

# 72-year-old Black Male

BCVA: 20/25+ OD, 20/25+ OS

#### PMH: (+) HIV; CD4 Count 336: Viral load 46 (+)Hypercholesterolemia (+)Hypertension (+)DM 2; poor BS control











Polypoidal Choroidal Vasculopathy

Clinical Subtype with features of Neovascular AMD

"Peculiar Hemorrhagic detachment of the RPE and choroid"

## Polypoidal Choroidal Vasculopathy

- Suspected in patient with:
  <u>sub-retinal orange polyp-like lesions</u>
  Can be macular or peripapillary
  Rarely in arcades as well
- Especially African or Asian descent (F>M)

8





10



# PCV and ICG • Essential for detecting the choroidal network of polyps • Differentiation from AMD Image: A state of the state of the

11













# 13-year-old Black Female

First eye exam ever!! Never had any visual problems Mom reports that she is just NOT seeing right!

BCVA: 20/30 OD, 20/30 OS Failed Color Vision OD and OS

" I can't see the blackboard at school and my grades are sinking!!!"

19



20



21























What is this	??13 y/o we i	need help‼		
Ο ΙΝΥΙΤΛΕ		AGNOSTIC TESTING RESULTS		
Patient name: DOB: 09/29/2008 Sex assigned at birth: Female Gender:	Sample type: Saliva Sample collection date: 10/12/2021 Sample accession date: 10/23/2021 MRN:	Report date: 11/08/2021 Invitae #: RQ2834631 Clinical team: Julie Rodman		
Reason for testing	Test performed Sequence analysis and deletion/duplication testing of the 328 genes listed in the Cenes Analyzed section. Invice Interior Retrind Discorders Panel			

one rantogenic variani neeninee in ETS, ETS is associated with autosomai recessive retinitis Bygmentosa. Additional Variant(s) of Uncertain Significance identified.				
EYS	c.6794del (p.Pro2265Ginfs*46)	heterozygous	PATHOGENIC +	
A8CA4	c.2161-6T>C (Intronic)	heterozygous	Uncertain Significance	
8851	c.1076G>A (p.Arg359His)	heterozygous	Uncertain Significance	
COL11A2	c.2682G>A (Silent)	heterozygous	Uncertain Significance	
PDE6A	c.916A>-G (p.Arg306Gly)	heterozygous	Uncertain Significance	
PDZD7	c.244G>A (p.Asp82Asn)	heterozygous	Uncertain Significance	
PEX6	c.1081A>G (p.Thr361Ala)	heterozygous	Uncertain Significance	
RP1	c.4397A>T (p.Glu1466Val)	heterozygous	Uncertain Significance	
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GENE	VARIANT	ZYCOSITY	VARIANT CLASSIFICATION	
EYS	c.6794del (p.Pro2265GInfs*46)	heterozygous	PATHOGENIC	
ABCA4	c.2161-6T>C (Intronic)	heteroxygous	Uncertain Significance	
BBS1	c.1076G>A (p.Arg359His)	heterozygous	Uncertain Significance	
COL11A2	c.2682G>A (Silent)	heterozygous	Uncertain Significance	
PDE6A	c.916A>G (p.Arg306Gly)	heterozygous	Uncertain Significance	
PDZD7	c.244G>A (p.Asp82Asn)	heterozygous	Uncertain Significance	
PEX6	c.1081A>G (p.Thr361Ala)	heterozygous	Uncertain Significance	
RP1	c.4397A>T (p.Glu1466Val)	heterozygous	Uncertain Significance	
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 What is Macular Telangiectasia 2?

 Proposed hypothesis: Neurodegenerative disorder

 Image: Constraint of the property of the

OCT: Normal































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## What is Hydroxychloroquine (Plaquenil)?

- Longer half life
  Less drug needed for





#### 73

#### **Recommendations on Screening for** Chloroquine and Hydroxychloroquine Retinopathy (2016 Revision) AMERICAN ACA

#### \*Dose:

♦ Maximum daily HCQ use of < 5.0 mg/kg</p>

#### Duration:

under 2%... BUT 20% AFTER 20 YEARS!!!

High dose and long duration of use are most significant risk factors

74



75



76











# Case: 73 year-old female



"I feel a film of cobwebs over my right eye. It started a year ago but is progressively getting worse. I had cataract surgery in both eyes a few years ago.. Is it related??"

82





The above OCT illustrates the following: 1. Complete PVD 2. There is partial detachment of the posterior hyaloid from the central fovea with persistent attachment at the ONH 3. There is vitreomacular traction resulting in obscuration of the foveal contour.



 There is partial detachment of the posterior hyaloid from the central fovea with persistent attachment at the ONH
 There is vitreomacular traction resulting in obscuration of the fove contour.

85



Symptomatic or asymptomatic? Symptomatic

86



"The vision in my right eye has gotten progressively worse over the last three months and everything looks wavy!!"

#### 87





BCVA <u>OD: 20/80</u>, OS: 20/20

 Fundoscopy: Vitreous condensation in fovea OD









92





94



## Why does it matter? (ETDRS)

Eyes with CI-DME have a 10-fold greater risk of moderate vision loss compared to eyes without center involvement!















Severity of Retinopathy	Presence of Macular Edema	Follow-up (Months)	Panretinal Photocoagulation (Scatter) Laser	Focal and/or Grid Laser*	Intravitreal Anti- VEGF Therapy
Normal or minimal NPDR	No	12	No	No	No
Mild NPDR	No	12	No	No	No
	NCI-DME	3-6	No	Sometimes	No
	CI-DME'	1*	No	Rarely	Usually
Moderate NPDR	► No	6-121	No	No	No
	NCI-DME	3-6	No	Sometimes	Rarely
	CI-DME'	1*	No	Rarely	Usually

104



105





- A 40-year-old female was referred for optic nerve lesion in the right eye.
- Patient vaguely recalls a problem with her eye exam at 19 years old
- She is asymptomatic.
- (+)Asthma; and that's it!











- She denied past medical or ocular history.
- BCVA 20/20 OD and 20/40 OS Slit lamp examination was unremarkable.







