

Case 1

- 49 yo man presents to clinic for a second opinion
- History of myopia and wearing glasses since he was young
- s/p LASIK in early 30s
- One month earlier, had a laser treatment

Exam

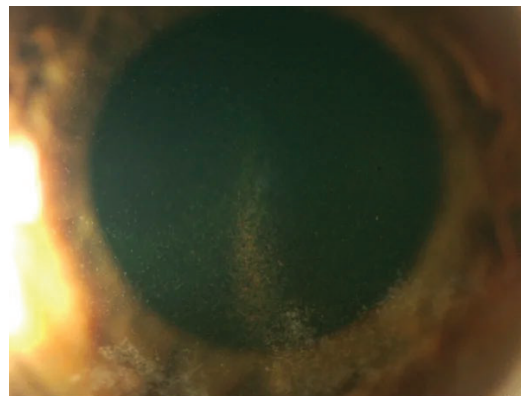
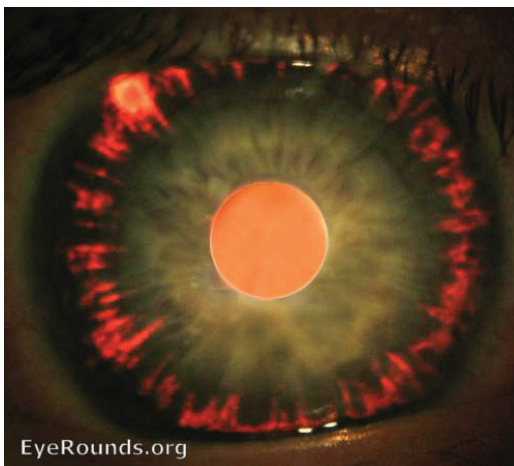
VAsc 20/20 ou

IOP: 18 in OD and 40 in OS

Pupils: no APD, round and reactive

EOM: full

CVF: overall full



Exam

Rest of anterior segment not remarkable

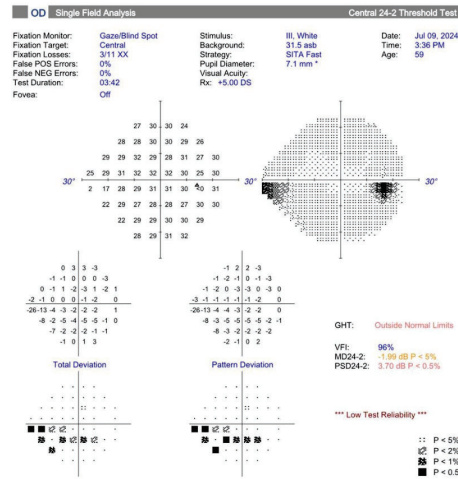
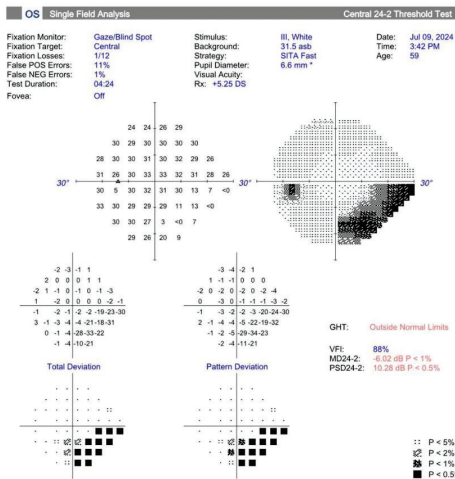
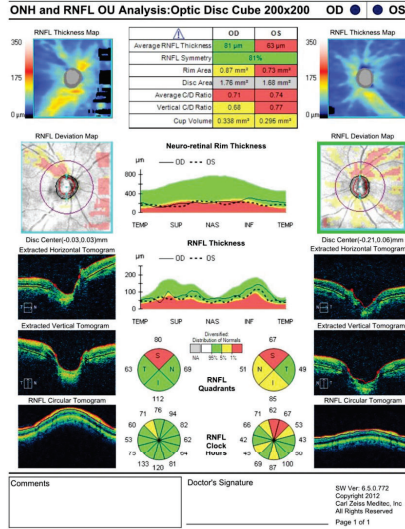
Gonio: ciliary body band with sampaolesi line

C/D: 0.6 OD and 0.6 OS with superior notch OU

Rest of DFE wnl

Drops: brimonidine BID OS, cosopt bid OU, latanoprost BID ou

CCT: 495//490



Outside records

- SLT about a month prior in left eye: 360 degree treatment and energy was 1mJ
- After SLT, had IOP spike, brimonidine was added with poor response.
- Prior to SLT, IOP in left eye had been 24

What would you do next?

