

***Uveitis Update 2023***

Sunil K Srivastava MD  
Staff Physician, Director of Vitreoretinal Fellowship Programs  
Cole Eye Institute, Cleveland Clinic

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***Uveitis Update 2023 – no it wasn't COVID or your vaccine that caused your uveitis.....***

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***Financial Disclosure***

- Consultant/Advisory Board: Bausch and Lomb, Allergan, Clearside, Eyepoint, Regeneron, Santen, Sanofi, Zeiss, Optos, Novartis
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***This is my 1st time at this meeting, but I have done a number of ophthalmology society talks....***

- The reviews are usually bad....
- "Ophthalmology is sunny and beautiful like Florida and uveitis is dark and dreary.... like Cleveland."
- "I am disappointed that the uveitis lecture did not include a wet lab on premium IOLs in uveitis patients"
- But every once in a while....
- "The uveitis speaker talked so fast that I didn't mind it was about uveitis & he told a couple of STDs jokes....bring him back!"

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***Goals Today***

- A couple of cases to help you think through what to do
- How to decide what to order
- What kind of meds to use to treat chronic uveitis
- How to help yourself, figure what you are comfortable with and when to refer.
- Will show you a real COVID uveitis case!
- And why ophthalmology is awesome.....

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***What's the point of the work-up?***

- Recognize that uveitis can be a local manifestation of a systemic problem
- Uveitis can also be a local issue (trauma, infection) without a systemic issue
- The goal of a work-up is to:
  - Identify a cause that would allow to treat specifically and avoid complications
  - Rule out infections (malignancies) allowing the use of immune suppressive medications

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## A proper work-up

- Requires a pretty good clinical exam
- Identifying all areas of activity
  - Helps with differential
  - But also assessing risk of vision loss
- Clinical History is vital
  - Targeted ROS
- Processing all this information together
- Treating the patient
- Don't forget - 50-60% of uveitis is idiopathic

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## Case Presentation

- 44 yo M presents with 3 week history of blurry vision and light sensitivity in both eyes
  - Started on prednisolone q1h and atropine BID in both eyes by outside ophthalmologist
  - Diagnosed with psoriasis and on etanercept
  - Has an unclear history of previous Tb test

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## Exam

- OD 20/70, OS 20/40
- SLE Post synechiae OU, quiet AC
- 1-2+ vit cell OU

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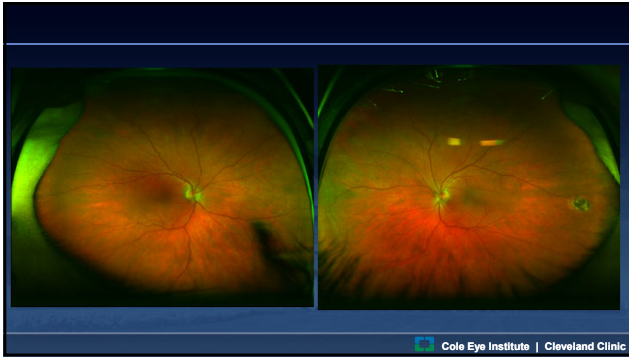
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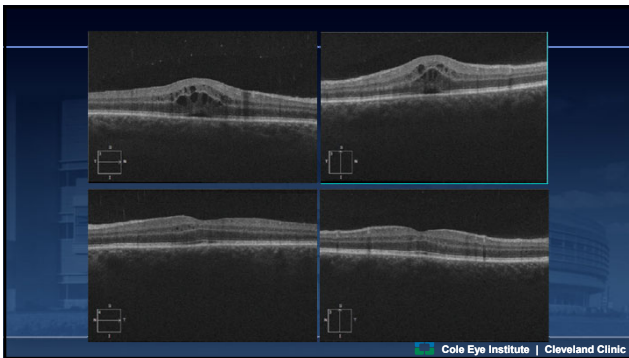
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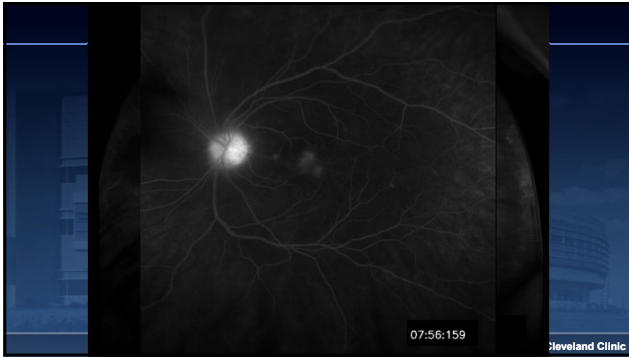
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### Assessment in Uveitis

- Is similar to a game you all are playing now during this lecture....

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### Each piece of information helps to solve it

- Bilateral panuveitis
- Choroidal thickening on OCT with CME
- Retinal vascular leakage

S	M	A	R	T
R	E	A	D	Y

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## Differential

- Bilateral panuveitis with CME
  - Psoriasis-associated (HLA-B27)
  - Tuberculosis
  - Medication-induced (Enbrel)
  - Sarcoidosis
- What else do you want to know?

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## Tailor your ROS to the disease process

- Tuberculosis – travel history, prison, work in medical field?
- Psoriasis – scaling skin changes, arthritic issues?
- Enbrel associated uveitis – new skin changes, new inflammatory symptoms
- Sarcoidosis – Pulmonary symptoms, Skin changes.
- Syphilis – review of risk factors

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## So I wasn't bashful and I asked

- Any new skin changes?
- My tattoos look different.
- Would you like to see my tattoos?
- Ummm...where is it exactly?
- Starts to undress....
- Please page the retina fellow....

