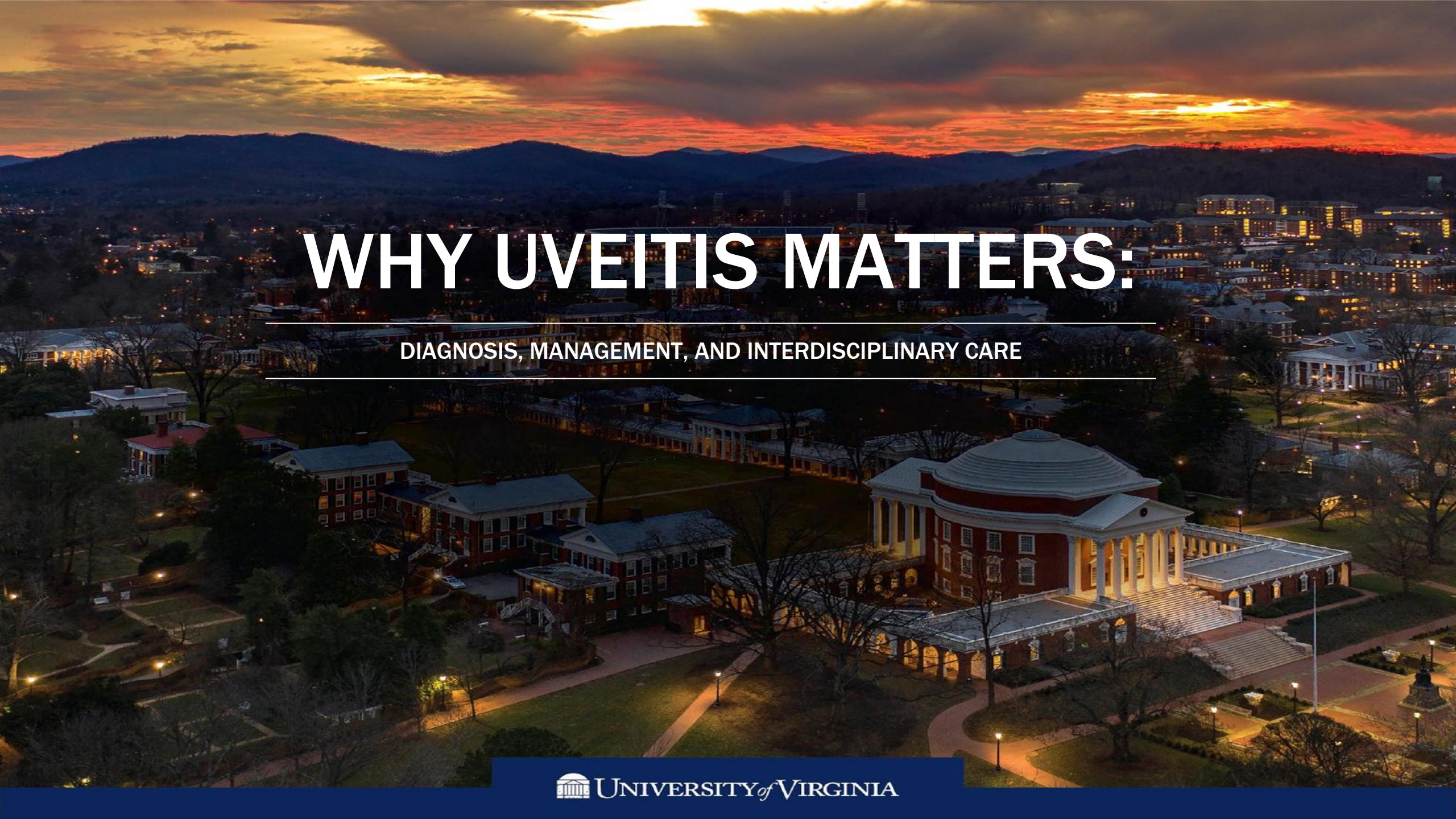


An aerial photograph of the University of Virginia campus at sunset. The sky is filled with vibrant orange and red clouds, with the sun low on the horizon. The campus is illuminated by warm lights, and the surrounding mountains are visible in the background. The text "WHY UVEITIS MATTERS:" is overlaid in large white letters.

WHY UVEITIS MATTERS:

DIAGNOSIS, MANAGEMENT, AND INTERDISCIPLINARY CARE



UNIVERSITY of VIRGINIA

FINANCIAL DISCLOSURES

- EyePoint (C)
- Bausch and Lomb (C)
- Alimera Sciences (C)

Learning Objectives



Understand the ophthalmology-specific tools used to diagnose ocular inflammatory disease



Recognize the hallmark ophthalmic exam findings of specific inflammatory eye conditions



Discuss local steroid options and where they may/may not be appropriate

Challenges of uveitis

1) The eye is an immune-privileged site

2) What is happening in the eye does not always line up with other sites

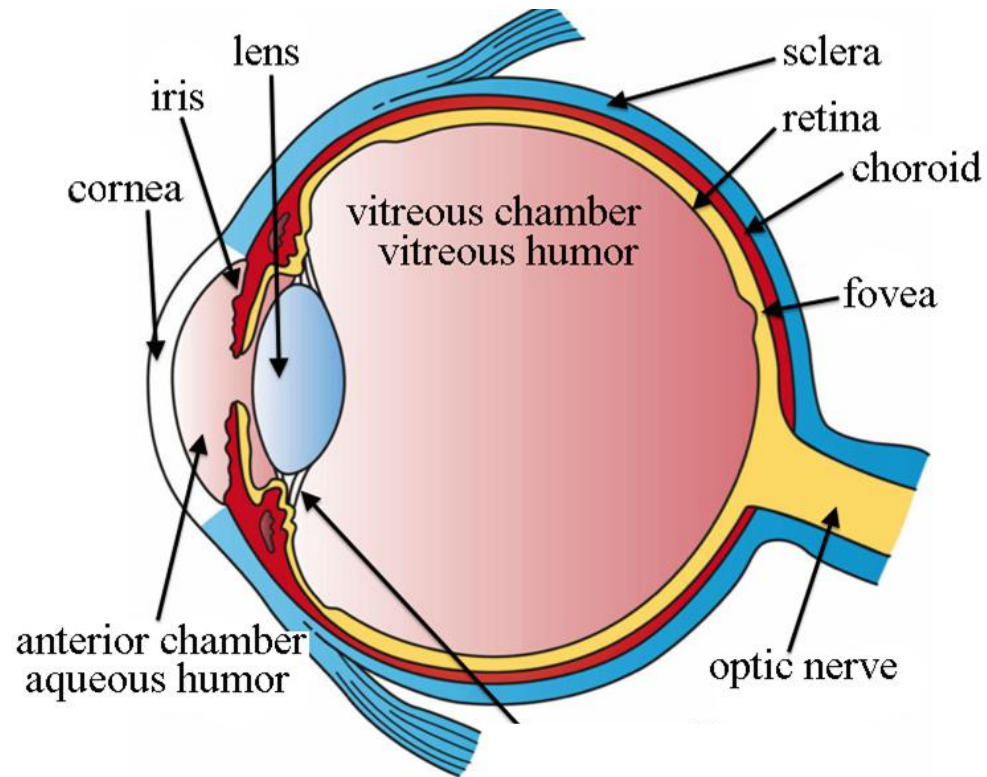
3) Our language is confusing

SLE	
EXT	: wnl ou
L/L	: mild meibominitis ou
C/S	: 1+inj. od, wnl os
K	: see drawing
A/C	: deep and quite ou
Iris	: flat, round, no NVI ou
Lens	: PCIOL od, 2+ NSC os
Vit	: PVD ou, no cells ou



