

# Swipe Right or Swipe Left...

ERIC E SCHMIDT, OD, FAAO  
OMNI EYE SPECIALISTS  
WILMINGTON, NC

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▶ Dr Schmidt is an advisor or consultant for the following:

- ▶ Allergan
- ▶ Tarsus
- ▶ Eyenovia
- ▶ Trukera
- ▶ Thea Pharmaceuticals
- ▶ Topcon
- ▶ B&L
- ▶ Sight Science
- ▶ Avellino Labs
- ▶ Visus
- ▶ Harrow Pharmaceuticals
- ▶ Sydnexis

## Disclosure Slide for Dr Eric Schmidt

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## Glaucoma Treatment Universe 2024

- ▶ Prostaglandins
- ▶ Alpha agonists
- ▶ Rho-kinase inhibitors
- ▶ Beta-blockers
- ▶ Carbonic Anhydrase Inhibitors
- ▶ Combo Agents
- ▶ SLT
- ▶ MIGS
- ▶ Glaucoma Surgery
- ▶ How Do You Know Which Category To Choose???

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### What Are You Trying To Achieve?

- ▶ Optimal IOP Reduction
- ▶ Minimal Side Effects
- ▶ Rigid Compliance
- ▶ Anything Else?

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### Target IOP – How Low Do You Need To Go?

- ▶ That all depends upon the individual patient
- ▶ Mainly it depends upon the severity of the glaucoma
  - ▶ Mild
  - ▶ Moderate
  - ▶ Severe

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### “New” Goal of treatment in Glaucoma

- Low and Stable IOP
- Minimize the diurnal curve
- Prevent IOP peaks

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## General Rule #1

- Mild glaucoma – decrease IOP 30%
- Moderate glaucoma – decrease IOP 40%
- Severe glaucoma – decrease IOP 50% (at least)

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## General Rule #2

- 30% decrease as an initial target
- Target decrease from highest untreated IOP
- CIGTS, OHTS

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## You Also Need To Consider The Type of Glaucoma The Patient Has

- ▶ POAG
- ▶ NTG
- ▶ ANA
- ▶ Secondary Glaucomas
  - ▶ Pigmentary
  - ▶ Exfoliative
  - ▶ Steroid Induced
  - ▶ Others

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### Eric's 7 Simple Rules For Treatment

1. Choose 30% IOP decrease as initial target
2. Squash the diurnal curve (Keep IOP peak <18mm)
3. Assess risk factors for progression and rate of progression  
(CT<555, IOP >26,C/D 0.5)

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### Eric's Rules cont.

4. If you are going to treat; treat aggressively
5. KISS
6. Be mindful of perfusion issues
7. Above all, do no harm

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### Cases To Help Illustrate The Decision Making Tree

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### Case 1

- ▶ 66 y/o Caucasian Female
- ▶ PMH: Anemia, Hypothyroid
- ▶ FMH: Mother- POAG
  
- ▶ Multiple IOP Readings over 3 year period:  
18-25mm Hg
- ▶ C/D as shown: ~.8/.8