S	M	A	R	T
R	E	A	D	Y
C	R	A	M	E

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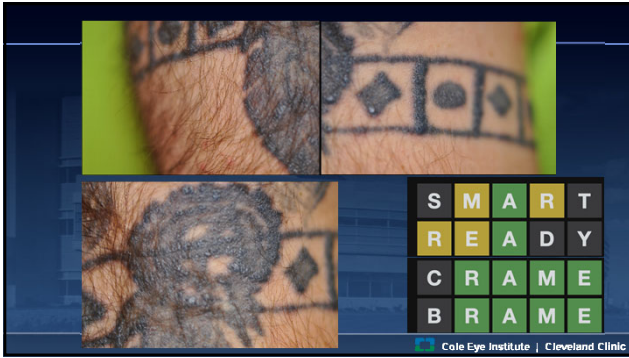
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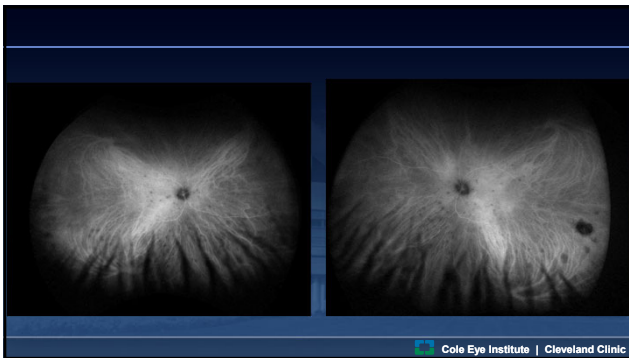
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**Case Presentation**

- Labs: ACE, CBC/CMP, syphilis IgG, HLA-B27, quant gold, CXR - negative
- When suspicious for sarcoidosis, I will order a CT chest
- Positive for Hilar adenopathy – biopsy positive for sarcoidosis
- No longer with dx of psoriatic arthritis, on prednisone, switched off etanercept to another agent.
- Dx of sarcoidosis – I used his images and because I looked at his tattoos..... **SARCOID**

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## The power of ROS

- Use your imaging to guide you.
- Not asking you to ask the 150 questions you did as a medical student
- Focus depending on presentation:
  - Older patient – new medications, recent illness, hospitalization, systemic cancers.
  - Younger patients – skin changes, arthritic changes, lung disease, history of STDs, drug use

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## Case Presentation

- 49 year old male presents for vision loss after dropless cataract surgery OU
- Presented with a few weeks history with vision loss – noted to have cataract
- 6 weeks ago had ce/iol “dropless” intravitreal steroids used OS. Did well then 4 weeks ago similar surgery OD. Noted significant decline in vision at postop week 1.
- I’ll admit I didn’t ask if he had femto or a multifocal placed.

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## Case Presentation

- CF OD 20/25 OS
- 1+ cell OU
- Triamcinolone scattered in vitreous OU

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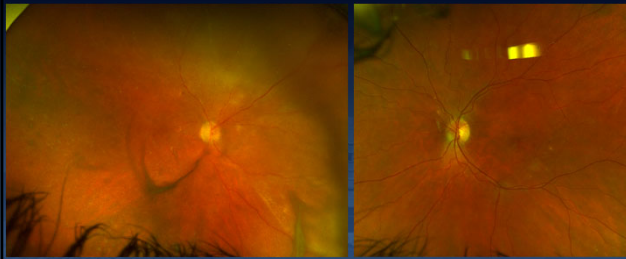
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**Photos**



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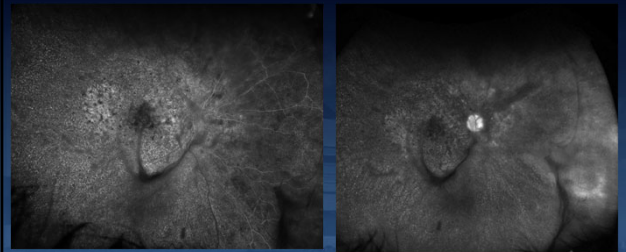
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**Fluorescein Angiogram OD**



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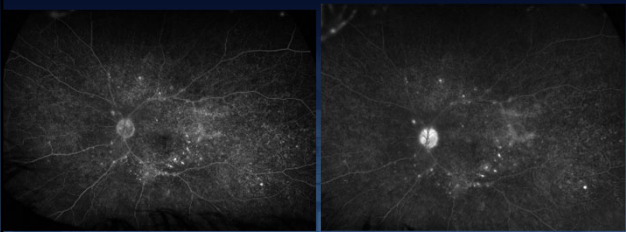
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**Fluorescein Angiogram OS**



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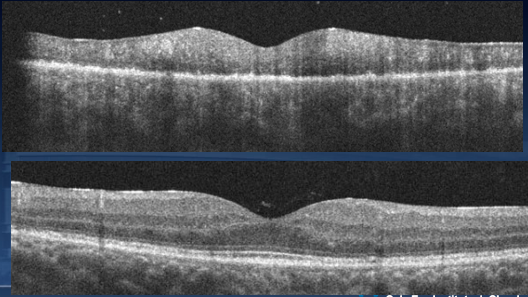
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### OCT (top OD, bottom OS)



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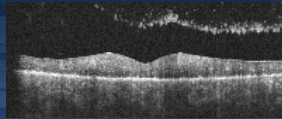
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### Thoughts?

- Bilateral retinal whitening after cataract surgery
- Outer retinal loss OU on OCT (Profound OD)
- Multifocal lesions OU with confluence OD
- Infectious
  - ARN, Syphilis, Toxoplasmosis
- Inflammatory
  - Sarcoidosis, HORV, Drug reaction



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- Syphilis IgG positive, RPR 1:32
- Called patient to discuss results
- "How did I get syphilis?"
- Referred patient to Abbas Haider, MD, world renowned expert in spontaneous spirochete infections

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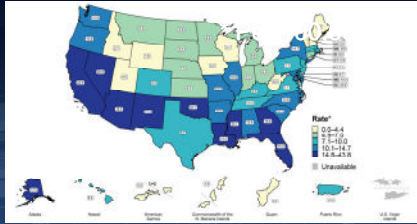
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**Primary and Secondary Syphilis — Rates of Reported Cases by State, United States and Territories, 2019**



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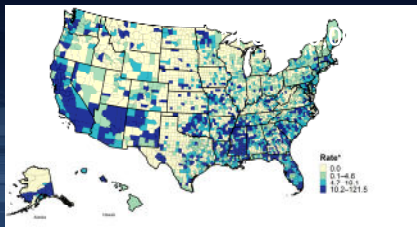
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**Primary and Secondary Syphilis — Rates of Reported Cases by County, United States, 2019**



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**How we can make things worse**

- Not looking (vision loss in a 49 year old)
- Not thinking or taking the easy way out (all vision loss = cataracts)
- Not testing or letting a test dictate treatment when everything else doesn't make sense
- Local steroids in infectious cases
- Not looking prior to delivering a long acting steroid in a situation where its probably not needed

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***In order to figure it out you need to ask it....***

- Ask the uncomfortable questions:
- IVDA?
- Sexual activity?
- Ulcers?
- You voted for whom?
- Are you vaccinated? Why not?