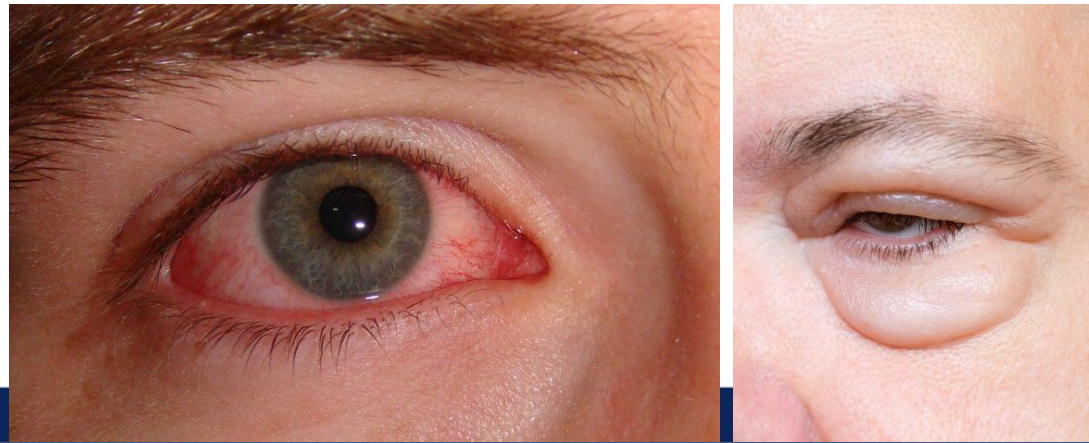
4) We see things that cannot be examined with the naked eye

The Eye Exam



- Intraocular structures can only be visualized in detail with the use of specialized equipment (i.e., a slit lamp)
- Some findings can be seen without a slit lamp:
 - Injection (redness)
 - Swelling of the eyelids/difficulty with eye movements

...but, these findings can be nonspecific:



Decoding the eye exam

- OD = right eye
 - OS = left eye
 - CSM (for Peds) = central/steady/maintained
 - EOM = extraocular movements
 - ET/XT = esotropia/exotropia (strabismus)
 - IOP = intraocular pressure
-
- DFE: dilated fundus exam
 - SLE: slit lamp exam



Findings that can be seen 'with the naked eye'



Differential:

- Subconjunctival hemorrhage
- Conjunctivitis
- Episcleritis
- Scleritis*
- Anterior scleritis
- Anterior uveitis
- Acute angle closure glaucoma
- Corneal abrasion
- Corneal ulcer
- Endophthalmitis



Differential:

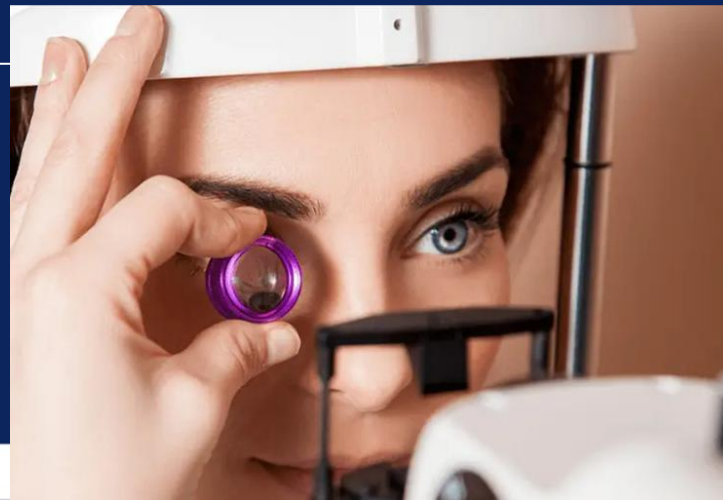
- Allergy/contact dermatitis
- Periorificial dermatitis
- Preseptal cellulitis
- Orbital cellulitis
- Orbital inflammatory syndrome*
- Thyroid eye disease
- Dacryocystitis/dacryoadenitis



Differential:

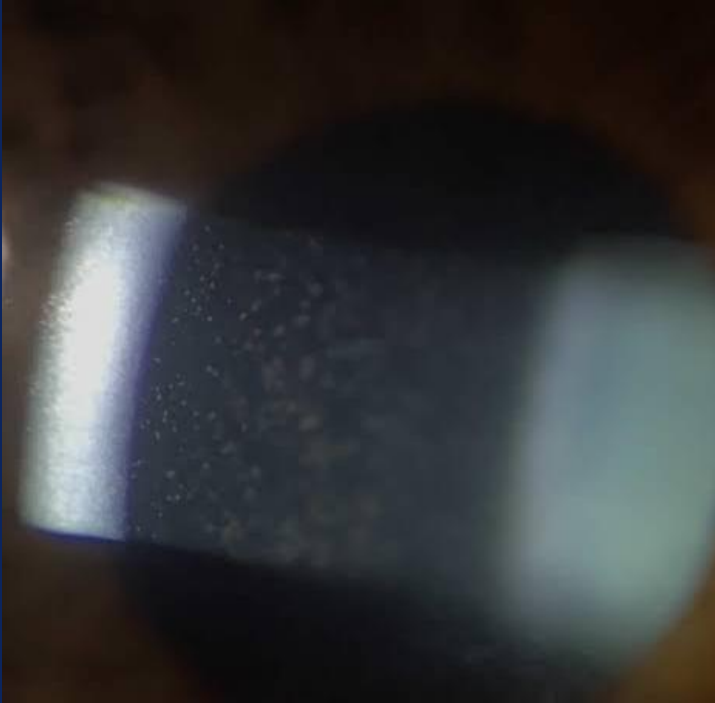
- Synechiae (from inflammation)
- Peaked pupil (traumatic, post-surgical)
- Persistent pupillary membrane (benign)

The Ophthalmic Assessment



- Allows visualization of microscopic structures
- Means of assessing disease activity

The Ophthalmic Assessment



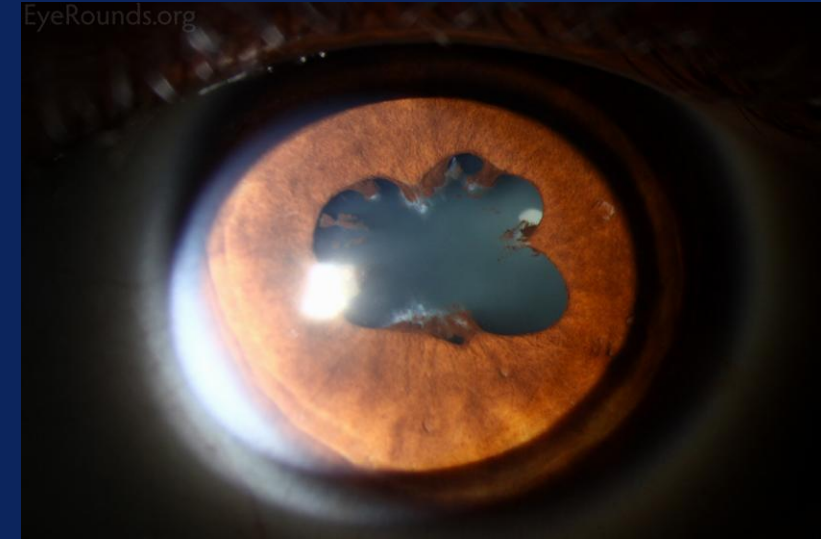
Anterior Chamber Cells

- quantitative, measure of disease activity



Anterior Chamber Flare

- qualitative, may indicate prior activity



Posterior Synechiae

- qualitative, may indicate prior activity

You typically need a slit lamp/BIO to diagnose:

Iritis/iridocyclitis

Peripheral ulcerative keratitis

Sclerokeratitis

Keratouveitis

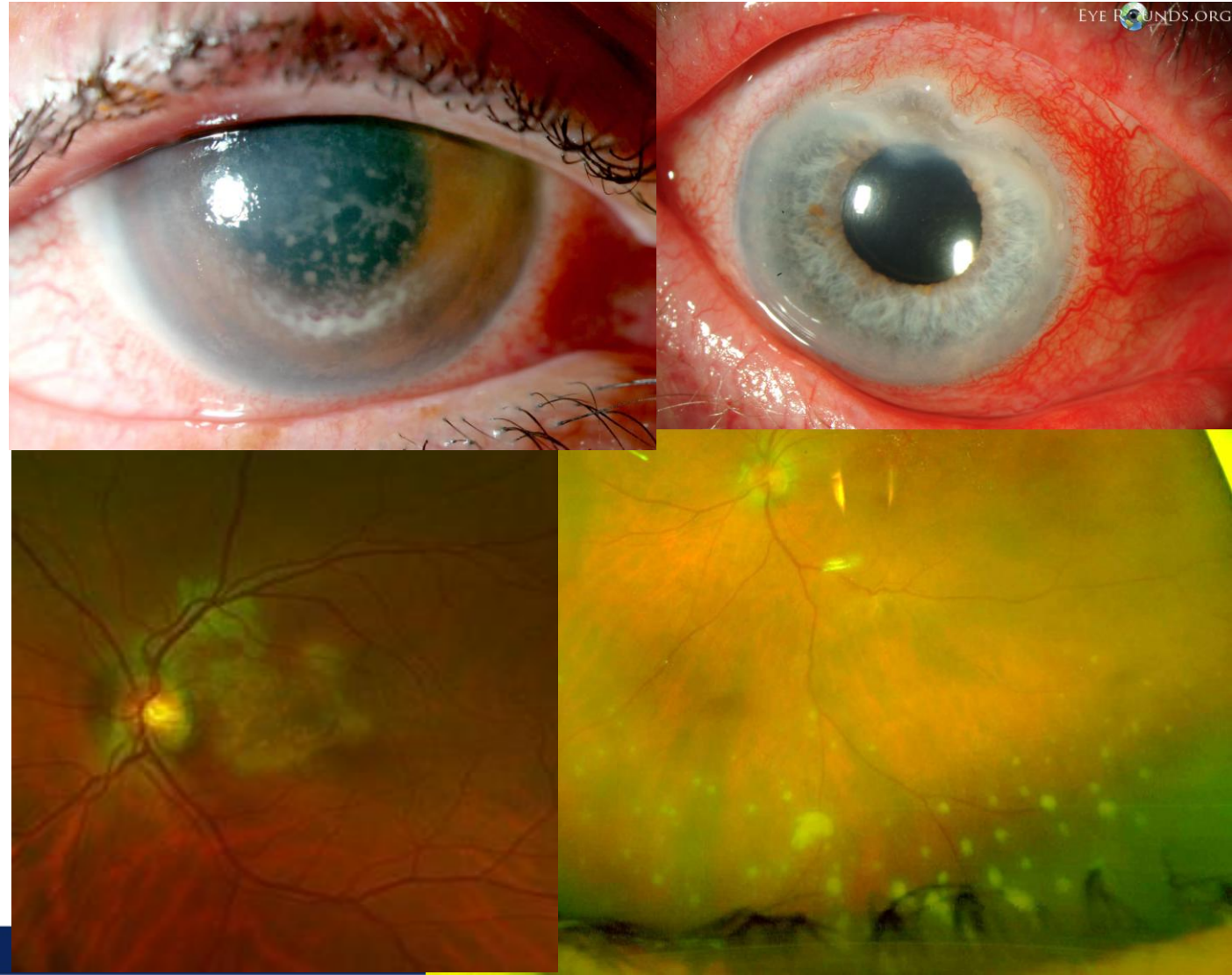
Intermediate Uveitis

Posterior Uveitis

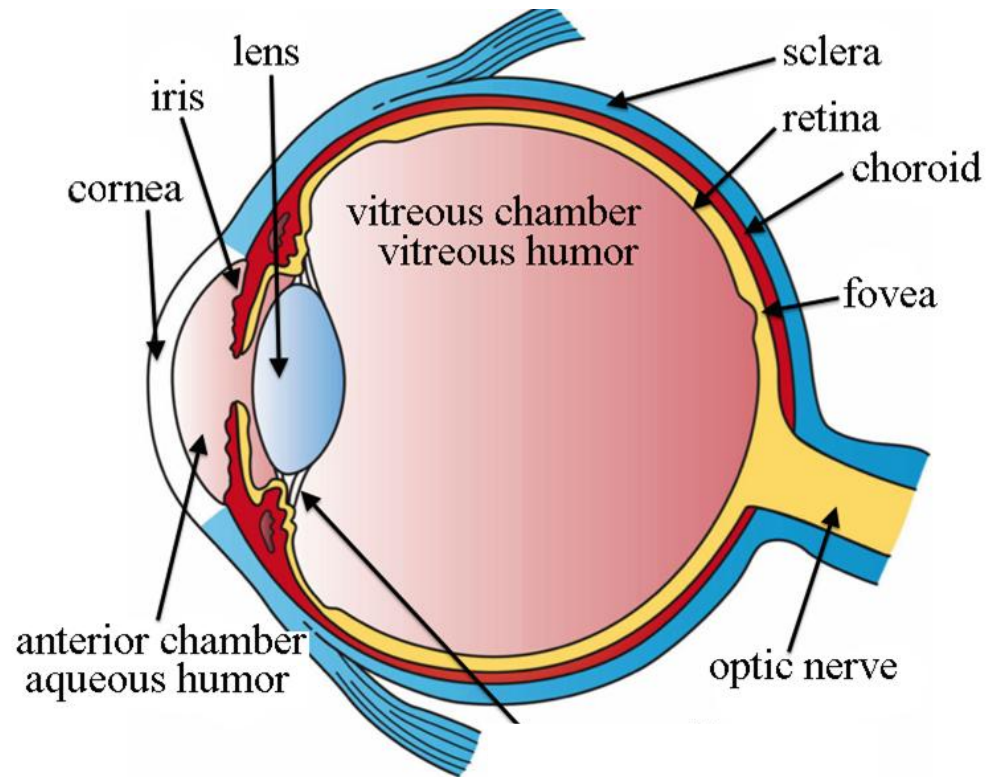
Chorioretinitis

Exudative Retinal Detachment

...among others



Ocular Imaging

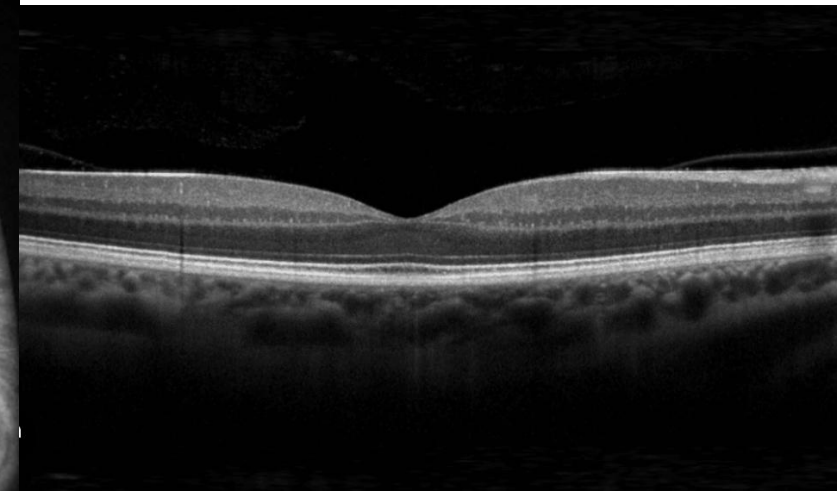
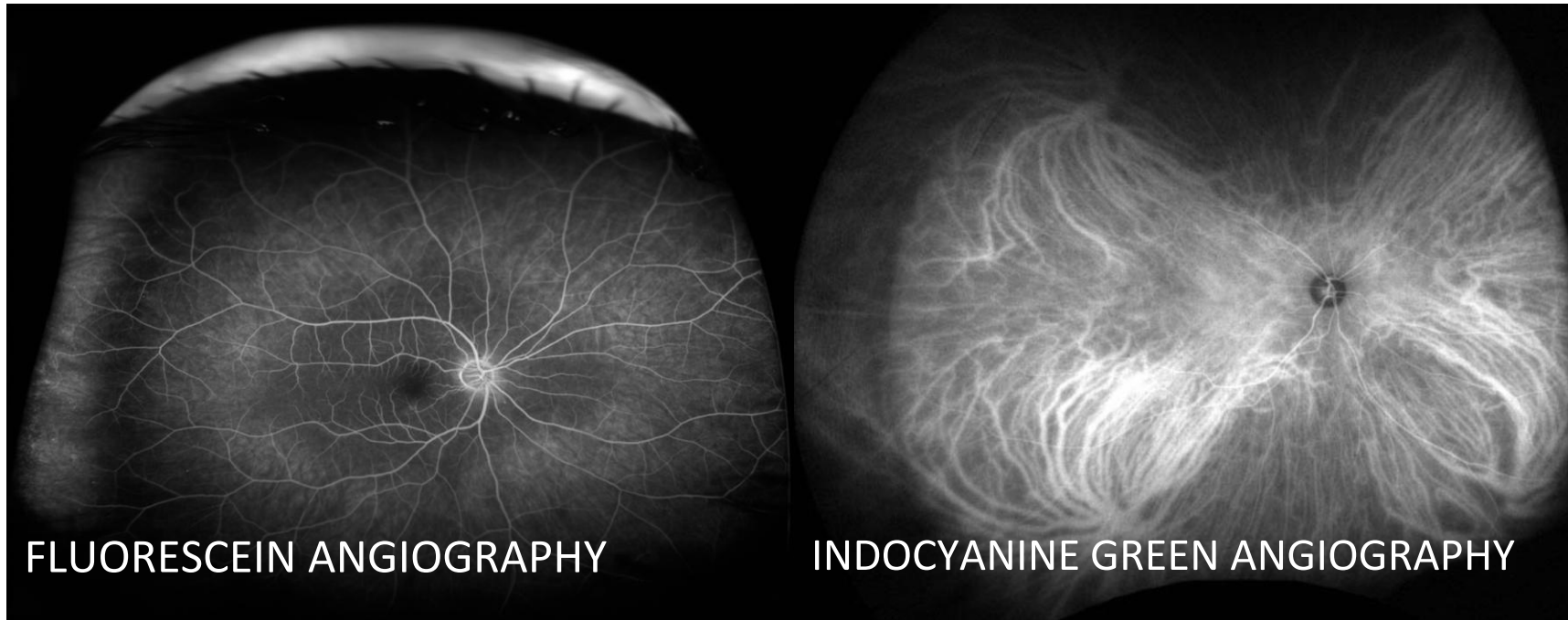


Specific imaging modalities can capture microscopic areas in the eye:

- Retina and retinal vasculature
- Choroidal vasculature

Introduction to Retinal (Multimodal) Imaging

NORMAL EYE IMAGING:



OPTICAL COHERENCE
TOMOGRAPHY

You typically need multimodal ophthalmic imaging to diagnose:

Birdshot chorioretinopathy