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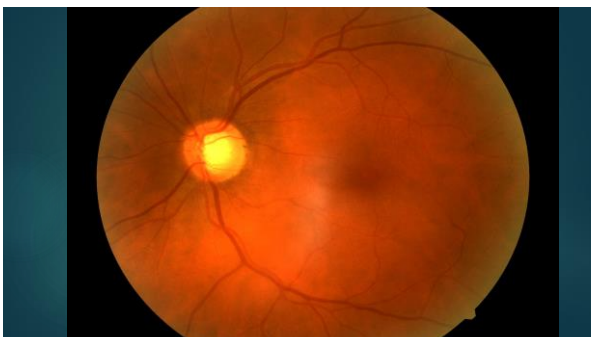
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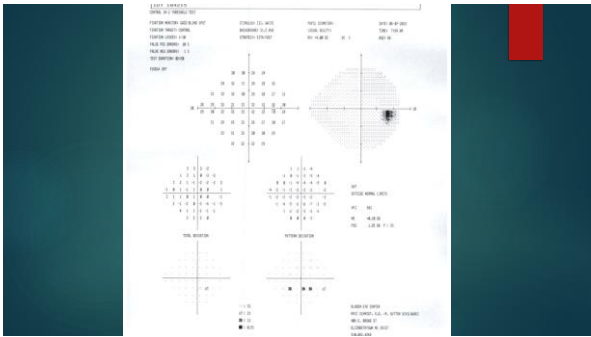
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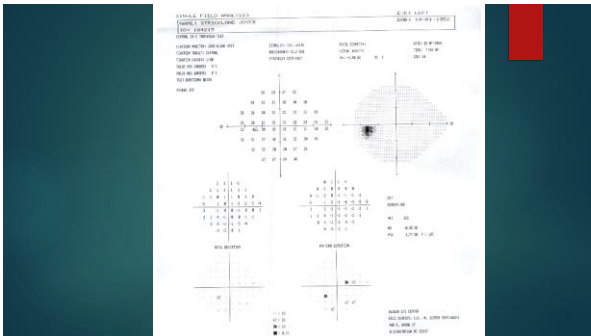
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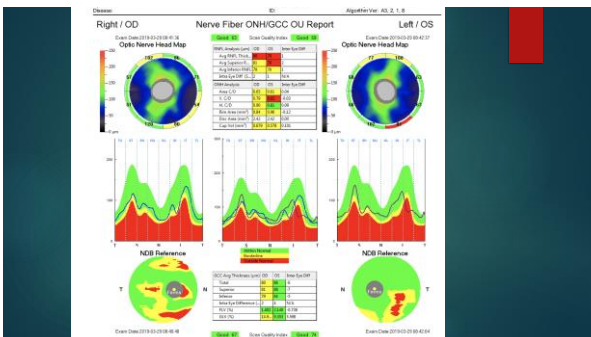
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SO- TREAT  
or no  
treat???

- ▶ What factors would lead you to monitor rather than treat
  - ▶ Or Vice Versa
- ▶ Do We Need Any More Data?
- ▶ What makes you feel comfortable about monitoring without therapy?

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If You Decide To Treat- Which Initial Agent Would You Choose?

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NTG Challenge

- ▶ 46 y/o WF
- ▶ No complaints
- ▶ Post Lasik x 12 yrs- stable RE
- ▶ Referred because of suspicious disks (by a new eye doctor)

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### Exam specifics

- ▶ VA - 20/20 OD, OS w/out RX
- ▶ Slit lamp exam - Well apposed LASIK flaps OU
- ▶ Gonio - Gr 4 360 degrees OU
- ▶ IOP - 14mm Hg OD, 18mm Hg OS
- ▶ Pachymetry - 456 OD, 442OS
- ▶ Normal Fundus Exam - Except for...

