncommon form:
  - Need astigmatism over 2.50 D
  - Need hyperopia over 5.00 D
  - Need myopia over 8.00 D

Anisometropic Amblyopia

- More common – unequal refractive error
- Need:
  - Astigmatism 1.50 D or more
  - Hyperopia 1.00 D or more
  - Myopia 3.00 D or more

What if it didn't?

I would send out for neuro consult

Work up

- Dilated retinal exam
- Visual field examination
- Sensorimotor testing

Visual Field testing

- What diagnosis do we use?

Any of the amblyopia codes are fine

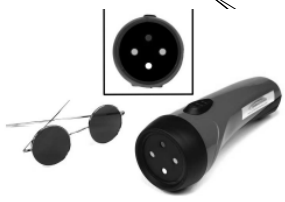
Sensorimotor exam

- CPT Code 92060
- "Evaluation of movement and ocular deviations in multiple gazes"
- What additional testing do you need to do?

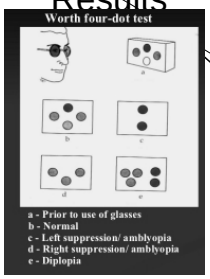
What needs to be done

- Report and Intepretation
- Worth 4 Dot, Maddox Rod, Bagolini Lenses

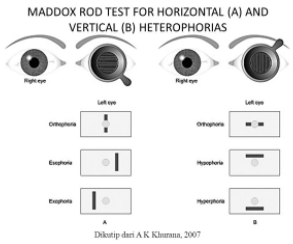
Worth 4 Dot



Results



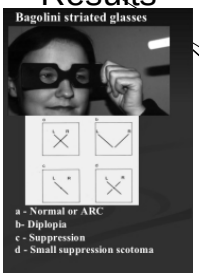
Maddox Rod



Dikutip dari A K Khurana, 2007

Bagolini Lenses

Results



If you can do that…

- You will earn yourself roughly $50
- Billed as bilateral procedure
- Can be done on the same day as a comprehensive eye examination
- Required diagnosis: Amblyopia or any tropia or phoria

How do we manage him?

STEP ONE:

- Give him full Rx in glasses or contact lenses
- When do we see him back?

When he comes back…

- He will be 20/20 BCVA
- He will be better but not 20/20
- There will be no improvement

Patching of amblyopic patients

- Traditional patch
- Atropine 1%

While they are patching…

- Encourage visual stimulation

True or False
There is no value in patching adults

False!

If you patch… how long after you reach endpoint do you continue?

3 months

What about recurrence?

- 80% of children maintain visual status at 1 year
- Maybe be higher in younger children

What about C/D ratio in children?

What is normal?

What is normal C/D ratio?

- .30
- C/D ratio in kids roughly the same in adults

Ocular Hypertension

- OHTN: Elevated IOP and everything else is normal

Physiological Cupping

- First: rule out glaucoma before you jump to the conclusion of physiological cupping
- Second: physio cupping is only confirmed after years and years of a stable ONH
- Lastly: In terms of liability, there is no such thing as physiological cupping!

Glaucoma Suspect

- Glaucoma Suspect – patient is at higher risk for developing glaucoma than the average person based on a variety of factors

Now what?

OCT?

If follow

- How often do we follow?
- Is this person a glaucoma suspect for life or can we stop the work up at some point?

If treat…

- What do we treat with?
- Beta blockers have shown to be best in children. Alphagan and CAI an option also
- PG don't work as well in children. No studies with PG as monotherapy, only adjunctive

Overall Prognosis good

- 80 to 90% achieve good IOP control
- 83% require surgical intervention to control IOP but medications may be tried first

Initial Diagnosis

- **Even if you don't a have topographer…**
- Refraction
- Retinoscopy
- Slit Lamp Findings
- Corneal Pachmetry
- Quick GP refraction

Initial Diagnosis

- So do we really need to send a patient out to confirm a diagnosis of keratoconus?
- If you have to send out, send to an optometrist.

OMDs know very little about properly fitting a keratoconus patient

Keep them in house

- Soft torics work in early keratconus. Take advantage of that fact
- If patient happy with glasses VA, then this is a valid option
- If you are in doubt, try it

Is a patient better of getting refit multiple times or surgery?

Which is less risky?

Progression is usually a finite time period

3 most common conditions we send to retinal specialist

- Retinal detachment
- Diabetic retinopathy
- Macular degeneration

Retinal detachment/tear

- Emergency vs “routine” referral – what are the three main deciding factors which determine this?