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***I wish it was just one case...***

- 60 year old male
- Followed for a lesion for years per him OD
- Worsening vision OD
- Noted to have a cataract
- Rapid vision loss after dropleless cataract surgery
- HM vision

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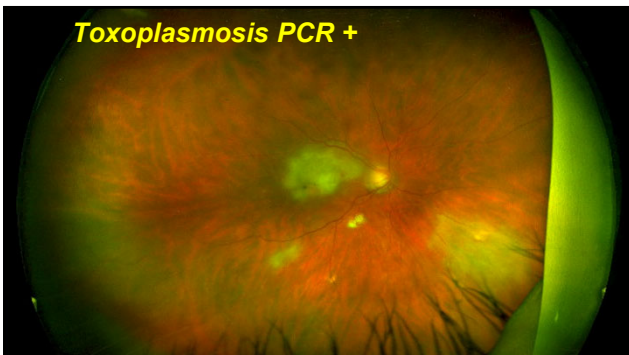
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***Toxoplasmosis PCR +***



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### Take home message

- You have to look in the eye, You have to think about why patient is not seeing
- Clear lens will not lead to 20/500 vision in a 40 year old.
- Ask why prior to putting a long acting steroid in the eye
- If you need steroids for uveitis, start with po steroids, If responds, then consider local injection
- If worsening or not responding – reconsider diagnosis
- Mandates close follow-up after beginning steroids

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### What should I order?

- Think about **your population and your patient (ROS)**
- Recurrent anterior uveitis I consider:
  - Syphilis IgG, Quantiferon Gold, ACE, CXR
  - HLA B27 in unilateral anterior, Urine B-2 microglobulin for acute bilateral disease esp kids
  - ANA, RF in kids with JIA Consider AC tap for viral PCR
- For posterior/panuveitis
  - Toxo, Bartonella depending on the presentation, HLA-A29 - birdshot, Chest CT if suspicious for sarcoidosis
  - Retinal vasculitis – warrants a complete work-up for systemic vasculitis
  - Tissue biopsy in elderly

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### To reduce the mistakes – image properly

- Where do I think the inflammation is and is there an imaging test that highlights that area better? *Can I use this test as an outcome measure to follow patients – i.e. will it improve on steroids or antivirals or antibiotics etc.*
- Widefield photo when I can't see the retina (Small pupils, kids or if you don't look in the back of the eye often and uncomfortable with your exam)
- OCT for almost everyone (OCTA – maybe for CNVM)
- Angiography for intermediate, posterior or panuveitis, ICG for choroidal disease, Autofluorescence for posterior uveitis (flashes)
- U/S for posterior/choroidal disease

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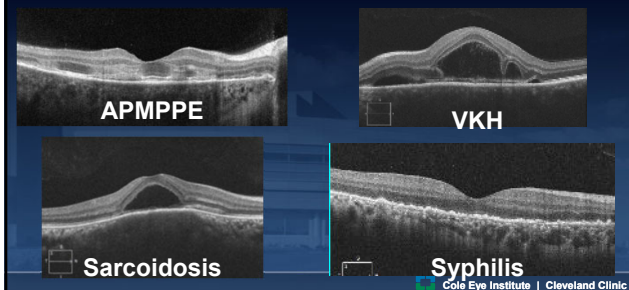
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### OCT as baseline diagnostic test for uveitis



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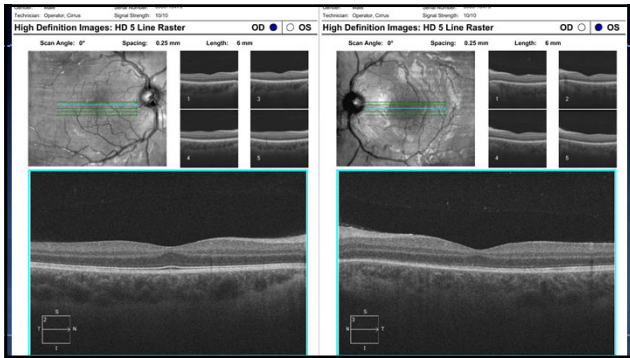
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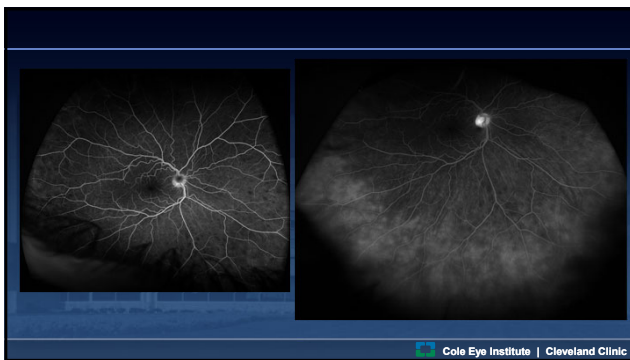
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## Uveitis Secondary to Medications

- Topiramate – Anterior Uveitis (AU), choroidals, effusion
- Bisphosphonates – AU, episcleritis/scleritis
- Cidofovir – hypotony, panuveitis, fibrin
- Etanercept – secondary sarcoidosis
- Oral Moxifloxacin – pigment dispersion, AU
- Topical therapy – brimonidine, etc
- Checkpoint inhibitors – VKH like inflammation, AU
- BRAF/MEK inhibitors – choroidals/CSR like changes
- Vaccines – Zostavax, HPV, in theory any including COVID-19
- Intravitreal therapy – brolocizumab, other anti-VEGF

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## Treatment for uveitis in 2023

- For acute disease
- Topical – prednisolone acetate and difluprednate
- Systemic – oral prednisone (0.5 mg – 1 mg/kg, max 80)
- First time acute presentation oral and topical should be first line, injection only after assessing a response of oral prednisone and ruling out infectious causes
- Intravitreal – triamcinolone and dexamethasone implant

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## When should a patient start on chronic therapy?

- Guidelines for treatment
- Active uveitis – treat with high dose of corticosteroids<sup>1</sup>
- Add steroid-sparing agent if inflammation cannot be controlled with <10 mg prednisone within 3 months<sup>1</sup>

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### So who should get chronic therapy?

