

COURSE SYLLABUS

20/100

T

H E

20/70

S U N

20/50

C O A S T

20/40

S E M I N A R

20/25

F O R O P T O M E T R Y

20/20

A P R I L 2 5 - 2 6 , 2 0 2 6



Saturday April 25

- 7:45 am - 8:15 am **Registration**
Exhibit Hall Open
Continental breakfast - sponsored by St. Luke's Cataract and Laser Institute
- 8:15 am - 9:55 am **Advances in Cornea, Cataract, Refractive and Glaucoma Surgery (2, TQ, COPE: 103831-GO)**
Neel R. Desai, M.D. and Priti Panchal, O.D.
- 9:55 am - 10:40 am **Break**
Exhibit Hall Open
- 10:40 am - 12:20 pm **Amblyopia Management for Primary Care O.D.s (1, COPE: 103274-FV)**
Acquired Brain Injury: What the O.D. Needs to Know (1, COPE: 103273-FV)
Richard Sorkin, O.D.
- 12:20 pm - 1:10 pm **Lunch** - sponsored by Retina Vitreous Associates of Florida
Exhibit Hall Open
- 1:10 pm - 1:20 pm **Lighthouse of Pinellas Update**
- 1:20 pm - 1:30 pm **FOA Update**
- 1:30 pm - 3:10 pm **Pharmaceutical Update - Innovations and Insights for Eye Care (2, TQ, COPE: 103324-PH)**
Greg Caldwell, O.D.
- 3:10 pm - 3:30 pm **Break**
- 3:30 pm - 5:10 pm **Latest Advances in Eye Care Technology - Innovations in Early Detection and Management (2, TQ, COPE:103700-GO)**
Greg Caldwell, O.D.

Sunday April 26

- 7:30 am - 8:00 am **Registration**
Continental breakfast - sponsored by the POA
- 8:00 am - 9:40 am **Grand Rounds - Improving Eye Care and Outcomes for Patients (2, TQ, COPE: 103866-TD)**
Greg Caldwell, O.D.
- 9:40 am - 10:00 am **Break**
- 10:00 am - 11:40 am **Prevention of Medical Errors (2, COPE: 102834-EJ)**
Alice Sterling, O.D.
- 11:40 am - 12:00 pm **Lunch** - sponsored by LENZ Therapeutics
- 12:00 pm - 1:40 pm **Florida Jurisprudence (2, COPE: 101024-EJ)**
Alice Sterling, O.D.



Latest Advances in Eye Care Technology
Innovations in Early Detection and Management!

Greg Caldwell, OD, FAAO


The Suncoast Seminar
April 25-26, 2026



1

Disclosures- Greg Caldwell, OD, FAAO
All relevant relationships have been mitigated

- Lectured for: Alcon, B&L, Dompé, Lenz
- Disclosures: Receive speaker honorariums
- Advisory Board: Dompé, Tarsus, Envision
- Disclosures: Receive participant honorariums
- I have no direct financial or proprietary interest in any companies, products or services mentioned in this presentation
- Disclosures: Non-salaried financial affiliation with Pharmanex/Nu Skin
- Healthcare Registries – Chairman of Advisory Council for Diabetes and AMD
- The content of this activity was prepared independently by me – Dr. Caldwell
- The content and format of this course is presented without commercial bias and does not claim superiority of any commercial product or service
- Optometric Education Consultants – Scottsdale, AZ, Pittsburgh, PA, Sarasota, FL, Barcelona, Spain, Orlando, FL, Mackinac Island, MI, Quebec City, Canada, and Nashville, TN- Owner



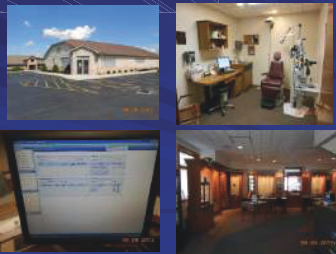
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My Practice

I am a clinician first then a scientist

- Some are scientists first then clinician
- I need to simplify for patient and patient care.
- Science is great, but not good if there isn't a clinical application.
- Some lectures are science based without clinical application.
- My lecture will be a hybrid. Showing clinical applications of the science

It is wonderful to have someone who's juggling so many aspects of optometry [scientific, clinical experience, teacher & lecturer]. It is refreshing and very informative. - Sarah



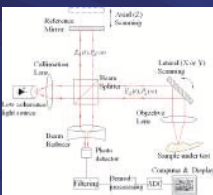
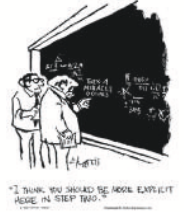
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Imaging & Diagnostic Technologies

Early Detection and Monitoring

6

Optical Coherence Tomography Angiography

"I THINK YOU SHOULD SEE AN Ophthalmologist ABOUT THIS!"