Macular Degeneration

- Dry Macular Degeneration
- Wet Macular Degeneration

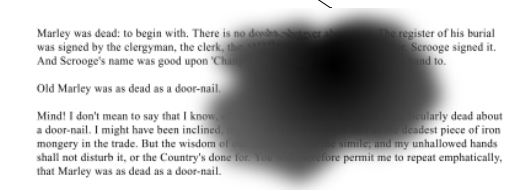
Dry vs Wet

What is the distinguishing feature?

How do we diagnose and monitor dry AMD?

- **Clinical Symptoms**
- **Amsler Grid**
- **OCT**
- **Visual Field**
- **Fundus Photography**

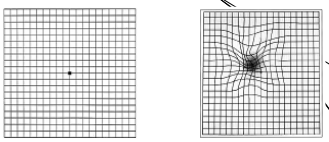
Clinical Symptoms



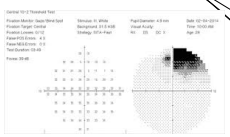
Patients with early AMD usually do not notice any changes in their vision.

Patients with advanced, or "wet" AMD often notice distortions, blurriness and dark areas in their visual field.

Amsler Grid is an easy screening test for monitoring AMD



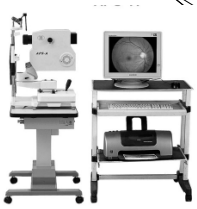
Visual field 10-2



Billing

- CPT code 92083
- Can be done once a year

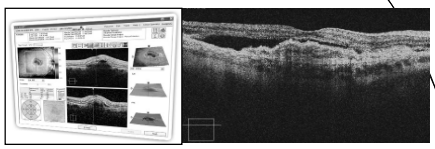
Fundus Photography



Billing

- CPT code 92250
- Can do once a year

OCT Mac



Billing

- CPT code 92134
- Can be done once a year on stable patients
- Can be done every 6 months on progressive or advanced patients

NEW: Dark Adaptometry

ALSTAR Study: The Science Behind Dark Adaptation

The Alabama Study on Early Age-Related Macular Degeneration (ALSTAR study) tracked 325 adults age 60 and older.

The ALSTAR study demonstrated dark adaptation impairment indicates subclinical AMD at least three years before the disease is clinically evident.

Billing

- CPT code 92284
- Average reimbursement $60
- Can do twice a year
- Can do with OCT, photos, VF

AMD Protocol – stable patient

- Visit 1: Comprehensive dilated exam with fundus photography
- Visit 2: Intermediate exam with VF
- Visit 3: Intermediate exam with OCT & Dark adaptometry

AMD Protocol – moderate/progressive

- Visit 1: Comprehensive dilated exam with fundus photography
- Visit 2: Intermediate exam with OCT & Dark adaptometry
- Visit 3: Intermediate exam with VF
- Visit 4: Intermediate exam with OCT & Dark adaptometry

How do we manage this patient?

- UV protected sunglasses
- Vitamins
- Stop smoking
- Green, leafy vegetables
- Increase exercise

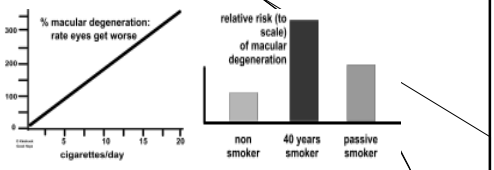
UV protection:Different materials

- CR-39 blocks up to 360 nm
- Polycarbonate blocks up to 390 nm
- Need “extra” coating to achieve UV 400

If you really are serious about preventing AMD

Start prescribing UV protection for children

Stop Smoking

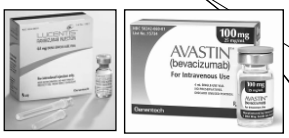


Dietary Changes

Increase exercise

Vitamins

Management



Lucentis

- Used for wet AMD, macular edema due to CRVO or diabetic macular edema
- Typical protocol: once a month for at least 3 months, then "every couple of months" depending on clinical situation

When does a glaucoma patient need surgery?

The disease is progressing, despite normal IOP

A truly noncompliant patient

The vast majority of Glaucoma patients can be managed by an optometrist because they are managed medically

A Patient is interested in LASIK What do you do?

- **Send patient to LASIK MD immediately**
- **Find out reason for wanting LASIK and discuss options**

Most common reasons why patients have LASIK

- Discomfort from CL wear
- They are tired of having to deal with taking CL in and out every day
- They want to be able to see during the night

- A patient complaining of dryness from CL wear is actually a poor candidate for LASIK but if you send a patient to a surgeon, he or she will do surgery!