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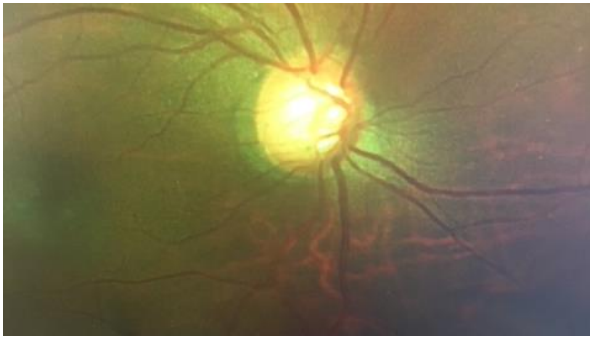
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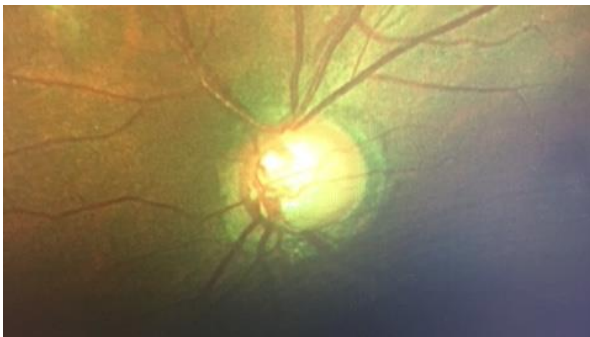
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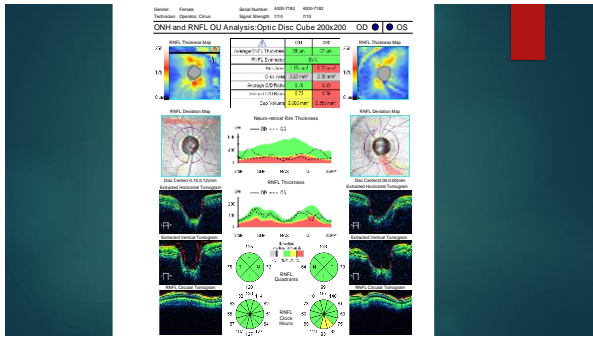
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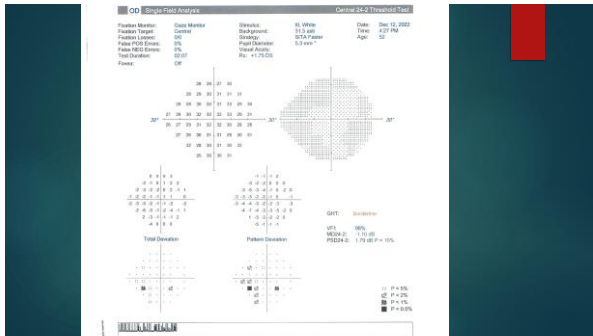
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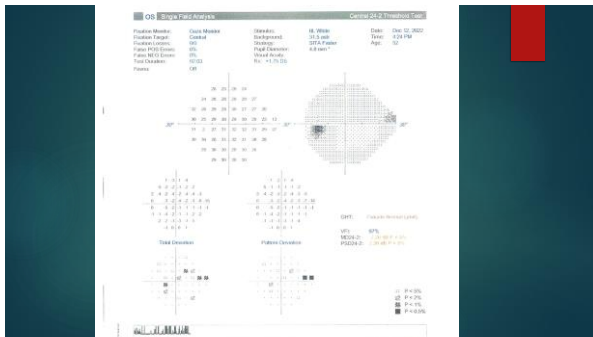




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### So Given The Evidence Before You What Do You Do?

- ▶ Observe
- ▶ Additional Testing
- ▶ Treat
- ▶ If so, with what?
  
- ▶ This is a difficult case, am I right?

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### If You decide to treat...

- ▶ What is your Target IOP?
- ▶ How Low Do You Go? ( How do you know?)
- ▶ How do you get the IOP to that Target?
- ▶ What is Your Initial Agent of Choice?