- Those who can't taper off prednisone
  - Greater than 10 mg prednisone for greater than 3 months
- Those who have multiple flare ups (3 within 12 months)
- Those who you are controlling with just injections and vision is dropping
  - 20/200 → IVK → 20/25
  - 20/200 → IVK → 20/40
  - 20/400 → IVK → 20/60

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### SITE Study

Drug	Success at 1 yr	<= 10 mg Pred	D/C within 1 yr
Mycophenolate	73%	55%	12%
Cyclosporine	51%	36%	10%
Cyclophosphamide	76%	61%	33%
Methotrexate	66%	60%	42%
Azathioprine	62%	47%	25%

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### How long do they take to work

- Gangaputra SS, Newcomb CW, Joffe MM, et al. Comparison Between Methotrexate and Mycophenolate Mofetil Monotherapy for the Control of Noninfectious Ocular Inflammatory Diseases. Am J Ophthalmol. 2019
- The time to success was shorter (more favorable) for MMF than MTX (hazard ratio = 0.68, 95% confidence interval: 0.46-0.99).
- **Proportion achieving success was higher for MMF than MTX from 2 to 8 months, then converges at 9 months. Onset of success was more than 3 months in both groups.**
- Outcomes of treatment (MMF vs MTX) were similar across all anatomic sites of inflammation. The incidence of stopping therapy for toxicity was similar in both groups.

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### Is one superior to the other?

- Rathinam SR, Gonzales JA, Thundikandy R, et al. FAST Research Group. Effect of Corticosteroid-Sparing Treatment With Mycophenolate Mofetil vs Methotrexate on Inflammation in Patients With Uveitis: A Randomized Clinical Trial. JAMA. 2019
- 25 mg MTX vs 3 grams MMF. Treatment success was control at 6 months with less than 7.5 mg pred/2 drops a day of PF
- Treatment success occurred in 66.7% patients in the methotrexate group vs 57.1% in the mycophenolate group (difference, 9.5% [95% CI, -5.3% to 21.8%]; odds ratio [OR], 1.50 [95% CI, 0.81 to 2.81]; P = .20).
- But almost 45% of patients had VKH

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### My first line therapy

- Methotrexate or mycophenolate mofetil (MMF)
- MTX – max dose of 25 mg, MMF max dose 3 grams daily
- MTX – adults start 15-20 mg weekly, folic acid daily except on days of MTX. Check labs
- MMF – start at 500 mg bid, if tolerable (GI side effects), then push to 2 grams or 3 grams daily
- My ratio is about 50/50

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### How long do you give it work?

- Most data suggests 3-6 months for anti-metabolites to work
- If disease can be controlled with a bridge of po steroids/intravitreal therapy then wait it out
- If flaring during use and it is vision threatening or requires high dose corticosteroids then I am switching therapy or supplementing

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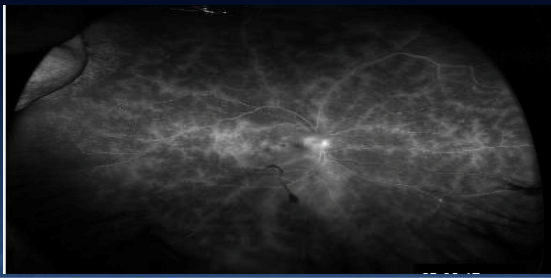
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**On MTX 20/40**



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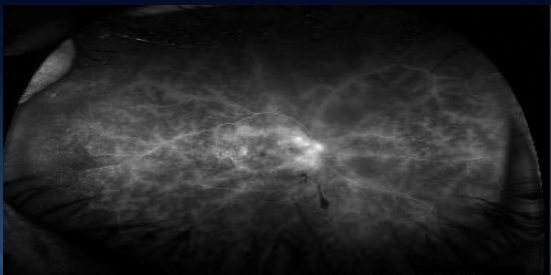
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**Increased MTX, Peri-ocular steroid 20/40**



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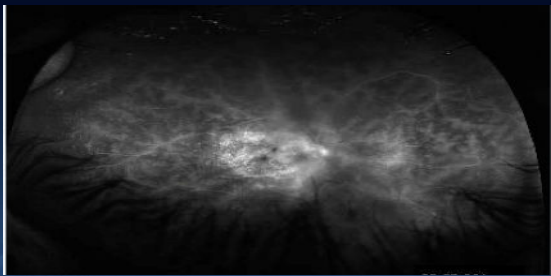
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**25 mg MTX, 20/50 vision**



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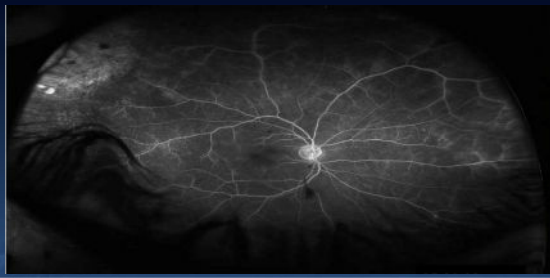
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## After Dexamethasone injection, 20/20




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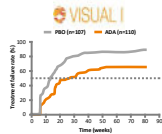
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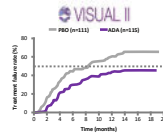
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## Early and Sustained Effect of Adalimumab on the Rate of Treatment Failure Compared with Placebo



	PRO	ADA
Median time to treatment failure	13 weeks	24 weeks
HR; p-value	0.50; p<0.001	
95% CI for HR	(0.36-0.70)	



	PRO	ADA
Median time to treatment failure	8.3 months	>18 months
HR; p-value	0.57; p=0.004	
95% CI for HR	(0.39-0.84)	

- The risk of failing treatment (flare or vision loss) was reduced by almost half and the time to treatment failure was approximately doubled.

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## If they don't know adalimumab, I ask if they watch TV



- Why are they so happy?

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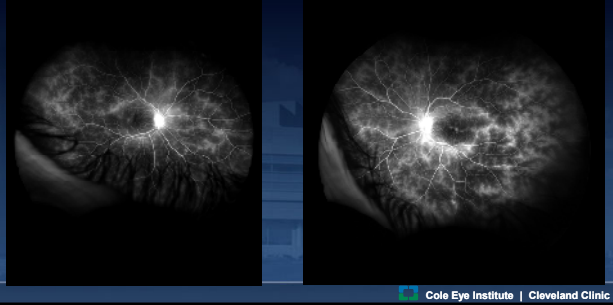
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**After steroids and MTX – still symptomatic**