GATT or OMNI



Case 2

- 67 yo white man referred by local optometrist due to high eye pressure
- Strong family history of glaucoma (mother, sister, maternal grandfather)
- Family history of macular degeneration (mother)
- No prior eye history or surgery

Exam

VAcc 20/20 OD and 20/25 OS

Mrx: -2.00 20/20 OD and -2.25 20/20 OS

IOP: 25 in OD and 25 in OS

Pupils: no APD, round and reactive

EOM: full

CVF: overall full

CCT: 483//518

Exam

Anterior segment: Trace NSC

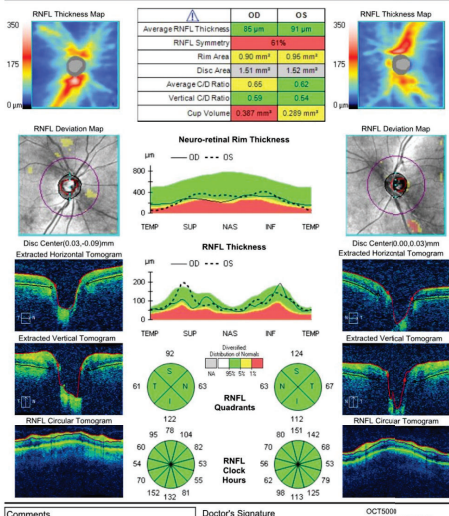
Gonio: ciliary body band ou

C/D: 0.65 OD and 0.6 OS

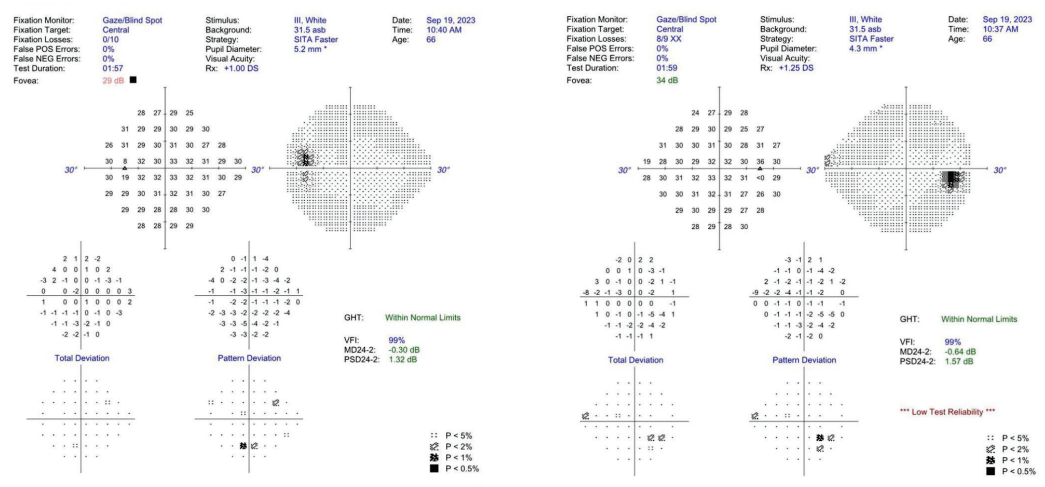
Rest of DFE wnl

Drops: none

ONH and RNFL OU Analysis: Optic Disc Cube 200x200 OD ● OS



Comments: Doctor's Signature: OCT5008



- What would you do?
 - Start a drop
 - SLT
 - Durysta

LIGHT Trial

- Laser in Glaucoma and Ocular Hypertension Trial
- Original paper was 3 years out
- Recent 6 year follow up published 9/2022
- SLT arm, 69.8% remained at or less than the target IOP without the need for medical or surgical treatment.
- More eyes in the drops arm exhibited disease progression (26.8% vs. 19.6%, respectively; $P = 0.006$)
- The SLT arm showed better Glaucoma Symptom Scale scores than the drops arm (83.6 ± 18.1 vs. 81.3 ± 17.3 , respectively)
- More cataract surgery required in drop arm vs SLT arm (95 compared with 57 eyes)