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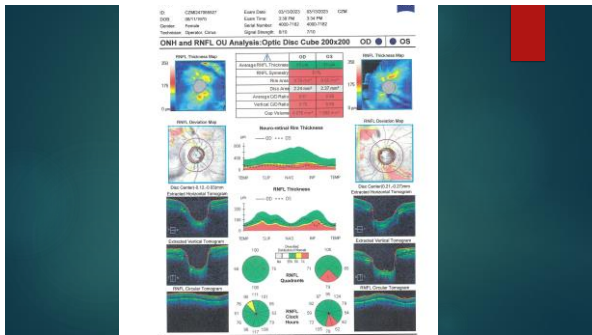
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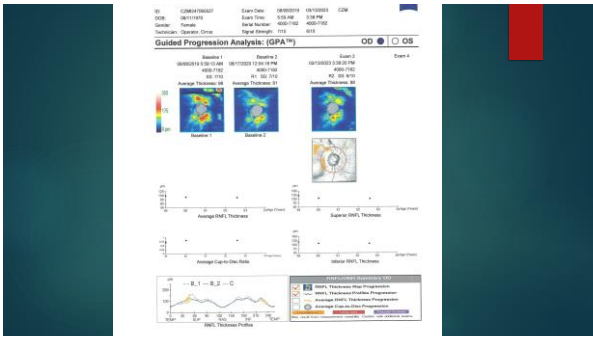
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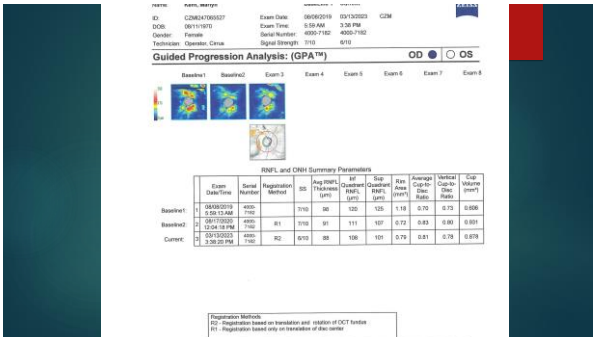
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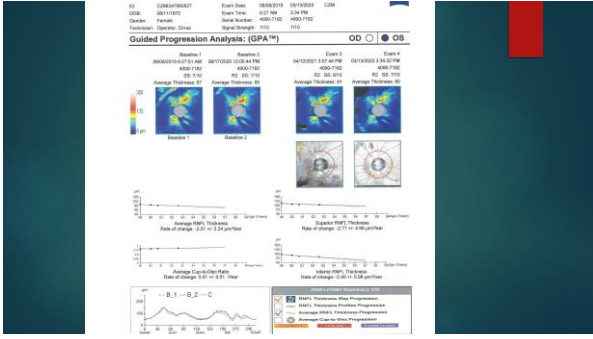
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ID: COMA1706667 Exam Date: 08/10/2019 05/10/2019 CSW  
 OOB: 04/10/2018 Exam Time: 0:22:06 0:26:39  
 Gender: Female Serial Number: 40007162 40007162  
 Customer: Optima - China Serial Group: 215 752

**Guided Progression Analysis: (GPA™)** OD  OS

Baseline1 Baseline2 Exam 1 Exam 4 Exam 5 Exam 6 Exam 7 Exam 8

Exam	Exam Date	Serial Number	Progression Status	Avg. RMV (LP)		Avg. RMV (LP)	RMV Range (LP)	Average Cycle Time (min)	Standard Deviation (min)	COP (mm)
				Left Eye	Right Eye					
Baseline1	08/10/2019	40007162	Y10	97	96	97	0.52	0.83	0.00	0.00
Baseline2	07/27/2018	40007162	N20	100	86	93	11.6	0.91	0.00	1.00
Exam 1	05/10/2019	40007162	N22	92	81	86	10.8	0.86	0.00	1.01
Exam 4	05/10/2019	40007162	N21	91	94	92	0.8	0.80	0.00	1.01
Exam 5	05/10/2019	40007162	N21	91	94	92	0.8	0.80	0.00	1.01

**Legend:**  
 Y - Progression observed on examination and stability of CCT values  
 N - Progression observed on examination and stability of CCT values  
 P - Progression observed on examination and stability of CCT values  
 R - Progression observed on examination and stability of CCT values  
 S - Progression observed on examination and stability of CCT values

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# Is She Stable?

- ▶ If You Swiped Left (Unstable)- What are you swiping to?
- ▶ What is Your Next Choice?

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Multiple choice questions and handwritten notes. The questions appear to be related to contact lens fitting and stability. Handwritten notes include 'Alphacon P - Non-extended', 'Spherical P - Handwritten', and 'CLAXON TRACKING' with a 'BEST' selection.