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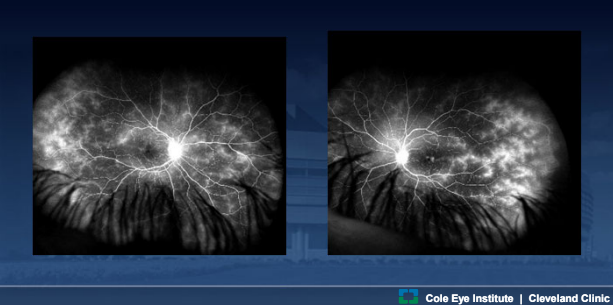
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**9 months on adalimumab Vision 20/30 OU**



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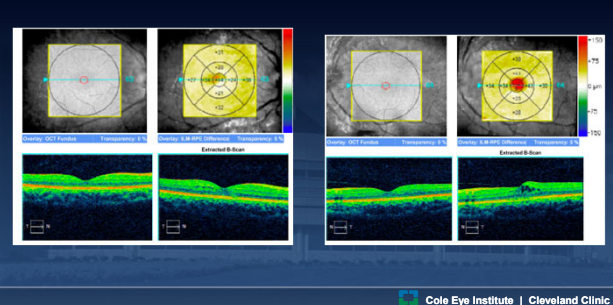
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**Next Visit**



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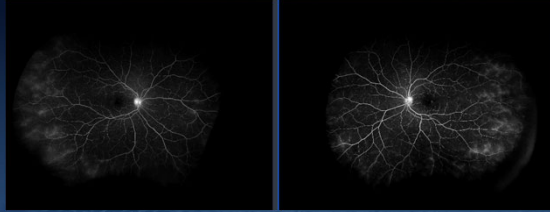
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### 3 months after infliximab



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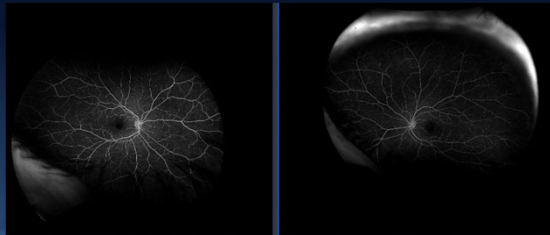
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### 2 years 20/20 OU



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### Safety

- *Burmester GR, Gordon KB, Rosenbaum JT, et al . Long-Term Safety of Adalimumab in 29,967 Adult Patients From Global Clinical Trials Across Multiple Indications: An Updated Analysis. Adv Ther. 2020*
- A total of 29,967 patients were included, representing 56,916 patient-years (PY) of exposure.
- Most frequent SAE of interest was infection (3.7/100 PY); The observed number of deaths was below what would be expected in an age- and sex-adjusted population for most adalimumab-treated patients . Lack of real-life data and limited long-term data (> 5 years) for most patients are limitations of this analysis.

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## Local Therapy Options

- Topical Steroids (difluprednate vs prednisolone acetate)
- Periocular Steroids
- Intravitreal Steroids (triamcinolone, dexamethasone)
- Suprachoroidal Steroids (triamcinolone)
- Delivery implants
  - Intravitreal injection (fluocinolone acetonide)
  - Surgical implant (fluocinolone acetonide)

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## Which injection is the best?

- Periocular Triamcinolone vs. Intravitreal Triamcinolone vs. Intravitreal Dexamethasone Implant for the Treatment of Uveitic Macular Edema: The PeriOcular vs. INTravitreal corticosteroids for uveitic macular edema (POINT) Trial

### Periocular Triamcinolone vs. Intravitreal Triamcinolone vs. Intravitreal Dexamethasone Implant for the Treatment of Uveitic Macular Edema

The PeriOcular vs. INTravitreal corticosteroids for uveitic macular edema (POINT) Trial

Joseph E. Thompson, MD, PhD<sup>1</sup>; Elizabeth A. Scott, PhD<sup>2</sup>; James F. Johnson, PhD<sup>3</sup>; Anne E. Soto, MD, PhD<sup>4</sup>; Michael M. Ohno, MD<sup>5</sup>; Albert F. Vitale, MD<sup>6</sup>; Sudeep E. Adnan, MD, MS<sup>7</sup>; John H. Koozekan, MD, PhD<sup>8</sup>; Pradeep A. Shah, MD, MBA<sup>9</sup>; for the Macular Vascular Inflammation Trial Research Group

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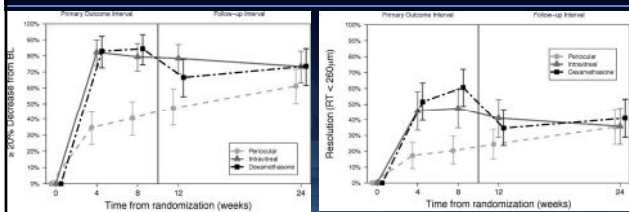
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## Result



Intravitreal dexamethasone and triamcinolone superior to periocular steroid. Higher risk of IOP rise in intravitreal groups

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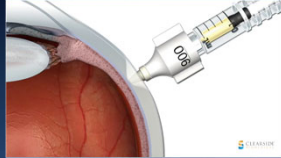
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## What's new in uveitis?

### SUPRACHOROIDAL STEROID INJECTION



Approved for Uveitic Macular Edema

### INTRAVITREAL FLUOCINOLONE ACETONIDE IMPLANT



Approved for Chronic Non-Infectious Uveitis of the Posterior Segment

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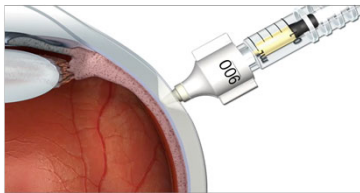
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## PEACHTREE SUPRACHOROIDAL INJECTION FOR POSTERIOR SEGMENT DISEASE



Video courtesy of Clearside

- Favorable drug concentrations: Retina, RPE, choroid >> Anterior segment
- Potential for uveitic macular edema with fewer side effects

Yeh S, Khorana RN, Shah M, Haney CR, Wang RC, Kissner JM, Cullis TA. Ophthalmology. 2020;127(7):948-955.

