

Isabelle Khorosh

Traditional Class of 2025

Hometown: Avon, CT

Undergrad: Nova Southeastern University

Major: Biology/Psychology and Business minor

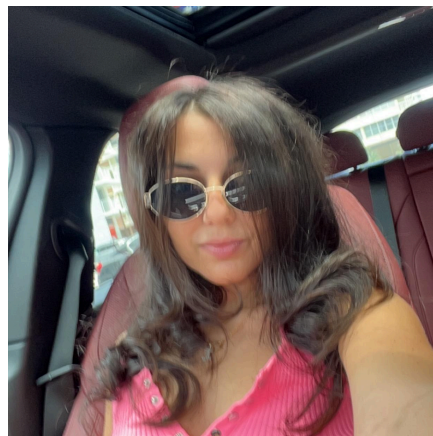
Favorite Animal: Panda

Optometry Goal: To have every patient leave happier than they walked in

Favorite food: Sushi

Hobby: Painting

Last Show I binged: Bridgerton



Mary Fantino

Traditional Class of 2026

Hometown: Nanuet, New York

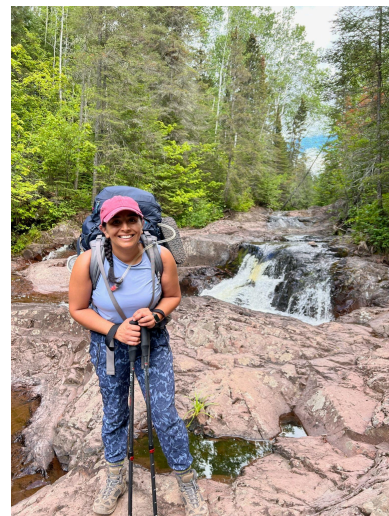
Undergrad: Quinnipiac University

Major: Health Science Studies

Favorite Sport: Baseball and Hockey

Optometry Goal: Work at the VA Hospital

Favorite singer: Morgan Wallen



Bhawan Minhas, OD, FAAO

Illinois College of Optometry 2013; Pennsylvania College of Optometry Residency in Primary Care and Ocular Disease 2014

Hometown: Calgary, Alberta Canada

Undergrad: University of Calgary

Major: Biological Sciences; Minor Primatology

Weird talent: I can make alouatta pigra (Howler monkey) noises from my time in the Belize rainforest

Next trip: hiking the next section of the Superior Hiking Trail in MN

Thrown For A Loop: Incidental Finding Congenital Prepapillary Vascular Loop



SALUS AT
DREXEL UNIVERSITY

The Eye Institute

Demographics

25 yo Black male

Chief complaint: blurry vision

History of present illness

Character/signs/symptoms: diffuse blur

Location: OU

Severity: mild

Nature of onset: gradual

Duration: 3 years

Frequency: without contact lenses

Exacerbations/remissions: broke glasses and has been wearing contact lenses

Relationship to activity or function: N/A

Accompanying signs/symptoms: needs contact lens re-evaluation

Patient ocular history: (-) eye surgery (-) eye injury (-) glaucoma (+) contact lens

Family ocular history: cousin: (+) glaucoma

Patient medical history (+) seasonal allergies, (+) eczema, (-) hypertension, (-) DM, (-) hyperlipidemia

Medications taken by patient naproxen 500 mg tablet, Zyrtec 10 mg tablet, and chlorhexidine gluconate 0.12%

Patient allergy history: seasonal

Family medical history: non-contributory

Review of systems

Constitutional/general health: denies

Ear/nose/throat: Cardiovascular: denies

Pulmonary: denies

Endocrine: denies

Dermatological: denies

Gastrointestinal: denies

Genitourinary: denies

Musculoskeletal: denies

Neurologic: denies

Psychiatric: denies

Immunologic: denies

Hematologic: denies

Mental status

Orientation: oriented to person, place, and time

Mood/Affect: normal

Clinical findings

BVA:	<u>Distance</u>	<u>Near</u>
OD:	20/20-	0.4/0.4
OS:	20/20	0.4/0.4

Pupils: PERRL (-) APD OU

EOMs: full with no restrictions OU

Confrontation fields: full to finger count OU

Hirschberg: Symmetric

Subjective refraction: VA Distance VA Near
OD: -3.00-1.25 x 090 20/20 0.4/0.4
OS: -3.00-1.23 x 095 20/20 0.4/0.4

Contact Lens evaluation:
Biofinity Toric 8.7/14.5 OU
OD: -2.50-1.25 x 090 20/20
OS: -2.50-1.25 x 090 20/20

Slit lamp:

lids/lashes/adnexa: clear lids and lashes OU
conjunctiva: mild papillae superior palpebral conj OU
cornea: circumlimbal melanosis OU
anterior chamber: deep and quiet OU VH 4 T and N OU
Iris: flat and intact OU
lens: clear lens, capsule, and nucleus OU
vitreous: clear and quiet OU