CLAXON TRACKING

BEST

Number 41412  
003036 - 003038 - 003040 - 003042

non 211110 non 211110

Question	Option 1	Option 2	Option 3	Option 4	Option 5
Q1	Alphacon P	Spherical P	Spherical P	Alphacon P	Alphacon P
Q2	Spherical P	Alphacon P	Spherical P	Alphacon P	Alphacon P
Q3	Alphacon P	Spherical P	Spherical P	Alphacon P	Alphacon P
Q4	Spherical P	Alphacon P	Spherical P	Alphacon P	Alphacon P
Q5	Alphacon P	Spherical P	Spherical P	Alphacon P	Alphacon P
Q6	Spherical P	Alphacon P	Spherical P	Alphacon P	Alphacon P
Q7	Alphacon P	Spherical P	Spherical P	Alphacon P	Alphacon P
Q8	Spherical P	Alphacon P	Spherical P	Alphacon P	Alphacon P
Q9	Alphacon P	Spherical P	Spherical P	Alphacon P	Alphacon P
Q10	Spherical P	Alphacon P	Spherical P	Alphacon P	Alphacon P
Q11	Alphacon P	Spherical P	Spherical P	Alphacon P	Alphacon P
Q12	Spherical P	Alphacon P	Spherical P	Alphacon P	Alphacon P
Q13	Alphacon P	Spherical P	Spherical P	Alphacon P	Alphacon P
Q14	Spherical P	Alphacon P	Spherical P	Alphacon P	Alphacon P
Q15	Alphacon P	Spherical P	Spherical P	Alphacon P	Alphacon P
Q16	Spherical P	Alphacon P	Spherical P	Alphacon P	Alphacon P
Q17	Alphacon P	Spherical P	Spherical P	Alphacon P	Alphacon P
Q18	Spherical P	Alphacon P	Spherical P	Alphacon P	Alphacon P
Q19	Alphacon P	Spherical P	Spherical P	Alphacon P	Alphacon P
Q20	Spherical P	Alphacon P	Spherical P	Alphacon P	Alphacon P

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### The Hypersensitive Patient

- 73 y/o WF identified as "Glaucoma Suspect"
- FHx: Mother, Sister (+) Glaucoma
- PMH: Healthy, Takes lots of vitamins and Synthroid
- Referral note indicates C/D .5/1.5 OU, IOP range; 13-18OU, Thin Pachs
- VF "abnormal"
- ?Low Tension Glaucoma

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### My Exam findings- Initial Visit

- VA 20/20-2 OD, 20/20 OS
- IOP 21 OD, 20 OS
- C/D - .7/1.7 OU (larger than documented)
- Pachs - OD 506, OS 501
- Gonio - Gr 4, 360 degrees OU
- Mild NS OU
- Photos, Fields and OCT...
- By the way, subsequent IOP readings w/out treatment...
  - 20 OD 20 OS, 19 OD, 18 OS, 17 OD, 17 OS

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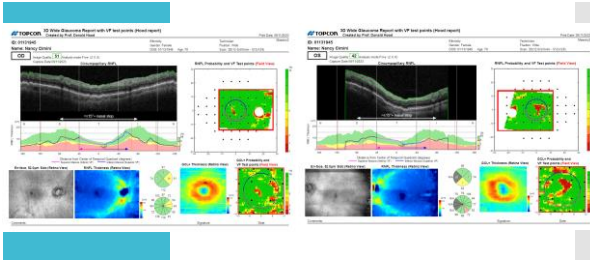
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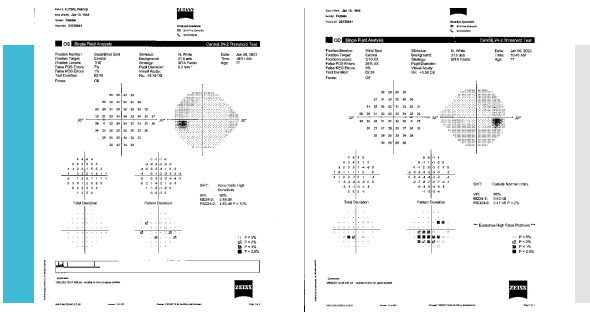
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This Lady Needs Treatment-Right?