7

OCT and OCT Angiography

Both are Becoming Equally Important in Diagnosis, Management, and Treatment

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Optical Coherence Tomography

- OCT is an optical signal acquisition and processing method
- Time domain OCT
 - 15-16 microns of resolution
 - Stratton (Zeiss)
- Spectral domain (SD-OCT) or Fourier domain OCT
 - Spatially encoded frequency domain OCT (SEFD-OCT)
 - 5-6 microns of resolution
 - Able to see photoreceptor morphology (inner/outer segments)
 - 50 times faster than time domain
- Swept source OCT
 - Time encoded frequency domain OCT
 - 1 micron of resolution
- Future of OCT: Intraoperative imaging, blood flow and oxygenation measurements

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OCT Angiography: the Next Chapter in Posterior Imaging

- Images retinal microvasculature without dye injection
- Displays structure and function from a single imaging system

2002: Time Domain OCT

2006: Spectral Domain OCT

2014: OCTA

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CPT Code for OCT Angiography

Scanning Computerized Ophthalmic Imaging

For 2025, CMS revaluated the existing OCT codes 92132, 92133, and 92134 to introduce a new Category 1 code for OCTA, CPT Code 92187 expanding the code family. CMS finalized the RUC-recommended work values for these codes as proposed. Values will not be subject to a multi-year phase-in.

CPT Code	2024 Total Payment	2025 Total Payment*	Percent Decrease
92132 OCT, anterior segment	\$31.29	\$28.79	-7.99%
92133 OCT, optic nerve	\$36.20	\$29.76	-17.97%
92134 OCT, posterior segment	\$49.26	\$31.37	-36.32%
92187 OCT-Angiography, retina	N/A	\$56.94	NEW

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OCT Retinal Angiography

- A. Requires an injection of dye
- B. Does not require dye or an injection

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OCT Angiography: A New Approach to Protecting Vision

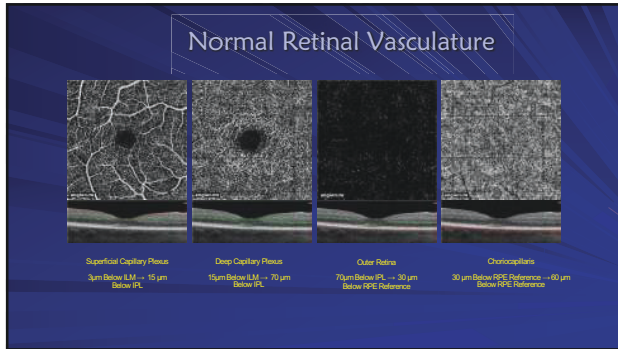
- Non-invasive visualization of individual layers of retinal vasculature
- Pathology not obscured by fluorescein staining or pooling
- Image acquisition requires less time than a dye-based procedure
- Reduced patient burden allows more frequent imaging to better follow disease progression and treatment response

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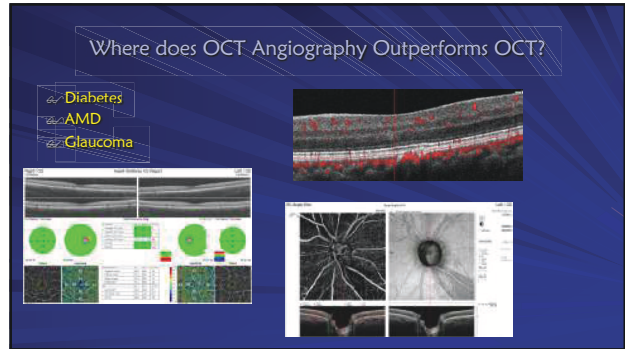
Enface OCT-A Slabs Based on Retinal Anatomy