Vogt-Koyanagi-Harada Disease

Retinal “Vasculitis” ***

Placoid Chorioretinopathy

Serpiginous Chorioretinitis

Autoimmune Retinopathy

Multiple Evanescent White Dot Syndrome

and the list goes on...



THE UVEITIS REFERRAL



What Freak

- A referral from a unfamiliar termi
- A referral from an condition you've systemic manifes
- A referral from an asking for initiatio
- A referral from an



UVEITIC MACULAR
EDEMA

STEROID
RESPONSE

RETINAL
VASCULITIS

DISC EDEMA

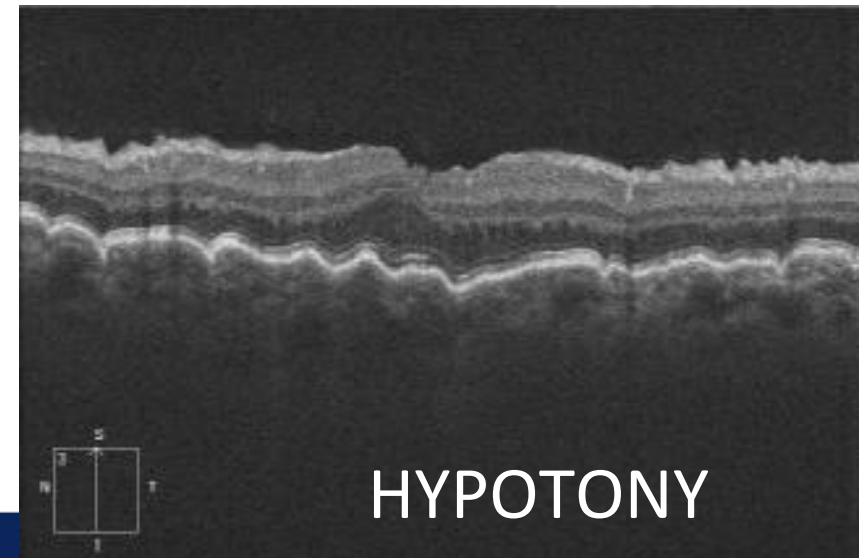
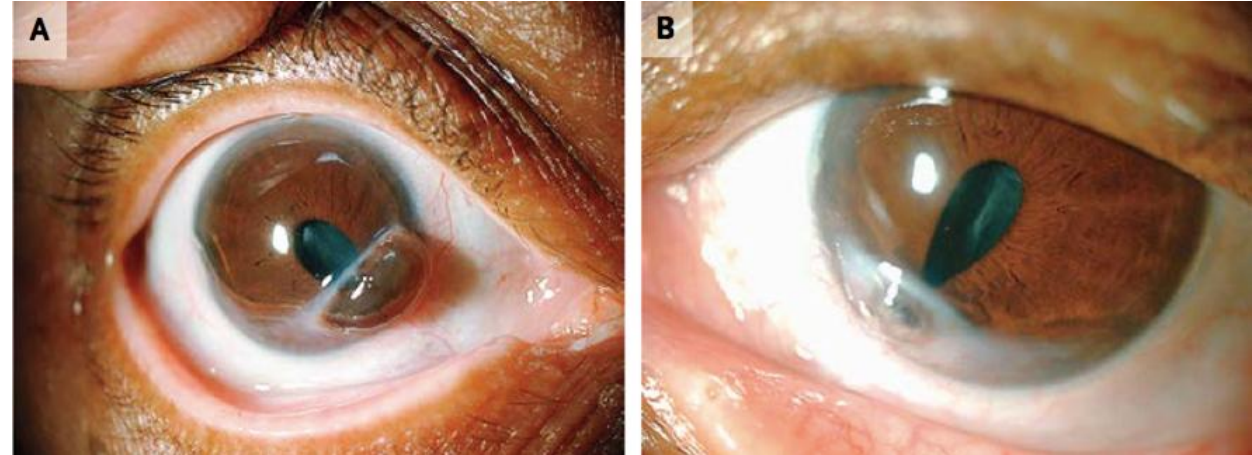
What Freaks Us Out

- Vision-threatening conditions
- Rapidly progressive and/or destructive conditions
- Complications of uveitis

WHY?

