Managing Patients With Multiple Conditions

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Roughly, what is time difference between damage on rNFL and VF?

Now what do we do?

Monitor closely?

Start medical therapy?

DG Rules for C/D

- C/D ratio ROUGHLY corresponds to treatment of patients

- A patient with a C/D of .20 will be treated 20% of times
- A patient with a C/D of .50 will be treated 50% of times
- A patient with a C/D of .80 will be treated 80% of times

Perceived Lack of Urgency in Early Stages

- Borderline IOP
- Borderline nerves
- Disease may take years to progress… if it exists

- We will take another look next year

Do we treat one eye or both?

What Stage is this?

Table 3. AAO Glaucoma Severity Staging Descriptions.

STAGE	DESCRIPTION
Mild/early	Structural optic nerve changes consistent with glaucoma with no evidence of visual field changes with standard automated perimetry (preperimetric glaucoma).
Moderate	Optic nerve changes consistent with glaucoma and glaucomatous visual field changes in one hemifield and not within five degrees of fixation.
Severe	Optic nerve changes consistent with glaucoma and glaucomatous visual field changes in both hemifields or loss within five degrees of fixation in at least one hemifield, or both.
Indeterminate	Field not done, or patient unable to perform visual field testing.
Unspecified	Stage not recorded in chart.

To stop progressive damage

Real Goal of Therapy

Why do we lower IOP?

Step 1: Establish a Target IOP

Factors To Consider When Setting Target IOP

- **IOP level at which ONH damage occurred**

Target IOP and Severity of Disease

Factors To Consider When Setting Target IOP

Patient Age or expected life span

Factors To Consider When Setting Target IOP

- **Corneal thickness**
- **Race**
- **Family history**

Do the Glaucoma Limbo !

Get each patient as low as safely possible

Why does this happen?

People Get Worse. . .

- **Because we have no cure**

People Get Worse. . .

And because patients live longer

How much should we lower IOP?

- **Every point is important**

For most patients with glaucoma . . .

The question is not IF they will get worse

The question is WHEN they will get worse

How long does it take for a glaucoma patient to go blind if you do nothing?

How long does it take for a patient to progress after you have intervened?

Adjunctive Medications

Beta Blockers

- Beta blocker in AM, PG in PM
- Beta blockers have a proven record

Problem with Beta Blockers

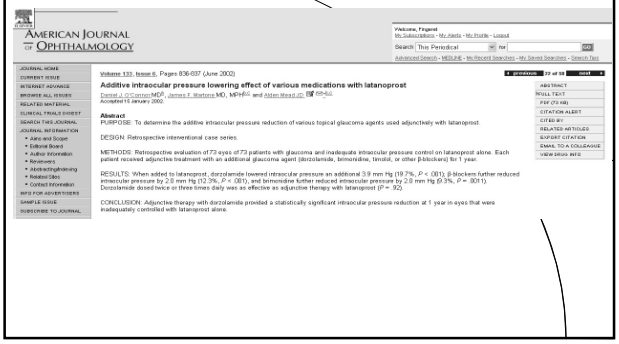
- No effect on diurnal variation
- Does not help IOP at night

Brimondine

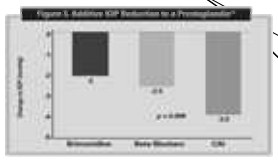
- Most prescribe as BID dosing
- No effect on diurnal variation
- Does not help IOP at night

CAIs as adjunctive therapy

- Sulfa based drug
- Most prescribe BID



Adjunctive Therapy



Topical CAI May be best additive agent to prostaglandin

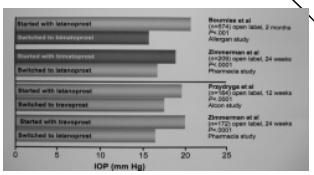
Combining the Prostaglandins

"The combination of bimatoprost and latanoprost in POAG increases the IOP and should not be considered as a therapeutic option."