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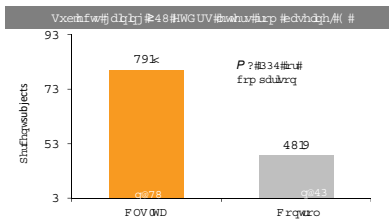
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## SHDF KWUHH

P HW#WV#SUIP DU\#IIIFDF\#IQGSR IQW



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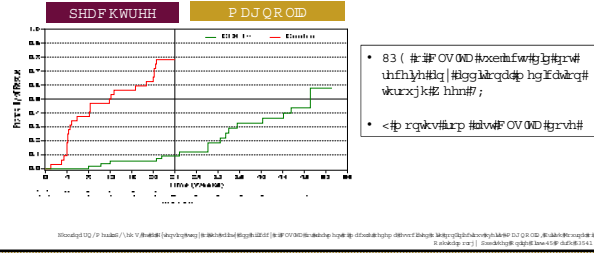
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**P DJ Q R O I D #**

NDSODQ O P H I H U # N I P H # R # I U V W # J H V F X H #  
**Primary Endpoint**




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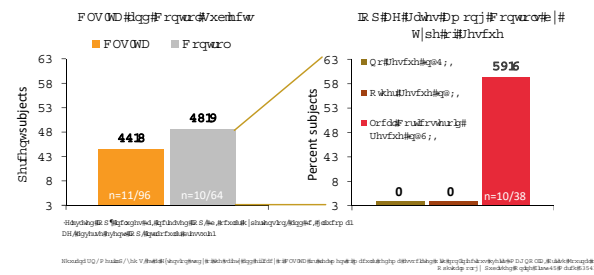
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**P DJ Q R O I D # H O H Y D W H G # R S # G Y H U V H # H Y H Q W V**




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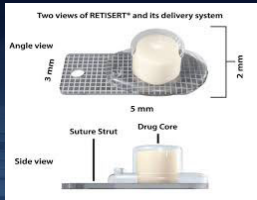
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**Fluocinolone Acetonide Implant**

- Reduction in ocular inflammatory episodes
  - 4% with recurrence at 1 year
  - 10% at 2 yr and 20% at 3 yr
- 100% of phakic patients require cataract surgery
- 35% glaucoma surgery rate




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## What about long-term?

- Average time to recurrence around 3 years
- Average time to reimplantation – 45-46 months from original implant
- Re-implantation at original site (or new site)
- Visual acuity post second implantation generally stable or improved
- Few complications

Nicholson B et al AJO 2012

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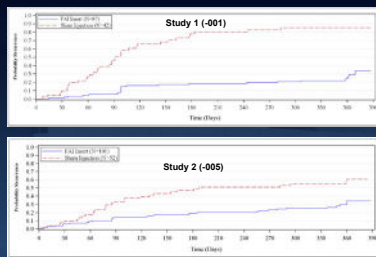
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## Injectable Fluocinolone Acetonide Implant – Time to Recurrence



Study 1: Recurrence rate at month 6 sham – 91% FA implant 28%  
At Month 12 Sham – 98%, FA implant 38%

Study 1: Time to First recurrence Sham 70 days vs FA implant 650 days

Jaffe GJ, Foster CS, Pavasio CE, Paggiaro DA, Redel GE. Effect of an Injectable Fluocinolone Acetonide Insert on Recurrence Rates in Chronic Noninfectious Uveitis Affecting the Posterior Segment: Twelve-Month Results. *Ophthalmology*. 2019 Apr;126(4):601-610. doi: 10.1016/j.ophtha.2018.10.033. Epub 2018 Oct 25. PMID: 30097864

Jaffe GJ, Pavasio CE, Study Investigators. Effect of a Fluocinolone Acetonide Insert on Recurrence Rates in Noninfectious Uveitis of the Posterior Segment. *Ophthalmology*. 2012;119(12):2483-2490. doi: 10.1016/j.ophtha.2012.07.017. Epub 2012 Oct 1. PMID: 23000000

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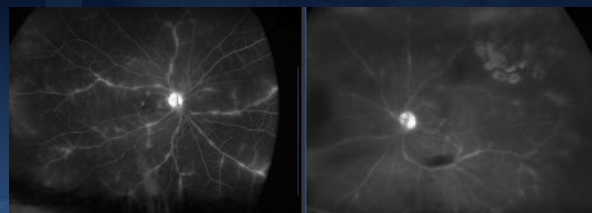
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## On Adalimumab, continued flares, coming off no matter what due to COVID....



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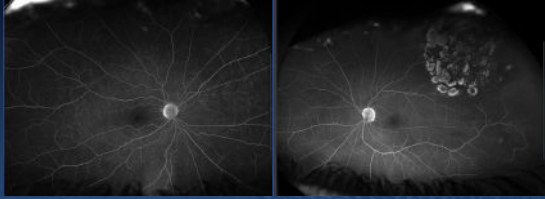
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### 1 year post intravitreal fluocinolone acetonide injection



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### So how do I use these therapies

- Difluprednate for short term treatment of aggressive anterior disease, CME, low-moderate grade intermediate uveitis
- Intravitreal steroids triamcinolone and dexamethasone for several month control in active posterior segment disease – CME, retinal vascular leakage, active retinal lesions
- Those who need long term control – fluocinolone acetonide implant (multiple recurrences, chronic CME, inability to taper steroid), injectable first line, then surgical for severe disease or vitrectomized.

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### What signs should I worry about?

- When things don't respond they way I expect
  - High dose prednisone should quiet most inflammation
  - Infections that progress on therapy
- Necrosis of the retina, scleral melts
- Diffuse hemorrhage and diffuse vascular sheathing
- Anyone referred to me with worsening vision after intravitreal/periocular steroids
- Hypopyon that I can't explain

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## Case Presentation

- 73 yo female decreased vision right eye for 2 weeks. Seen by outside retina specialist, had an AC tap for possible toxoplasmosis
- History of Breast CA, previous +ANA 1:320 2016, previous hip surgery years ago
- Renal failure due to lithium toxicity and s/p deceased donor kidney transplant 5 months ago –rATG, CMV D+/R+, EBV -/+
- On tacrolimus, mycophenolate, prednisone 5 mg, pentamidine prophylaxis and difluprednate
- No previous history of COVID exposure...
- 20/200 OD, 20/20 OS, IOP 20, 14

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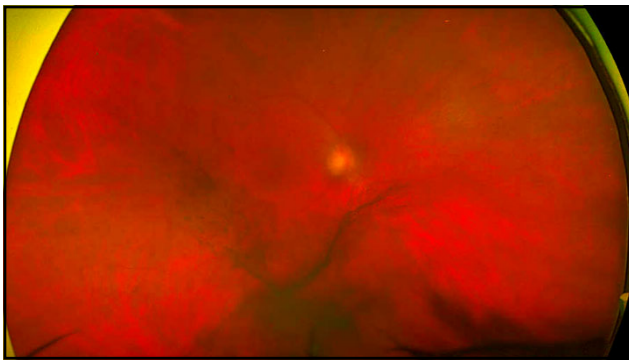
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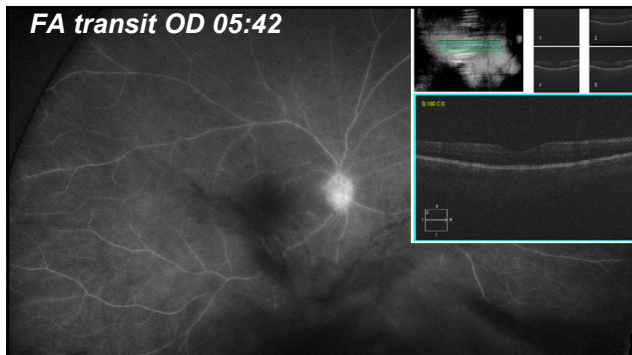
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## Thoughts?