Because the eye is unforgiving

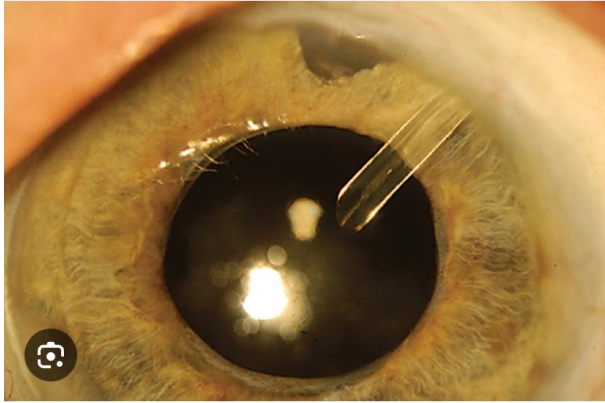
Corneal melt (from PUK)



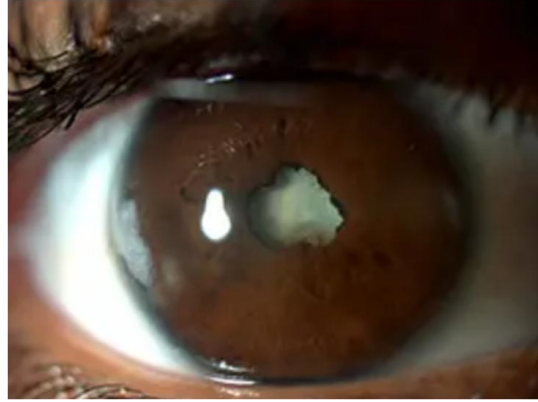
HYPOTONY

Complications of Uncontrolled Uveitis

UVEITIC GLAUCOMA



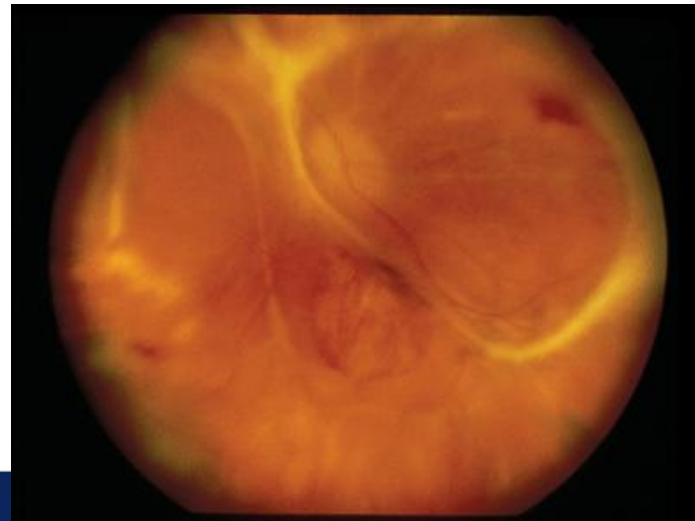
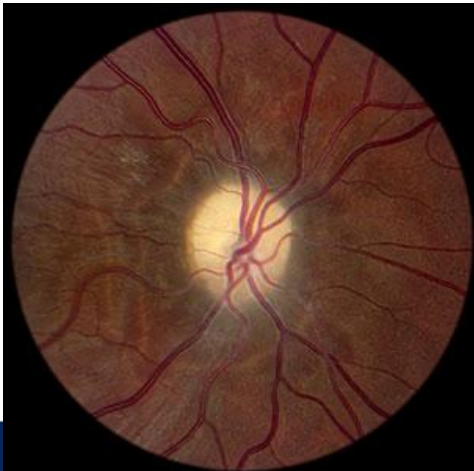
UVEITIC CATARACT



PHTHISIS BULBI



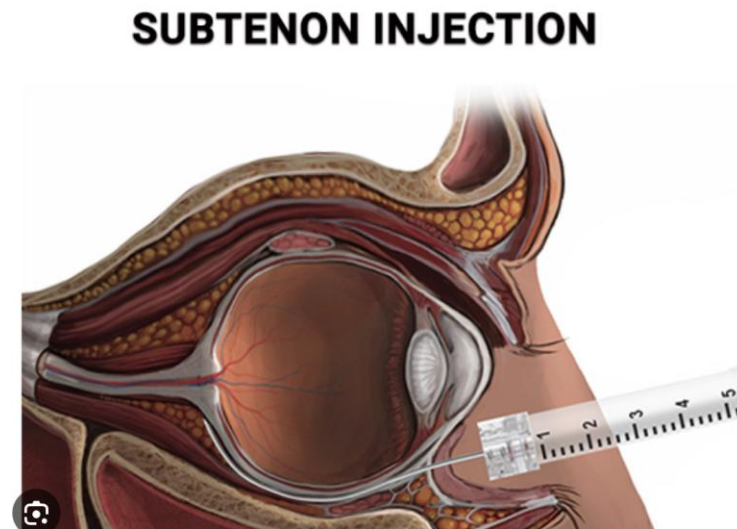
OPTIC NEUROPATHY



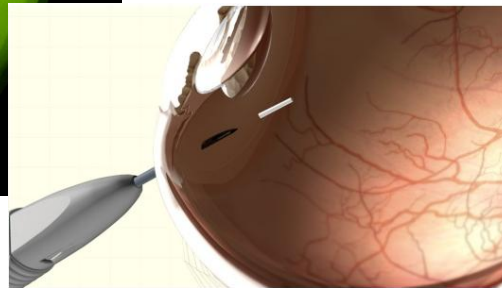
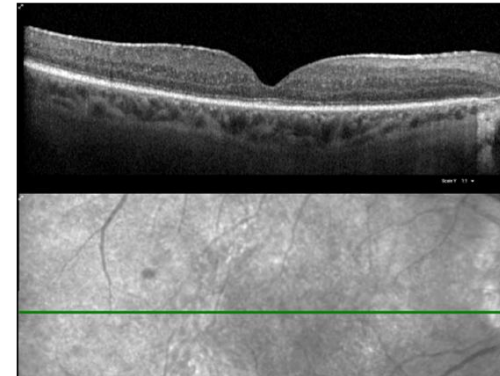
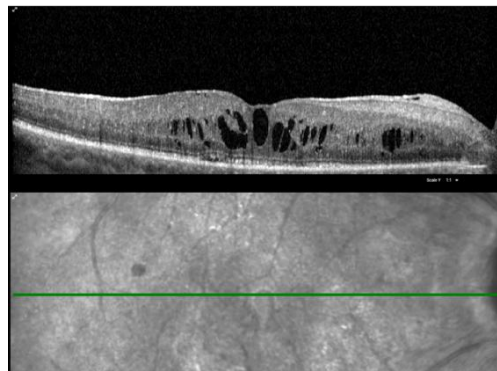
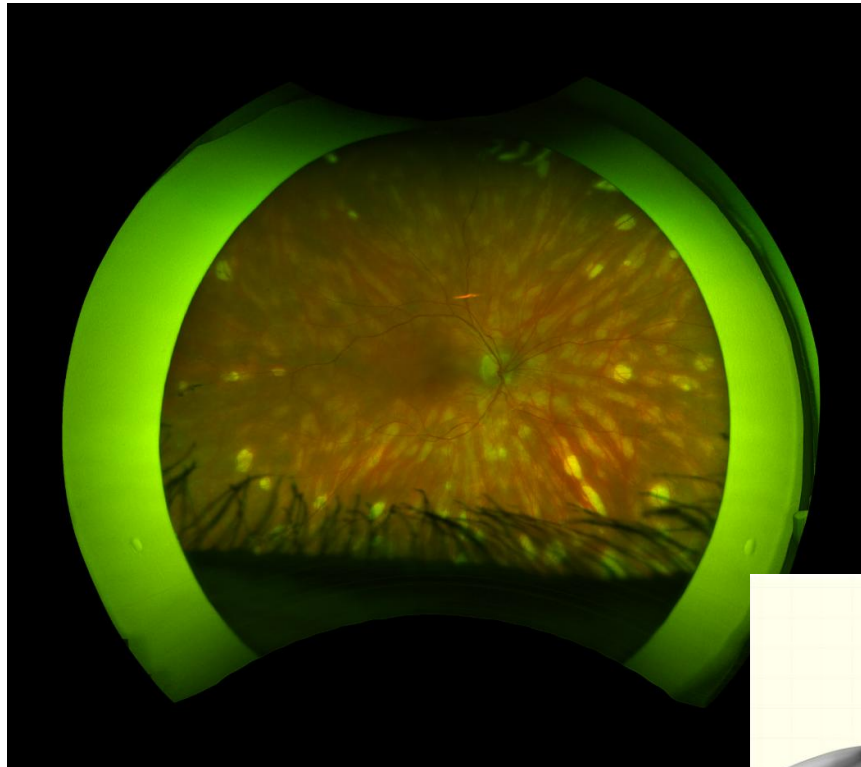
CHRONIC
RETINAL
DETACHMENT