Case 3

- 60 yo Asian woman comes in as a referral for a possible laser treatment
- Worn glasses since she was young
- Recently started on a new eye drop- Lumigan qhs ou

Exam

VAcc 20/25 ou

Mrx: +2.25 in OD and +2.50 in OS

IOP: 24 in OD and 25 in OS

Pupils: no APD, round and reactive

EOM: full

CVF: overall full

CCT 560 ou

Exam

Anterior segment: shallower chamber, cornea clear, 1-2+ NSC

Gonio: ATM-closed but with dynamic gonioscopy, opens to PTM

C/D: 0.3 OD and 0.3 OS

Rest of DFE wnl

Drops: Lumigan qhs ou

Testing

- HVF full ou
- OCT RNFL in 90s and all green

Outside records

- Presented as new patient for glasses check
- Previous eye exam had been 5 years before- had just been using OTC reading glasses
- IOP at presentation was 32 ou- dilation was deferred
- Started on Lumigan- that visit was a month ago
- Given angle closure precautions

What would you do next

- LPI?
- Clear lens exchange?

EAGLE Trial

- Effectiveness of early lens extraction for the treatment of primary angle closure glaucoma
- Published October 2016
- Study looked at primary angle closure (IOP 30 mmHG or greater) and primary angle closure glaucoma
 - 419 participants
 - 155 PAC and 263 PACG
- Age 50 or older
- Patients with symptomatic cataract, advanced glaucoma (mean deviation worse than -15 dB or cup-to-disc ratio ≥ 0.9), or previous acute angle-closure attack or who had undergone previous laser or ocular surgery were excluded

EAGLE TRIAL

- 208 were assigned to clear-lens extraction and 211 to standard care
- The mean health status score assessed with the European Quality of Life-5 Dimensions questionnaire, was 0.052 higher (95% CI 0.015–0.088, $p=0.005$) and mean intraocular pressure (16.6 [SD 3.5] mm Hg) 1.18 mm Hg lower (95% CI -1.99 to -0.38 , $p=0.004$) after clear-lens extraction than after standard care.
- Also, it was more cost effective for clear lens exchange vs standard care

Case 4

- 60 yo woman presents after > 1 year lost to f/u due to pain and redness in her left eye
- No recent injury
- No history of uveitis
- Hx of glaucoma with hx of trabecultomy with MMC in both eyes

Exam

VAsc 20/30 OD and 20/60 OS

IOP: 10 in OD and 9 in OS

Pupils: +APD in OS, round and reactive OD

EOM: full

CVF: overall full in OD and constricted in OS



Exam

Conj/sclera: cystic bleb in OD- seidel negative; cystic purulent bleb in OS; seidel negative; 3+ injected in OS

Cornea: clear

Anterior chamber: deep and quiet in OD; 1+ cell/flare, no hypopyon

Iris: superior PIs

Lens: PSK

C/D: 0.8 OD and 0.99, pale OS

Rest of DFE wnl- no vitritis

Drops: latanoprost qhs ou

What to do next?

- Start antibiotics?- how often, which kind
- When to send to retina?
- How often would you see this patient?

Blebitis

- Stage 1: erythema around the bleb, bleb infiltrate
- Stage 2: anterior chamber inflammation
- Stage 3: hypopyon and/or intravitreal involvement

Treatment

- Stage 1 and 2:
 - topical fluoroquinolones or fortified topical or subconj antibiotics (usually hourly for topical drops)
 - Need to be seen daily
- Stage 3:
 - Vitreous tap and inject or vitrectomy
 - Poor prognosis