- Which class of agents do you think?
- PGA
- Beta Blocker
- Rho Kinase Inhibitor
- Combo Drop

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Pxs Eyes Go REALLY Red. Oops!!

- Obviously d/c Rhopressa
- What do we switch to?

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A Tough Inheritance

62 y/o BF, (+) fam hx- treated for POAG for 6 years

VA 20/20 OD, 20/20 OS

Pachs – OD 490, OS 495

No systemic meds

IOP maintained around 18 OU on Lumigan QHS, AlphaganP OU TID, T1/2 OU BID

Initial IOP 28 OD, 29OS

Condition was stable but px developed hypersensitivity (After patient was switched to Brimonidine 0.15%)

IOP 22 OU on Lumigan only

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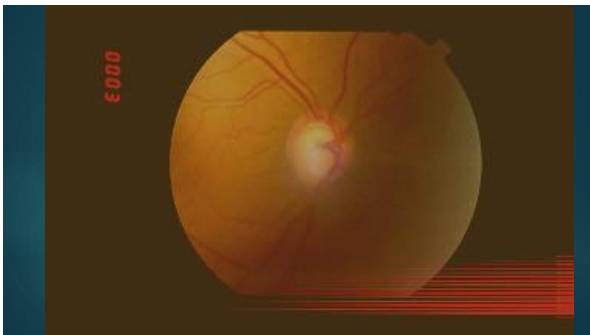
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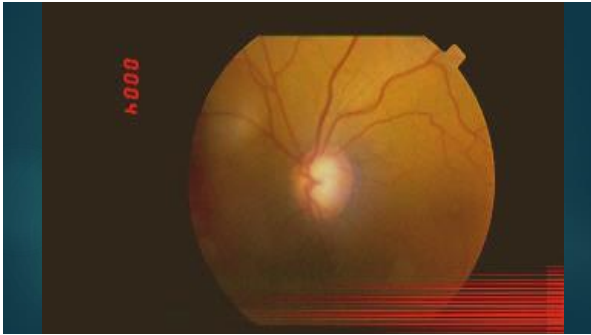
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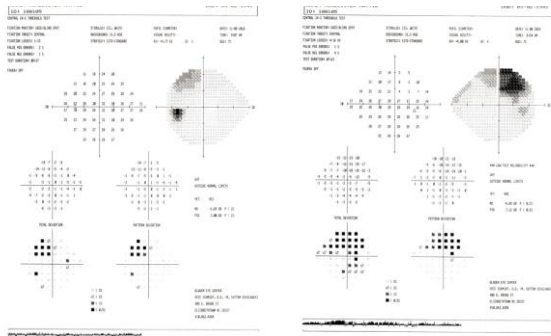
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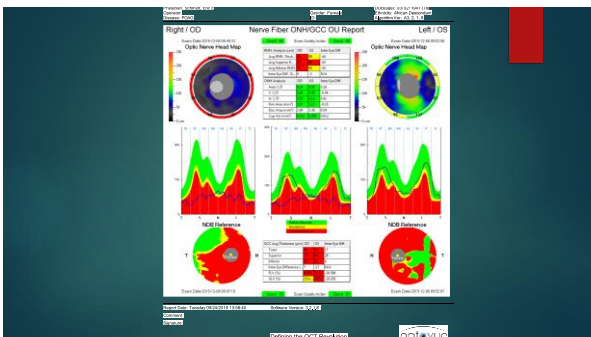
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What is the target IOP?

-18  
-15  
-12  
How Do You Know??

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What tx would you choose?

1. Switch to Rocklatan
2. SLT OU 180
3. Add Azopt OU BID
4. add Timoptic 1/2 OU BID
5. Trabeculectomy
6. d/c Lumigan, try Travatan Z OU QHS
7. Cosopt OU BID
8. Combigan OU BID

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How Do You Know if the IOP needs to be lower?

What are the risk factors for progression?