Reasons not to see uveitis referrals:

- 1) There are lots of local therapeutic options for uveitis (particularly for those weird 'eye only' conditions)

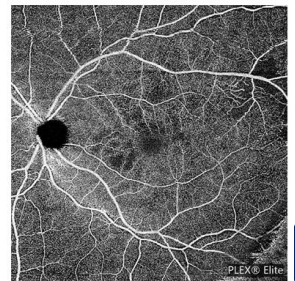
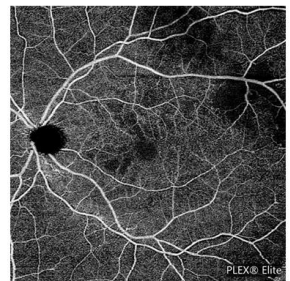
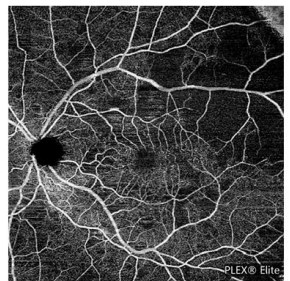
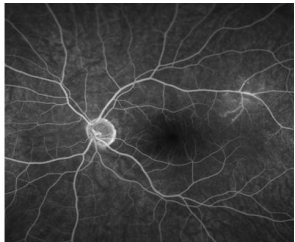
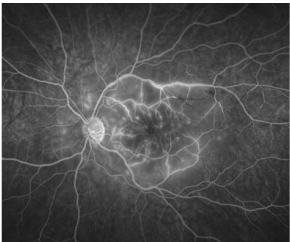
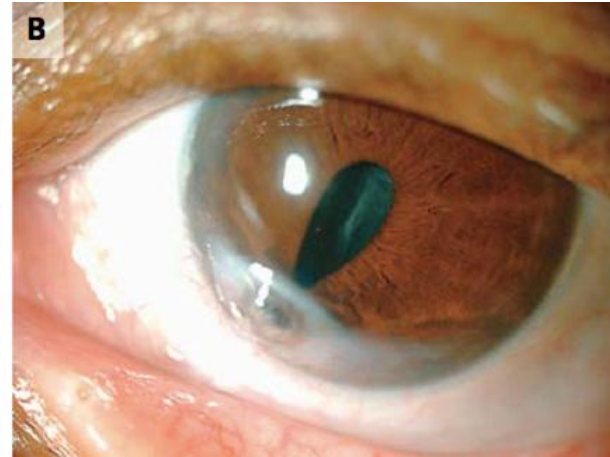


Example: Birdshot Chorioretinopathy



Eye conditions requiring systemic steroid

All of these
required IV pulse
dose steroids
initially



Reasons not to see uveitis referrals:

- 1) There are lots of local therapeutic options for uveitis (particularly for those weird 'eye only' conditions)
- 2) Even if the uveitis is from a systemic disease, there are many times where there is no clear evidence of systemic disease activity

Example: Lupus chorioretinopathy...without the lupus?

44 yo F with history of systemic lupus dx in 2004

- presented with fatigue/fevers/arthritis, dx with class III/V lupus nephritis on kidney biopsy in 2005
- treated with high dose steroids, HCQ, MMF - off IMT x several years due to remission
- 2022: began to develop blurred vision - unclear etiology, multiple eye exams showed areas of prior vascular occlusion but no active vascular leakage on fluorescein testing

Example: Lupus chorioretinopathy...without the lupus?

Fluorescein Angiography Left Eye (right photo = 4/27/26, left photo = 1/26/23)
At 30 seconds



- Rapid deterioration in vision 4/2026
- Fluorescein testing showed choroidal and retinal vascular flow abnormalities
- repeat systemic testing showed no evidence of systemic lupus
- improved with IVSM/oral steroid, now on myfortic and stable

At 1 minute:



Example: Lupus chorioretinopathy...without the lupus?

Unilateral vaso-occlusive retinopathy in quiescent condition of systemic lupus erythematosus

S Hayasaka, N Furuse, M Kanamori, T Setogawa

PMID: 2753745

Choroiditis in systemic lupus erythematosus: systemic steroid therapy and focal laser treatment

Masahiko Shimura ¹, Yuko Tatehana, Kanako Yasuda, Shin ichiro Saito, Takeshi Sasaki, Makoto Tamai

Affiliations + expand

PMID: 12782171 DOI: [10.1016/s0021-5155\(03\)00012-1](https://doi.org/10.1016/s0021-5155(03)00012-1)

Abstract

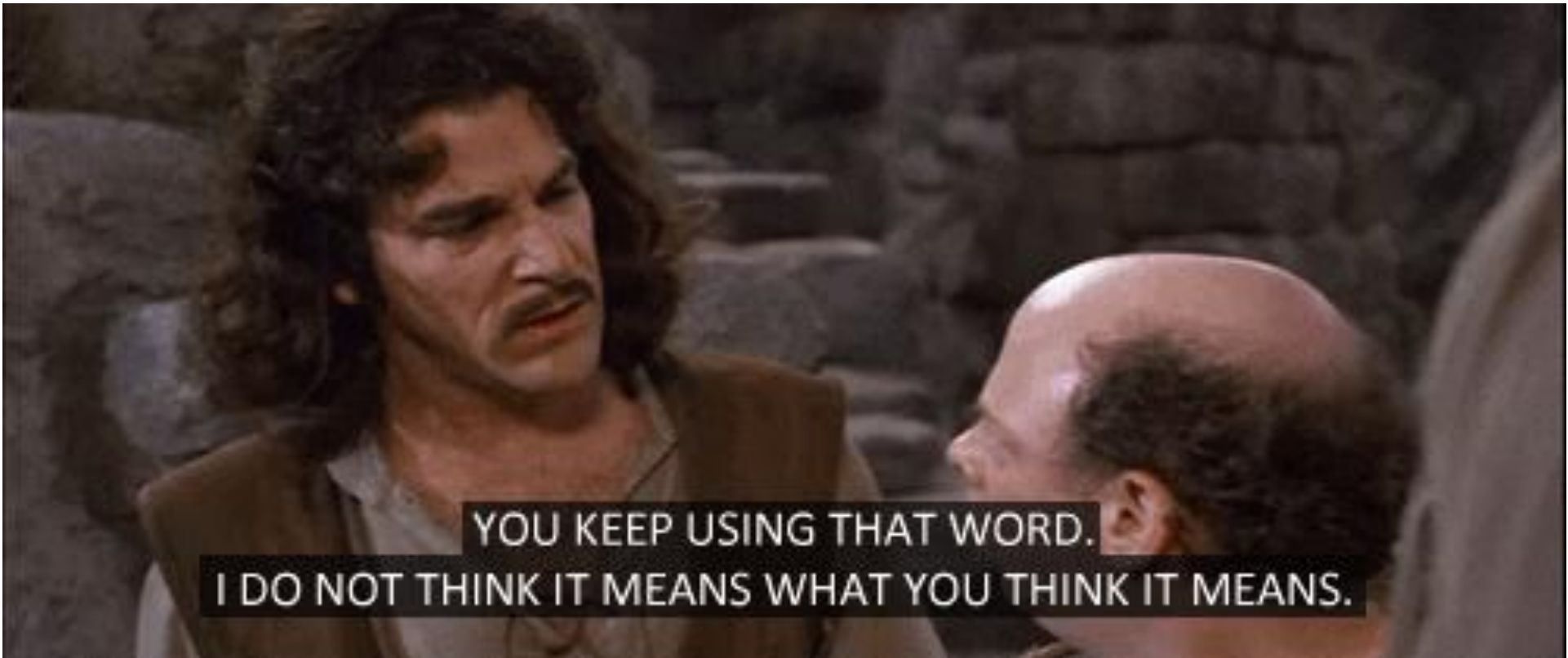
Purpose: To report a rare case of choroiditis in association with systemic lupus erythematosus (SLE).

