



**SALUS**  
UNIVERSITY

The Eye Institute

Pennsylvania College of Optometry

# The Focal Point

September 2022 Edition

## Stephen Shalamanda

Traditional Class of 2024

**Hometown:** Ashland, Pennsylvania

**Undergrad:** The Pennsylvania State University

**Major:** Biology

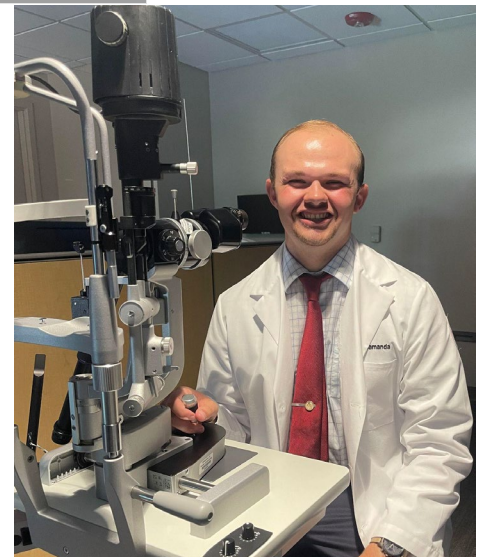
**Favorite Subject:** Anterior Segment Disease

**Optometry Goal:** Specialize in dry eye management/treatment

**Favorite food:** Hamburgers

**Hobby:** Kayaking

**Last Show I binged:** Stranger Things



## Bhawan Minhas

Class of 2013, Illinois College of Optometry

**Hometown:** Calgary, Alberta Canada

**Undergrad:** University of Calgary

**Major:** Biological Sciences; Minor Primatology

**Favorite Diagnostic Instrument:** Optical Coherence Tomography

**Hates:** tomatoes and tardiness

**Hobby:** hiking with my dog and boxing (not at the same time)

## Perils of the Lone Ranger: Ocular and Systemic Management of Proliferative Disease in a Monocular Patient



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# The Case

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## Demographics

69 year old, Black, male

**Chief complaint:** diabetic eye exam

## History of present illness

**Character/signs/symptoms:** Type II diabetic; unsure of last A1C and FBS

**Duration:** 17 years

**Exacerbations/remissions:** none

**Relationship to activity or function:** none

**Accompanying signs/symptoms:** being treated with oral medications and has had PRP and retinal repair OS for proliferative retinopathy

**Secondary complaints:** blurry vision

**Character/signs/symptoms:** notices vision is blurrier when wearing his glasses

**Location:** OU

**Frequency:** at near

**Exacerbations/remissions:** none

**Relationship to activity or function:** none

**Accompanying signs/symptoms:** itching

## Patient ocular history

Current glasses - 1 year old

LEE- 1.5 years prior

(+) CRVO OD x 15 years ago

(+) pthisis bulbi OD s/p CRVO ODx 15 years ago

(+) PRP and retinal repair s/p proliferative diabetic retinopathy with large preretinal heme and tractional retinal detachment OS x 6 years ago

(+) cataract surgery OS x 6 years ago

## Family ocular history

(-) Glaucoma

(-) AMD

(-) Blindness

## Patient medical history

Diabetes x 17 years

HTN x17 years

Heart disease - stent placed 18 years ago

Hypercholesterolemia

## The Case

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Vitamin B deficiency  
Diabetic neuropathy  
Coronary artery disease  
Sleep apnea  
Osteoarthritis  
Chronic anemia  
Mitral valve regurgitation  
Mild aortic regurgitation  
Stage IV chronic kidney disease

### **Medications taken by patient**

Albuterol sulfate HFA aerosol inhaler  
Aspirin 81 mg  
Azelastine nasal spray  
B complex-Vitamin B12 tablet  
Flomax  
Furosemide  
Gabapentin  
Glipizide  
Hydralazine  
Metoprolol tartrate  
Nifedipine extended release  
Rosuvastatin  
Vitamin C

### **Patient allergy history**

NKDA

### **Family medical history**

(-) DM, HTN

### **Review of systems**

**Constitutional/general health:** denies  
**Ear/nose/throat: Cardiovascular:** denies  
**Pulmonary: Endocrine:** denies  
**Dermatological:** denies  
**Gastrointestinal:** denies  
**Genitourinary:** denies  
**Musculoskeletal:** denies