- Age
- IOP at diagnosis
- Neuroretinal rim tissue
- Disk hernes
- Corneal hysteresis

Is she progressing?

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## When Progression Is Detected, How Do We Know...

- ▶ How Low the IOP Should be...
- ▶ Which agent(s) should we use...
- ▶ When Surgery is Indicated...
- ▶ The Rate Of Their Progression...

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## 4 Major questions surrounding progression

- ▶ 1. Why Do Patients Progress?
- ▶ 2. How Do We Best Detect Progression?
- ▶ 3. How Can We Improve Compliance?
- ▶ 4. Once Progression Occurs, What Is Our Best Strategy?

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## Rate Of Progression

- ▶ RGC loss in normals -0.5% /yr
- ▶ RGC loss in Glaucoma - 3.5% / yr
- ▶ RGC loss in treated G - 1.5%/yr

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### The Smoldering Case

- ▶ 51 y/o BF
- ▶ Treated for "eyelitis" for ~ 1 year
- ▶ Never completely resolved
- ▶ Currently using PF OS QID, Atropine 1% OU BID
- ▶ PMH: HBP, Arthritis, chronic cough

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### The symptoms

- ▶ Throbbing intermittent pain OS >> OD
- ▶ Radiates to temples
- ▶ Chronic redness OS
- ▶ Photophobia
- ▶ Poor near vision

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### The exam

- ▶ BCVA: OD 20/20, OS 20/50
- ▶ Pupils: 8mm fixed OU
- ▶ EOM: no pain on movement
- ▶ OD: Normal SLE
- ▶ OS: As shown
- ▶ IOP: 14OD, 16 OS

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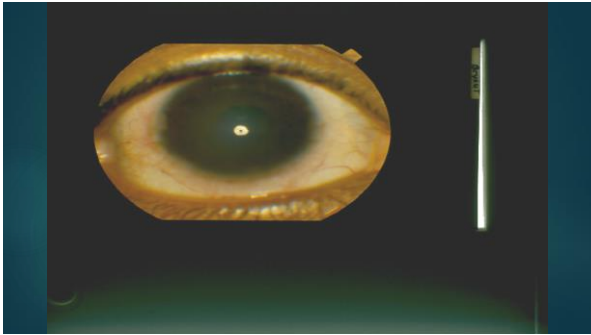
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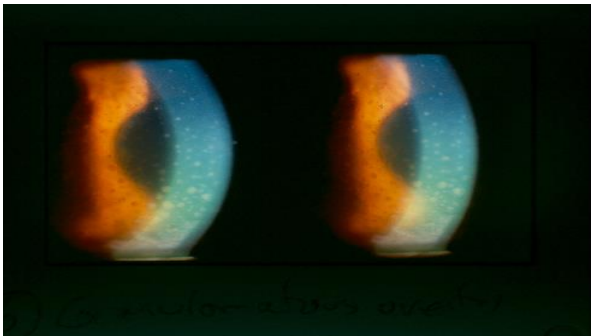
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### What is the Most proper diagnosis?

- ▶ 1. Posterior Uveitis
- ▶ 2. Acute Iritis
- ▶ 3. Granulomatous Uveitis
- ▶ 4. Recurrent Uveitis
- ▶ 5. Recalcitrant Uveitis
- ▶ 6. Chronic, granulomatous Uveitis

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### How would you treat this patient?

1. Politely refer her out
2. PF Q1H OS
3. PF Q2H OS
4. PF Q2H, Atropine QD OS
5. Durezol OS QID
6. Durezol OS Q2H

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### 1 week later

- ▶ Eye feels much better
- ▶ She is reading better
- ▶ VA OD 20/20, OS 20/50
- ▶ AC – tr cell, no flare
- ▶ IOP 18OD, 31 OS
- ▶ Blood work:
  - ▶ ESR – 36mm/hr
  - ▶ (+) RF
  - ▶ Elevated ACE
- ▶ Subsequent CXR – Lung Granuloma

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What would you do with the steroid?

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How would you treat the IOP?

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