- New onset slow unilateral vision loss with panuveitis on systemic immune suppression. No history of COVID exposure
- Toxoplasmosis
- Viral retinitis – CMV vs HSV
- Endophthalmitis – fungal/bacterial
- Inflammatory
- Medication Induced
- Maybe COVID.....??????
- What next?

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## Next steps?

- Intravitreal tap & inject
  - Send for: Toxo PCR, bacterial/fungal culture, CMV, HSV, VZV PCR if possible
  - Inject: clindamycin, foscarnet, voriconazole

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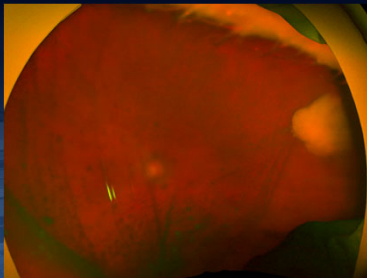
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1 week later, cultures negative (blood and eye), now with hip pain as well



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COLE EYE INSTITUTE  
VITREOUS BIOPSY FOR PANUVEITIS

HONG-UYEN HUA, MD AND SUNIL SRIVASTAVA, MD

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**Biopsy**

- Fungal Culture and PCR positive for Candida Albicans
- Infectious disease consult
  - Started on oral fluconazole 800 mg → 400 mg daily
- Admitted for work up of candidemia
- Ortho team: left hip irrigation and debridement, head/liner exchange Synovial fluid cultures grew many candida albicans
- Blood culture +candida albicans, Urine culture – normal flora, Echo: normal EF, no valvular vegetations

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**Where is the COVID? And where did the fungus come from?**

Right Eye

Infectious Disease believes source is the kidney

Left Hip

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**Where is the COVID? And where did the fungus come from?**

Donor Kidney from Right Eye Patient died of COVID associated respiratory failure. Had Fungemia at time of death. Donor kidney from the COVID positive patient housed the candida which lead to endophthalmitis in the host.

Disease Believes source is from kidney from the COVID positive patient housed the candida which lead to endophthalmitis in the host.

Mate kidney leads to fungemia in second recipient

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**I present to you my only proven COVID case**

- COVID
- Associated
- Uveitis
- By Proxy
- Times 2
- aka Srivastava Syndrome

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**Clinical Course**

- Repeat intravitreal voriconazole x2
- Vision now improved to 20/20 OD

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## Endogenous Fungal Endophthalmitis

- Consider in
  - Elderly patient, Recently hospitalized patient
  - IV drug users (even your neighbors can be IVDA)
  - Patients with recent GI/GU infection
- Tap/inject or diagnostic PPV
- Treat with systemic anti-fungal (fluconazole 200-400 mg daily or voriconazole 200 mg bid)

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## Next case

- Post op inflammation, gone wrong....

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## HPI

- 71 yo female initially evaluated for conjunctival/corneal lesion prior to cataract surgery
- Lesion was concerning for squamous cell carcinoma, now POM3 s/p excisional biopsy and cryotherapy
  - Pathology: Epidermoid metaplasia (negative for carcinoma/dysplasia)
- Post-operative course complicated by chemosis and injection over the biopsy site, thought to be post-operative scleritis
- Managed initially with oral and topical steroids, then sub-Tenon's triamcinolone injection.
- Initially improved, then severely worsened – now referred

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## Base Exam

	OD	OS
Dist VA sc	HM at 3 feet → ph NI	20/60 → ph 20/50
IOP	9	10
Pupils	Irregular, minimally reactive	Round and reactive
Visual Field	Full	Full
EOM	Full	Full

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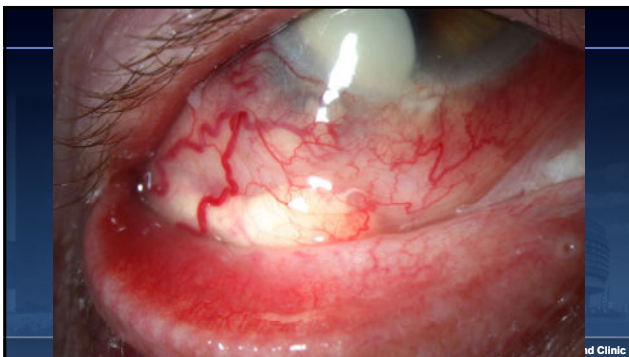
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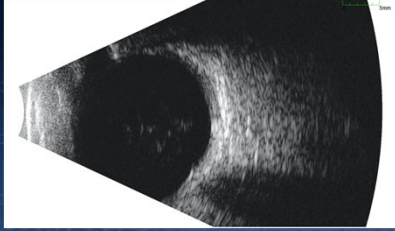
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## B-Scan, right eye



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## Differential diagnosis?