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**Neurologic:** denies  
**Psychiatric:** denies  
**Immunologic:** seasonal allergies  
**Hematologic:** denies

## Mental status

**Orientation:** oriented to person, place, and time  
**Mood/Affect:** normal

## Clinical findings

| <b>BVA:</b> | <u>Distance</u> | <u>Near</u> |
|-------------|-----------------|-------------|
| OD:         | NLP             | NLP         |
| OS:         | 20/201          | 0.4/0.4 M   |

**Pupils:** OD- unable; OS- reactive, round

**EOMs:** OD- unable; OS- full/no restrictions

**Confrontation fields:** OD- unable; OS- slight temporal constriction on finger count

**Hirschberg:** CRXT; **Kappa:** nasal reflex/unable to fixate OD; central, steady fixation OS

| <b>Subjective refraction:</b> | <u>VA Distance</u> | <u>VA Near</u> |
|-------------------------------|--------------------|----------------|
| OD: Balance                   | NLP                | NLP            |
| OS: +1.50 sph                 | 20/20              | 20/20          |
| +2.50 ADD                     |                    |                |

## Slit lamp:

**lids/lashes/adnexa:** OD enophthalmos; OS unremarkable

**conjunctiva:** OD unremarkable; OS pinguecula nasal and temporal

**Cornea:** OD diffuse, dense opacification obscuring underlying structures with corneal neovascularization and 4+ haze; OS arcus

**anterior chamber:** OD unable to assess; OS deep and quiet

**Iris:** OD unable to view; OS flat and intact ∩ NVI

**lens:** OD unable to view; OS PCIOL centered, trace PCO haze

**Vitreous:** OD unable to view; OS syneresis

**IOPs/method:** 32 mmHg OD, 13 mmHg OS @ 9:38 AM by iCare tonometry

## Fundus OD:

**C/D:** unable to view

**macula:** unable to view

**posterior pole:** unable to view

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periphery: unable to view

**Fundus OS:**

C/D: 0.35/0.35

macula: flat and intact (-) DME, CSME, (+) ERM)(pseudohole

posterior pole: clear retina (-) hemes ,exudates, CWS, microaneurysms , IRMA, venous beading, or NVE

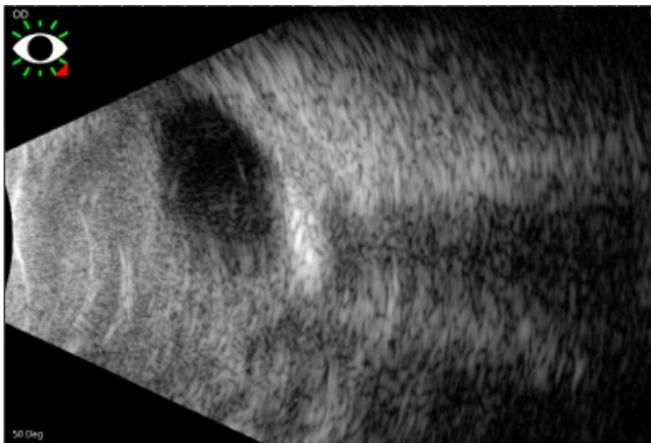
periphery: scattered PRP laser scarring 360 with few non clearing retinal hemes