Doi LM et al. *Effects of the combination of bimatoprost and latanoprost on intraocular pressure in primary open angle glaucoma: a randomized clinical trial.* Br J Ophthalmol 2005;89(5):

Switching Drugs Within A Class

- **Switching from one drug to another within the same class makes little sense**



Combination Products

- Simbrinza – brinzolamide/brimonidine
- Combigan – brimonidine/timolol
- Cosopt – dorzolamide/timolol

Advantage of Combination Products

- Adds another medication to medical regimen without adding another bottle
- Keeps costs down since only one copay
- Less preservatives since 2 drugs in one bottle

Disadvantage of Combination Products

- Mismatch of dosing in many cases
- Is third drug helping all that much?
- Combination products don't work as well together as they do individually

Vyzulta

- Lowered IOP by 35% to 44%, compared with only 26 to 27% with latanoprost alone

Problem with Vyzulta

- $$$$$$$$
- Try vyzulta.com - pay no more than $35 or $40
- Hopefully price will come down

Problem with Rhopressa

- $$$$
- Hyperemia
- Use discount cards
- Hopefully price will come down soon

Rule # 1

- Find out why a patient's glaucoma is worse
  - i.e. is it due to noncompliance

If patient is hypertensive

- See if they can take their meds in AM instead of at bedtime
- Will help increase perfusion pressure at bedtime
- Will help lower IOP in AM

Rule # 3

- If rule # 1 and #2 not violated, then perform serial tonometry to estimate when the patients IOP is the highest
- Realize that each medication you add follows the law of diminishing returns

My preference for 2nd line therapy if IOP highest in AM

- Beta-blockers in AM
- Prostaglandins at night time

My preference for 2nd line therapy if IOP highest other time of day

- Azopt or Simbrinza BID
- Prostaglandins at night time

At what IOP do you intervene even when all else is normal?

Management Priorities

- Lower IOP OD
- Evaluate as glaucoma suspect
- Cause of BCVA OD

Step 1: Lower IOP

- Instilled topical beta blocker OD QAM and Alphagan in office
- IOP down to 24
- Rx'd both and we will see in one week for workup

Glaucoma Management

- Treat one eye or both?

Step 3:What about her VA OD?

- Do nothing
- Send her out for cataract surgery

When do we send a patient for surgery?

- 20/40
- 20/60
- 20/80
- No magic number – depends on patient's needs

Treatment Options

- Prevention
- Patient deals with it
- Surgery

Prevention

- UV glasses may delay onset
- Nutrition – diet high in antioxidants plus multivitamins
- Ultimately, it is a losing battle

The procedure

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

Who has the discussion about IOLS options and post-op refraction?

- **They are still YOUR patient – you understand their visual needs and past history better than anyone else**
- **If you have this discussion, the patient will have time to process the information when the MD discusses with them again**

- 96-98% successful
- What are things to watch out for in post op period?

Elevated IOP

Management

- Do Nothing
- “Burp” it
- Diamox 250 mg x 2 for a couple of days
- Topical beta blockers or Alphagan - what about Prostaglandins?

Wound leak: What are the signs?

Management

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

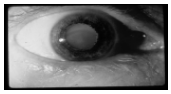
CME: Why does it happen?

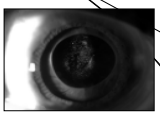
- Patient was non compliant with post op NSAID and steroids
- Taken off too quickly

Management

- Order OCT, if available
- Share the liability with surgeon and/or retinal specialist
- Most common treatment is topical steroids and topical NSAIDs

#4: PC Haze





Why does it happen?

- It is caused by residual lens epithelial cells that remain in the **capsular** bag **after** surgery and undergo proliferation, migration, and fibrous metaplasia.

This time…

- Surgeon put her at -5.50 OD (OS is -8.25) and will do -2.50 for OS when she has surgery
- Will be followed closely as a glaucoma patient

Does Cataract Surgery Help Glaucoma?

Thought One

- Even though we still do VF testing on patients, it should not be the FIRST machine we use to make an early diagnosis
- It is, however, very useful in monitoring for changes over time

Thought One

- Repeatable and/or progressive changes in rNFL or ONH means that a patient has glaucoma
- Do NOT wait until they lose 30% of their optic nerve before you intervene