Case: A 49-year-old woman with a 17-year history of SLE experienced acute vision impairment of her left eye during the remission stage of systemic SLE. Fundus examination revealed a gray-white

Reasons not to see uveitis referrals:

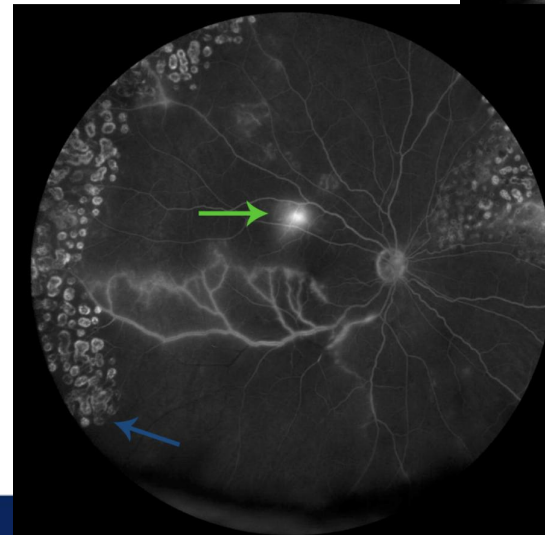
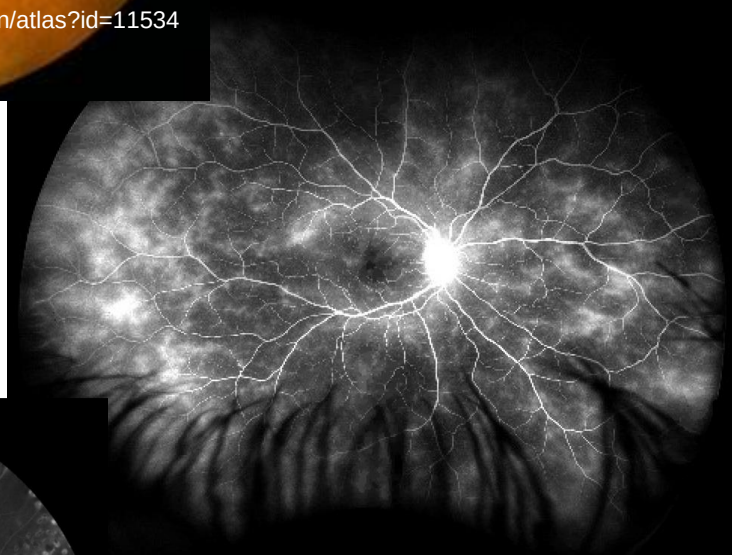
- 1) There are lots of local therapeutic options for uveitis (particularly for those weird 'eye only' conditions)
- 2) Even if the uveitis is from a systemic disease, there are many times where there is no clear evidence of systemic disease activity
- 3) Your vasculitis is different from our vasculitis

Retinal “Vasculitis”



Retinal “Vasculitis”

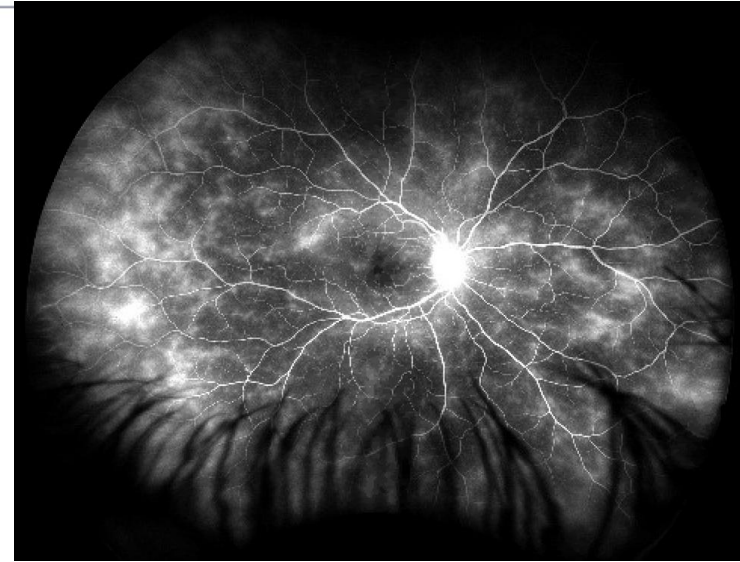
- Vasculitis is defined as inflammation of the vessel wall - traditional definition and pathologically supported in systemic vasculitis^{1,2}
- “Retinal vasculitis” traditionally references sheathing and leakage of retinal vessels, but is phenotypically variable³
- Appearance on exam/imaging does not elucidate underlying mechanisms; terminology is imprecise⁴
- Leakage can result from retinal vasculitis, inflammation in adjacent tissue, hydrostatic mechanisms, etc., without vessel wall damage



1. Jennette JC, et al. Arthritis Rheum. 2013;65:1-11.
2. Jennette JC, Falk RJ. N Engl J Med. 1997;337:1512-1523.
3. Ali A, Ku JH, Suhler EB, Choi D, Rosenbaum JT. The course of retinal vasculitis. Br J Ophthalmol. 2014;98(6):785-789.
4. Davis JL. Defining Retinal Vasculitis. Am J Ophthalmol. 2024;267:84-89. doi:10.1016/j.ajo.2024.05.030. PMID: 38925285.

Retinal “Vasculitis”

- Consensus panel on nomenclature for retinal vascular inflammation
- Recommendation to broaden terminology for angiographic vascular changes seen in posterior uveitis
- More accurate to use “retinal vascular leakage”