En Face Visualization of Layers Based on Retinal Anatomy

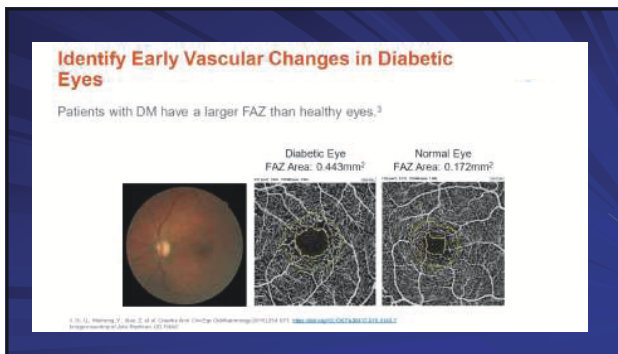
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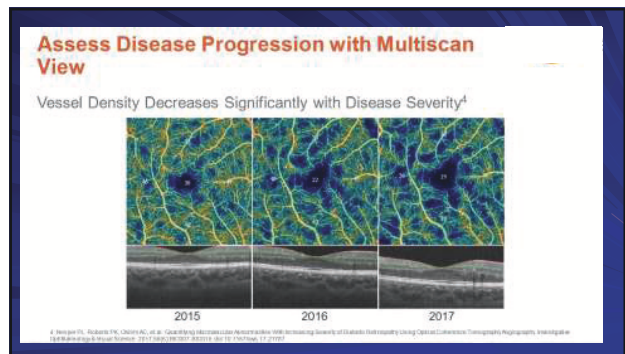
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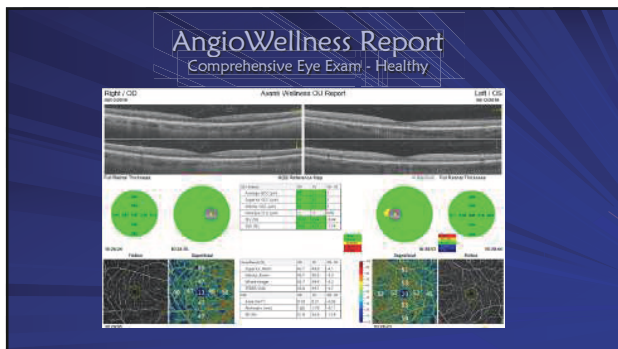
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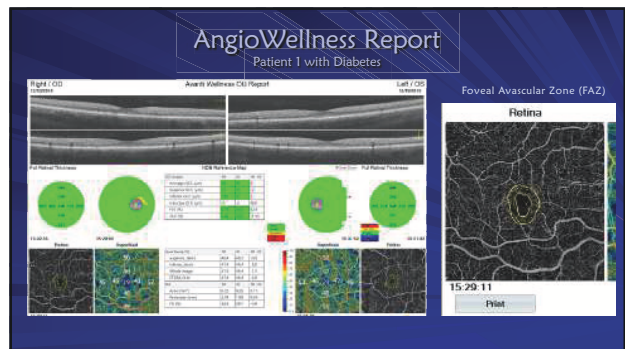
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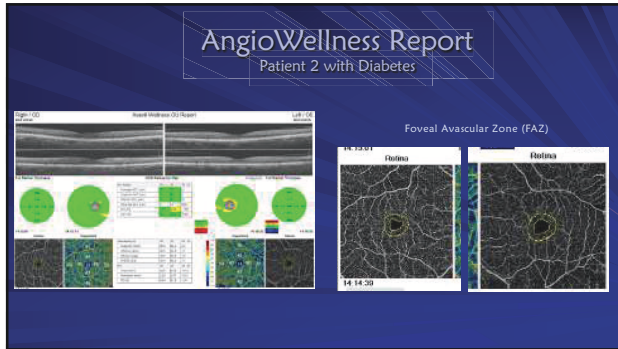
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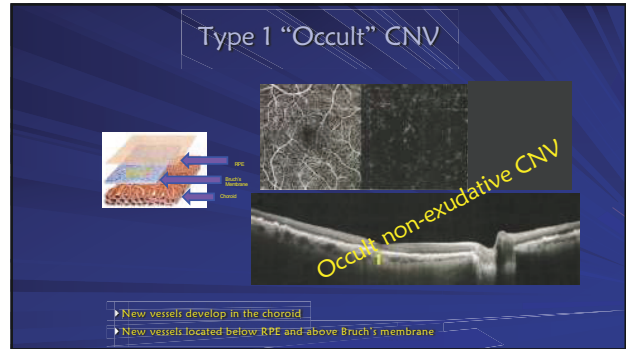
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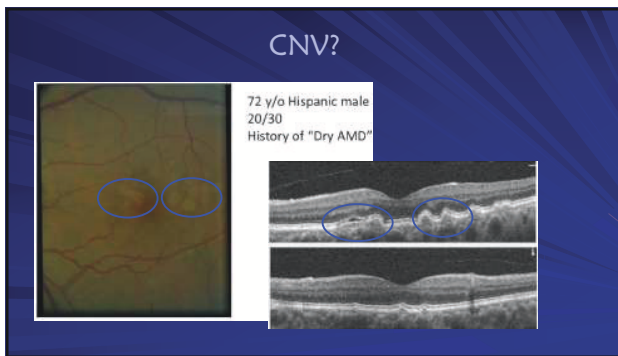