**Blood pressure:** 164/88mmHg right arm sitting

**Case Images:**

**Image 1:** Bscan open eye screening performed: T12, T6, T9, T3, and LMAC

Findings: Phthisical eye, no mass noted

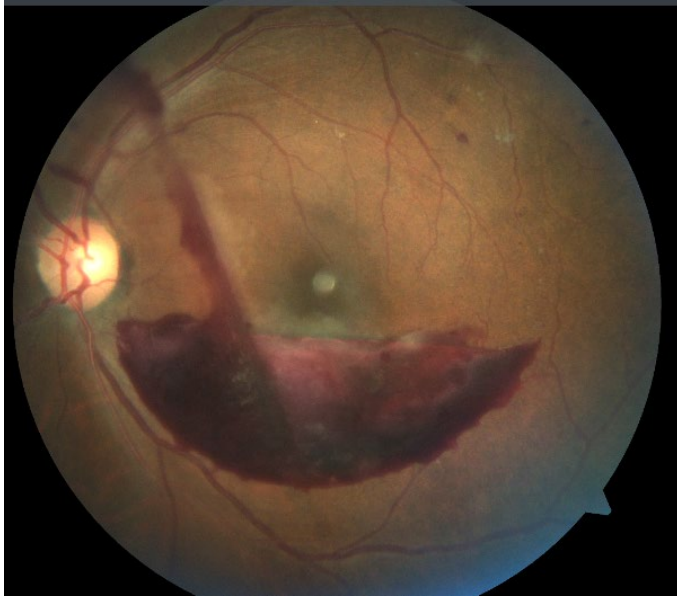


prior to urgent referral for PRP laser/retina repair

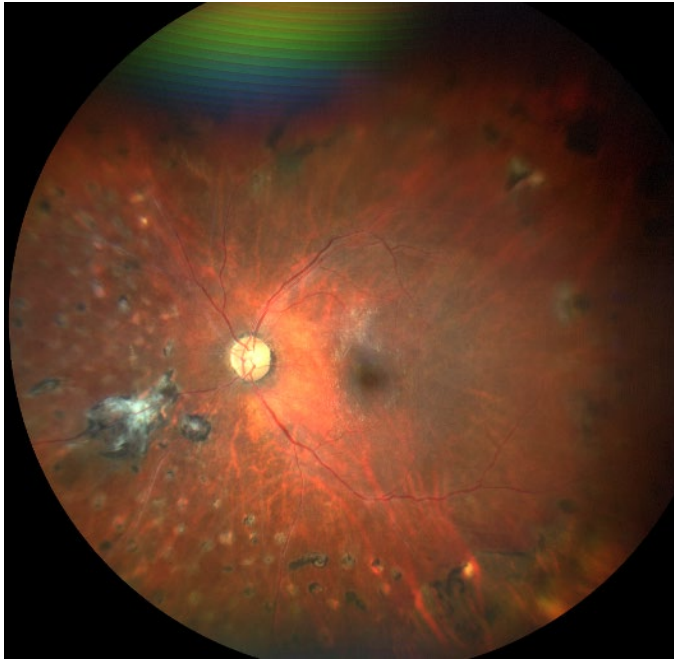
**Image 2:** Colored fundus photo OS directly

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**Image 3:** Colored fundus photo OS current status



### Case Management Summary

A1: Type 2 diabetes mellitus s/p PRP laser and retina repair OS for proliferative disease

-Last HBA1C and fasting blood sugar: unknown

-Baseline photos: updated today

P1: Pt educated on the importance of optimal metabolic control via diet/meds/exercise and regular PCP follow ups. Ed on importance of yearly dilated eye exams. Monitor in 1 year.

A2: Epiretinal membrane OS () pseudohole s/p retinal surgery/laser OS

-BCVA: 20/20

-expected given intraocular surgery/laser

P2: Pt educated on exam findings. Ed on the importance of yearly eye exams and monitoring on



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his own for changes in his vision OS given monocular status. Ed on Amsler grid. Monitor in 1 year.

A3: Atrophy of globe/Phthisis bulbi, right eye s/p central retinal vein occlusion OD

-Bscan performed today: unremarkable

P3: Pt educated on exam findings. Ed on the need for full time protective eyewear/polycarbonate lenses and yearly dilation. Ed to monitor for discomfort of pain OD and RTC ASAP. Monitor in 1 year.

A4: Balance lens OD, simple hyperopia OS w/ presbyopia

-BCVA: NLP OD, 20/20 OS

P4: Updated bifocal spec rx was released for full time wear with balanced lens OD. Pt educated on the importance of full time protective eyewear and polycarbonate lenses. Monitor in 1 year.

## Case Pearls

- Phthisis bulbi and other conditions causing opacifications of ocular structures need to be monitored yearly with Bscan examinations to rule out further complications including cancerous or other metastatic tumors.
- Additionally, phthisical eyes should be monitored for pain/inflammation to ensure that sympathetic ophthalmia does not jeopardize the contralateral eye.
- Being the patient is monocular, it is medically necessary to wear full time protective eye wear with polycarbonate lenses to limit the risk of traumatic injury to the only functional eye.
- A “balance” or “BAL” lens for a spectacle Rx allows for a patient with an eye with poor visual function to achieve good cosmesis without requiring specific ANSI standards to be followed by an optical.
- Bottom line: Being the patient is monocular, we are more concerned about systemic and/or ocular complications that could put the patient’s vision in jeopardy and cause loss of autonomy. Yearly eye exams along with follow up care with the patient's PCP is crucial in ensuring the best possible outcomes.