IOPs/method: 14/14 mmHg via Goldmann

Fundus OD:

ONH: perfused, healthy, distinct with congenital prepapillary vascular loop extending into vitreous space (**see Image 2**)
C/D: 0.55/0.55
macula: flat and intact (+) FR
posterior pole: unremarkable with normal course & caliber of vasculature
periphery: flat and intact 360 (-) breaks or RDs; WsP inf temporal

Fundus OS:

ONH: perfused, healthy, distinct
C/D: 0.50/0.50
macula: flat and intact (+) FR
posterior pole: unremarkable with normal course & caliber of vasculature
periphery: flat and intact 360 (-) breaks or RDs; WsP inf temporal and inf nasal

Blood pressure: 130/85 mmHg RAS automatic cuff

Case Images:

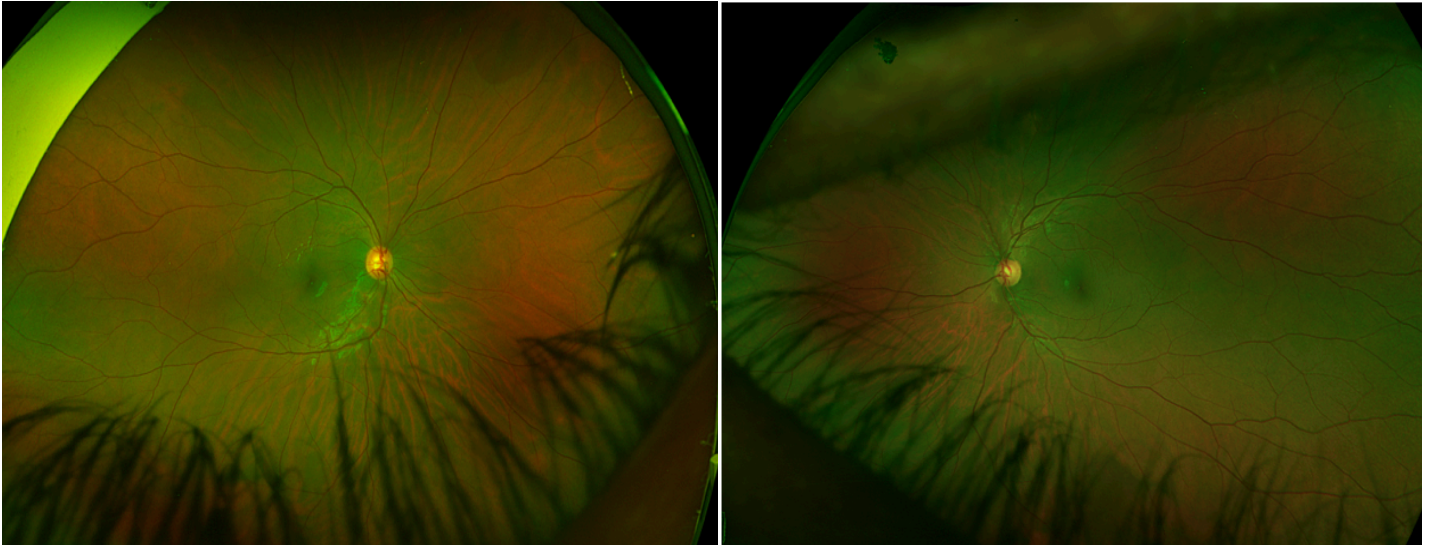


Image 1: Colored Optos Image of the right and left eye, respectively. Note the normal appearance of the posterior pole and general vasculature in both photographs and the artifact created by the eyelashes inferiorly OU.