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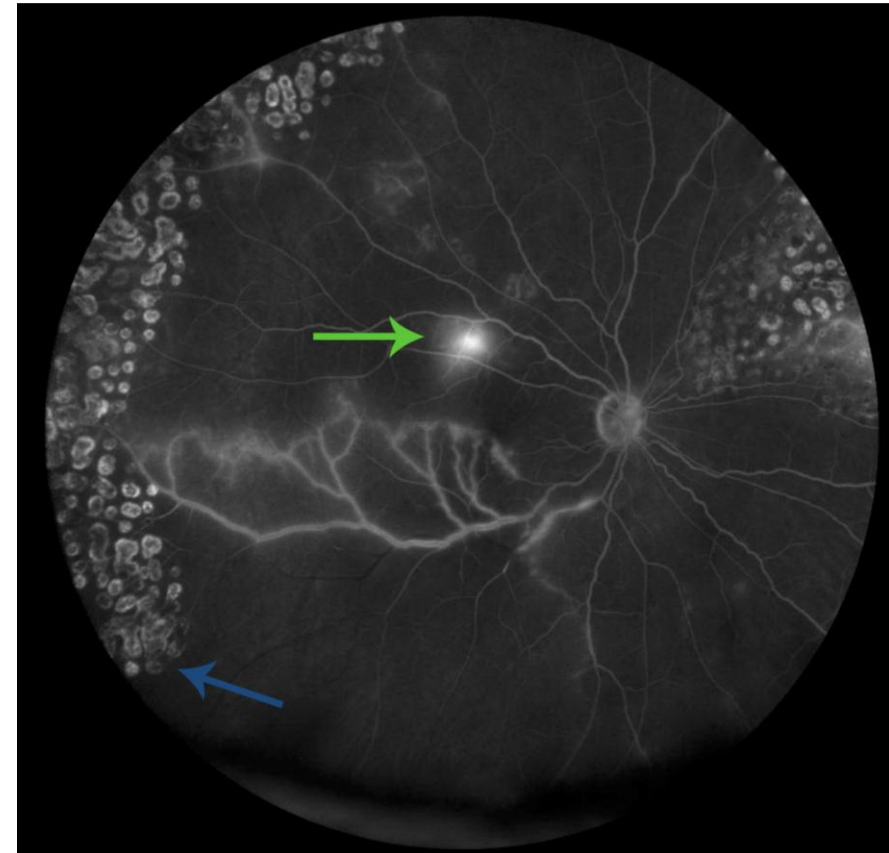
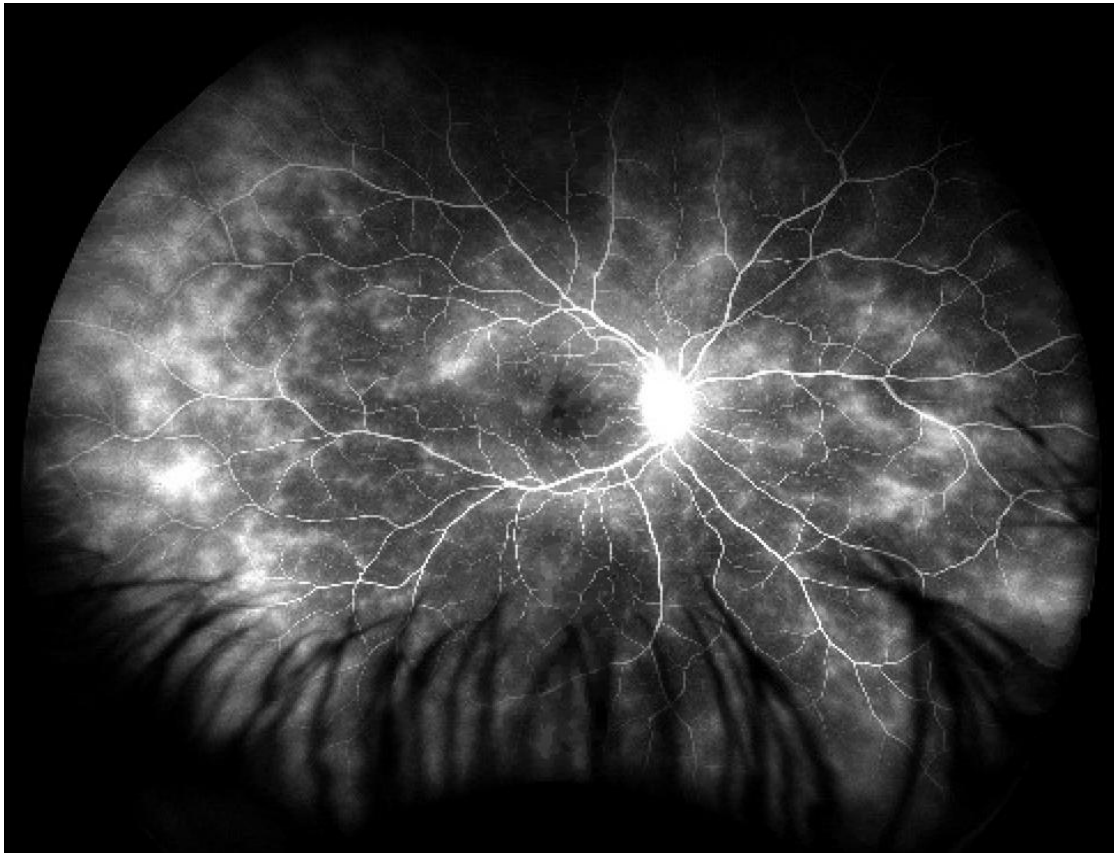
Original Investigation

Standardization of Retinal Vasculitis Terminology With Consensus Definitions From a Delphi Panel

James T. Rosenbaum, MD¹; Sapna Gangaputra, MD²; Marc D. de Smet, MD, PhD^{3,4}; [et al](#)

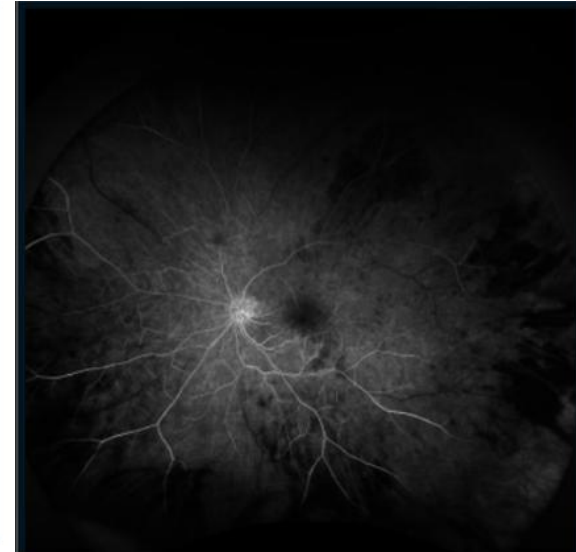
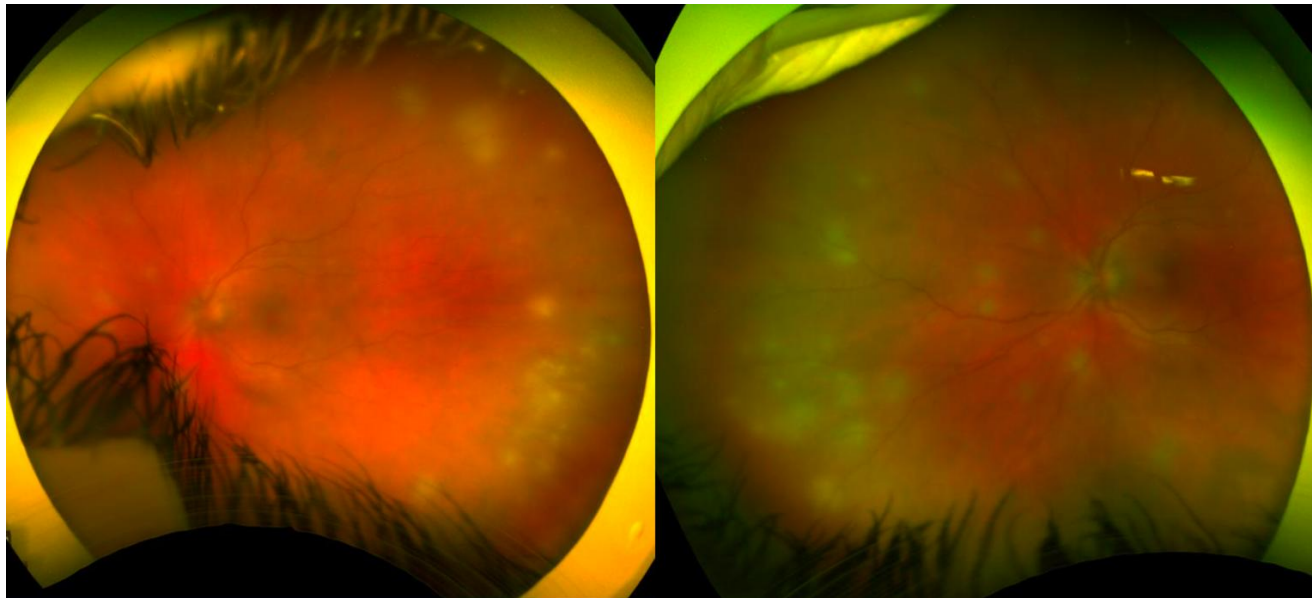
» [Author Affiliations](#) | [Article Information](#)

Retinal Vascular Leakage ≠ Occlusive Retinal Vasculitis



Retinal “Vasculitis” = Systemic Vasculitis?

- Not always - only in certain conditions (Behcet's, SLE, sarcoidosis)⁶
- Retinal vasculitis associated with systemic vasculitis often follows specific patterns:



6. Rosenbaum JT, Ku J, Ali A, Choi D, Suhler EB. Patients with retinal vasculitis rarely suffer from systemic vasculitis. *Semin Arthritis Rheum.* 2012;41(6):859-865. doi:10.1016/j.semarthrit.2011.10.006. PMID: 22177107.

Reasons not to see uveitis referrals:

- 1) There are lots of local therapeutic options for uveitis (particularly for those weird 'eye only' conditions)
- 2) Even if the uveitis is from a systemic disease, there are many times where there is no clear evidence of systemic disease activity
- 3) Your vasculitis is different from our vasculitis
- 4) We can't see the endpoints... **We can (and are happy to) help!**



Thank you for your attention!