- Scleritis
  - Infectious/Non-infectious
- Inflammatory secondary to recent cryotherapy



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## Management

- Taper off of oral steroid
- Anterior chamber tap and intravitreal injection of antibiotics/ antifungals
- Anterior chamber washout/biopsy with possible scleral patch graft given degree of scleral thinning

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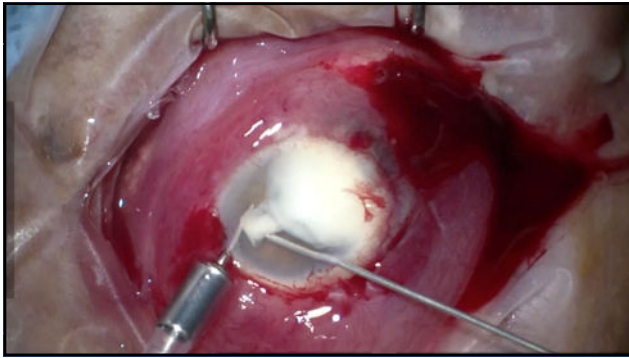
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### Management

- Started on sulfamethoxazole-trimethoprim 800-160 mg (TMP-Sulfa) BID at time of surgery; amikacin injected at time of surgery along with vancomycin and voriconazole
- Culture positive for *Nocardia cyriacigeorgica*
  - Negative fungal cultures
- Continue TMP-Sulfa DS BID
- Start amikacin 2.5% q2h while awake
- Start linezolid 0.2% q2h while awake

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### *Nocardia* species

- Aerobic, gram-positive, weakly acid-fast filamentous bacteria
- Relatively uncommon
- Opportunistic infection in immunocompromised patients
- Ocular infection rare but seen after penetrating trauma or contact with plants/soil

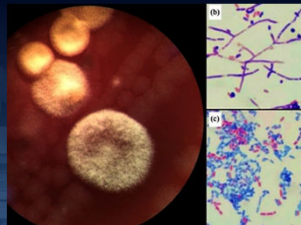


Image: Rodriguez-Lozano et al., JMM Case Rep 2019

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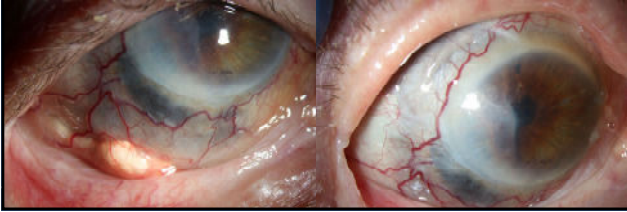
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**POM2: VA Slow CF, IOP 11**

- B-scan without RD, stable/improved vit opacities Continue TMP-Sulfa DS BID for one month, then decrease to daily



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**POM4: VA Brisk CFI, IOP 15**



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**Last Case**

- Let's put it all together
- And show you a case which proves
- Why ophthalmology is awesome....



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## Case Presentation

- 32 year old male, transferred from outside hospital for ophthalmology intervention
- 3 week history of progressive painful swallowing, diagnosed with candida esophagitis
- Unable to eat – losing weight, on TPN and develops sudden floaters and vision loss
- Diagnosed with candida endophthalmitis but progressive worsening of vision
- Transferred – ophtho resident called

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- Vision 20/200 OD 20/20 OS
- Tr AC cell
- DFE: see photos
- But first – I will show you his mouth

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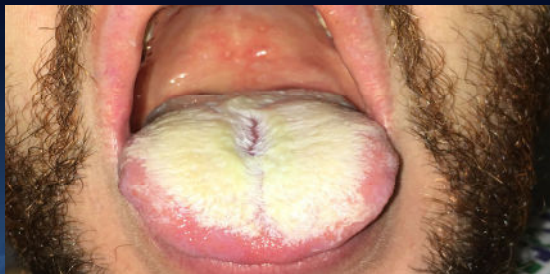
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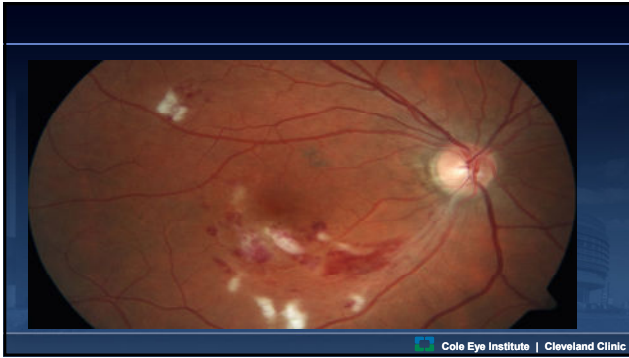
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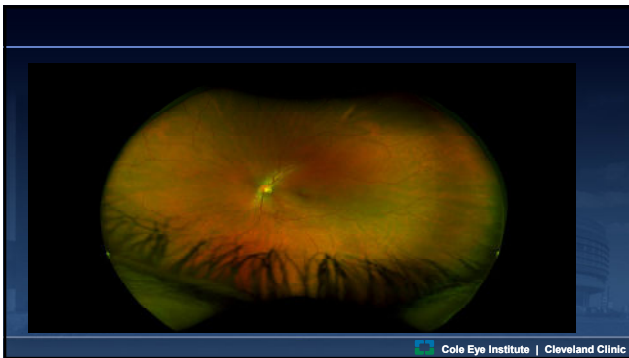
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***So my resident thinks.....***

- This does not make sense
- What would Sunil do?
- Recheck everything...



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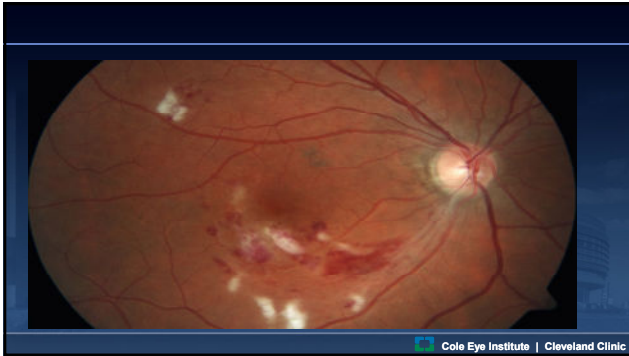
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**Resident thinking...**

- Multiple ischemic areas
- Looks like artery occlusions
- Can systemic fungal infection give you artery occlusion?
- Maybe but rare, and no lesions OS, and no full thickness lesions
- But inflammatory disease can.
- Let me look at his mouth again

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**So...**

- Mouth ulcer, multiple artery occlusions
- ?Behcet's
- What else should he have?
- Yup – lets check you everywhere

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## Success!

- Oral ulcers, genital ulcers, retinitis = Behcet's

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## Case Presentation

- Started on IV Solumedrol, Eating in 2 days
- Esophagus lesions determined to be ulcers – resolved within 5 days
- Gains weight back
- Started on IV infliximab
- f/u vision 20/30 OD, 20/20 OS
- Ophtho resident – saves this patient's life.

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## Summary

- Properly identification location of inflammation, talk to patients and then order appropriate labs
- No cookbook, but a couple of basics we should order (Tb, Syphilis, Sarcoidosis)
- Consider medications (systemic and local) as causes
- Lots of options for long term control in uveitis patients
- [srivass2@ccf.org](mailto:srivass2@ccf.org)

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