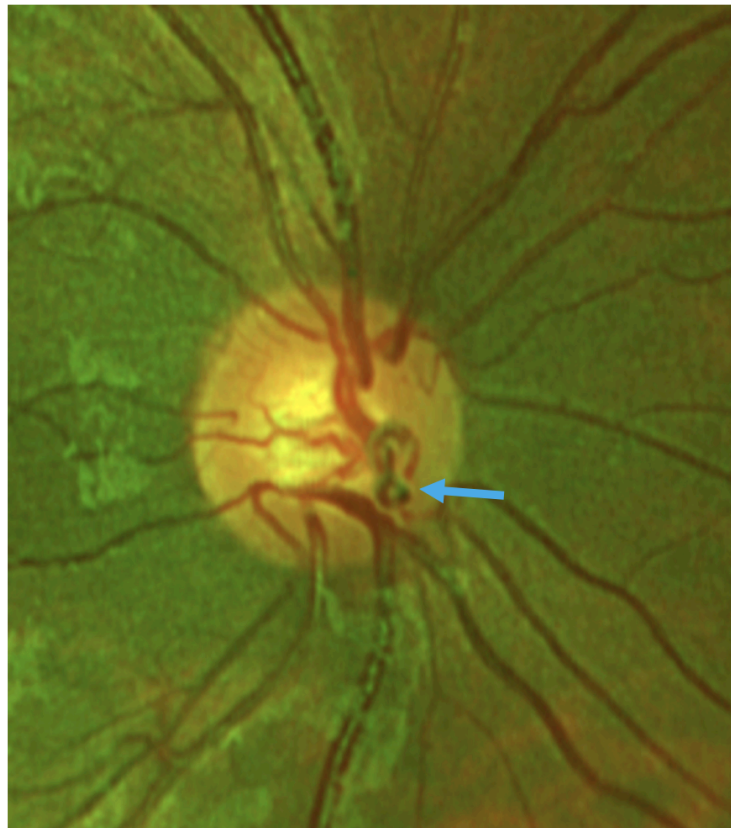


Image 2: Colored Clarus Fundus Photo of the right optic nerve. Of note is the pre-papillary vascular loop on the nasal aspect of the optic nerve head highlighted by the blue arrow.

Case Management Summary

A1: Myopia, bilateral, chronic (H52.13)

- a) Refraction revealed compound myopic astigmatism OU
BCVA: 20/20 OD, 20/20 OS
- b) Contact lens re-evaluation today: Biofinity Toric Contact Lenses
(8.7/14.5/OD: -2.50-1.25x080 and OS: -2.50-1.25x090)
- BCVA: 20/20 OD, 20/20 OS

P1: Updated Spec Rx and Final Rx released for Biofinity Toric contact lenses. Good fit, VA and comfort. Patient was educated on the wearing schedule (1 month), CL cleaning/hygiene and care. Will use Optifree solution. Ed no to sleep, swim or shower in lenses. Ed to D/C wear and RTC ASAP if any changes in vision, pain, redness or discharge are experienced. RTC 1 year CEE, sooner if needed

A2: Encounter for fit/adjust of spectacles and contact lenses, chronic (Z46.0)

See AP for H52.13

P2: See AP for H52.13

A3: Other disorders of optic disc of right eye, chronic (H47.391)

Examination revealed Type IV congenital peripapillary vascular loop OD
-Fundus photos today for documentation

P3: Patient was ed on exam findings. Ed on signs/symptoms of changes to congenital lesion with age (flashes, floaters, curtain veiling) and to RTC ASAP if occur. Ed on importance of yearly dilation. Need ONH OCT at next visit to rule/out vitreous traction on loop. Return to clinic 1 year comprehensive eye exam (CEE), sooner if needed.

A4: Other chronic allergic conjunctivitis, symptomatic (H10.45)

Examination revealed allergic conjunctivitis OU
-Patient symptomatic of mild itching

P4: Patient was ed on exam findings. Ed on OTC options for ophthalmic anti-allergy drops including Zaditor BID OU, Pataday QD OU, or Pazeo QD OU. Monitor 1 year.

Case Pearls

- Congenital peripapillary vascular loop (CPVL) is an anomaly of the optic disc that presents as an elevated and twisted bundle of vessels which can be either from the central retinal artery or venule that projects into the vitreous from the optic nerve head.
- It is rare with estimated incidence ranging from one in 2,100 to one in 9,000 eyes.¹
- CPVL have a rare association with branch retinal artery occlusion, amaurosis fugax, retinal microaneurysm, recurrent vitreous hemorrhage, and subretinal hemorrhage.
- The finding is usually asymptomatic, unilateral, and congenital in nature with the majority of CPVLs being arterial in origin.¹
- CPVL should be differentiated from opticiliary collateral vessels or neovascularization of the optic nerve which are seen in non-congenital vascular pathologies.

- There are six morphologic types of CPVL that are based on location, loop elevation, loop shape, loop covering, and vitreo-retinal traction:¹
 - Type I: flat central single intraretinal loop or twist
 - Type II: flat central intraretinal loop or twist associated with generalized tortuosity of retinal vasculature
 - Type III: flat radial small loops
 - Type IV: vitreous loop in the figure 8
 - Type V: vitreous loop corkscrew shape with fibrotic sheath
 - Type VI: any loop with vitreo-papillary traction demonstrated by OCT
- OCT can be helpful in determining if vitreous traction is present and closer monitoring is warranted.
 - CPVLs with active traction may be at higher risk of vitreous hemorrhage or symptomatic posterior vitreous detachments.

References

1. Mansour AM, Kozak I, Saatci AO, Ascaso FJ, Broc L, Battaglia M, Olivier N, Gili P, Chhablani J, Hedges TR, Honrubia A, Gutierrez L, Panozzo G, Català J, Díaz J, Carreras E, Kadayifcilar S, Al Kahtani ES, Uwaydat SH, Lima LH, Mansour HA, Khan HA, Aaberg TM Jr, Bovino JA, Hunyor AP. Prepapillary vascular loop-a new classification. *Eye (Lond)*. 2021 Feb;35(2):425-432. doi: 10.1038/s41433-020-0859-3. Epub 2020 Apr 14. PMID: 32291404; PMCID: PMC8027617.