Management of DES

- Art tears
- Restasis/Xiidra
- Punctal Plugs
- Lacrisert

By offering your patient a fitting with a CONTINUOUS WEAR CONTACT LENS

You will either solve the patient's problem

OR

You will reinforce his or her decision to have LASIK

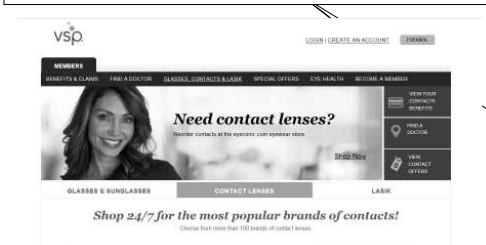
Then

- Your competition was the OD down the street
- Or the big box store

Now…

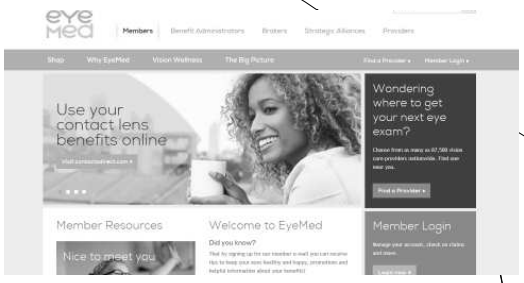
- Your competition is the OMD who is giving away CL services
- Your competition is a website or app
- Or it is a vision plan

VSP



VSP

- It's only a matter of time before VSP starts steering your patients into Vision works



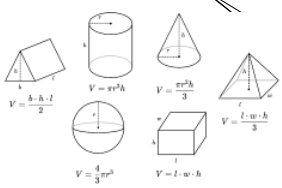
CVS

How Can I Compete?

How Can I Compete?

How Can I Compete?

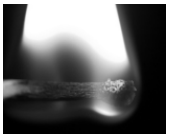
How Can I Compete?



How Can I Compete?

Stay away from these

How Can I Compete?



Why Should I lower myself and do this?

- **For those of you who are against it, remember that you get ZERO dollars for writing a Rx for CL**

How many of you agree?

- **Even if you break even on materials, it is still worth it**

It's in your best interest to keep them in CL and to keep buying from you

1800 contacts

- Boomerang service
- Patients can send in glasses. They will read the prescription from the lenses and duplicate it. No exam required!

The Coalition for Contact Lens Consumer Choice

Consists of 1-800 Contacts, Costco Wholesale and Lens.com

Ultimate goal is deregulation of CL

CL & Disease Monitoring

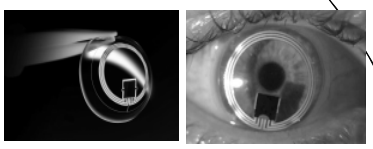
- Blood glucose
- Intraocular pressure
- Drug delivery
- Electronic viewing

CL & Diabetes

- CL to help patients monitor their blood glucose being developed by University of Western Ontario
- CL which will help automatically measure blood glucose levels

CL & Glaucoma

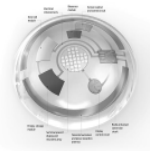
The Triggerfish lens – released by Sensimed in September 2011



CL & Drug delivery

- For chronic conditions such as glaucoma and macular degeneration

CL & Electronic viewing



What else?

- Decreased profit margins on material fees
- Fewer patients coming every year to renew CL Rx as online renewals expand

Cataracts

When do we send a patient for cataract surgery?

General Trends in Procedures

- The trend is smaller incisions
- Stitch-less
- Blade-less
- The entire procedure takes 10-12 minutes

Traditional Distance Only IOL

- Great for distance – offer the crispest vision for driving, etc
- Patient is often dependent on glasses for reading, computer, and other near tasks FOREVER

Multifocal IOLs

- Same basic principle as bifocal contacts
- Same patient selection
- Same ocular criteria EXCEPT a lot more money and more of a “permanent” solution

Before you send them…

- Talk to them about IOL optons – spherical, toric, bifocal
- Talk to them about post op goal for refractive error
- Talk to them about costs

Post Operative Care

When do they see you vs surgeon?

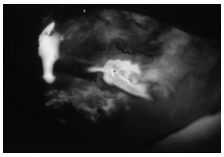
Elevated IOP

Management

- Do Nothing
- Diamox 250 mg x 2 for a couple of days
- Topical beta blockers or Alphagan

Complications

– **Wound leak**



Management

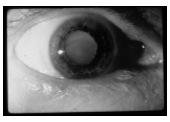
- Small - Do nothing
- Medium - Bandage contact lens
- Large - Stitch

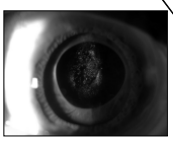
Rare Complications

- Decentered IOL
- RD
- Endophthalmitis

What about this?

Post Capsular Opacity





To the surgeon

When the patient is ready to have the YAG