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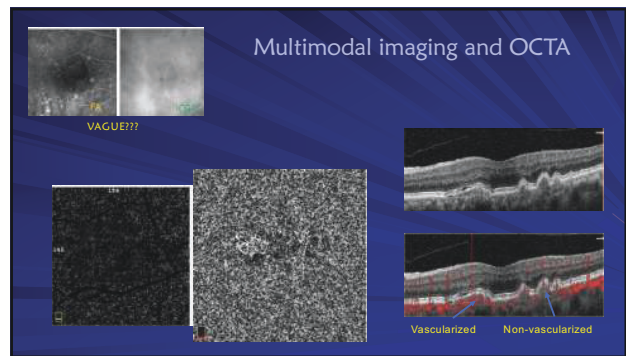
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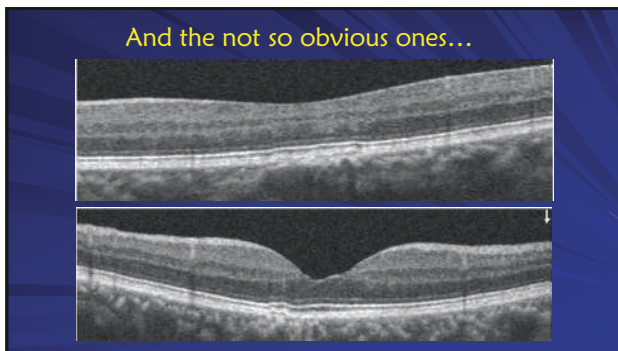
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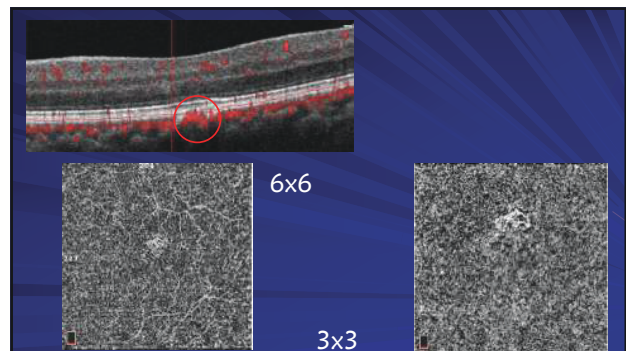
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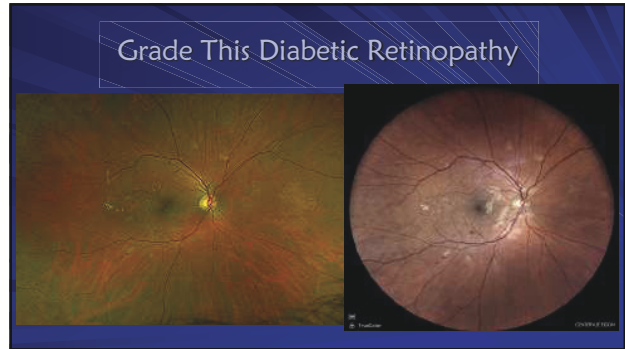
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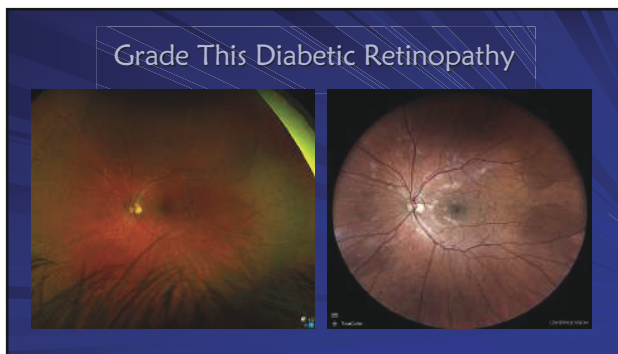
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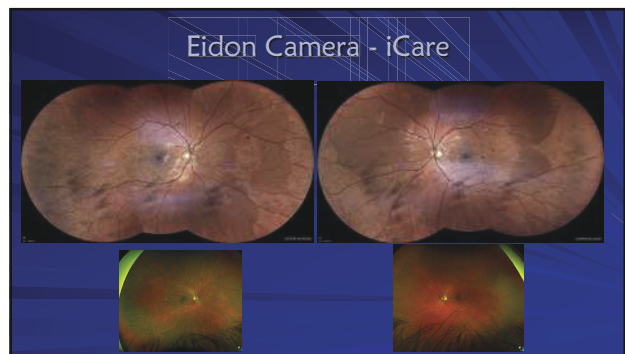
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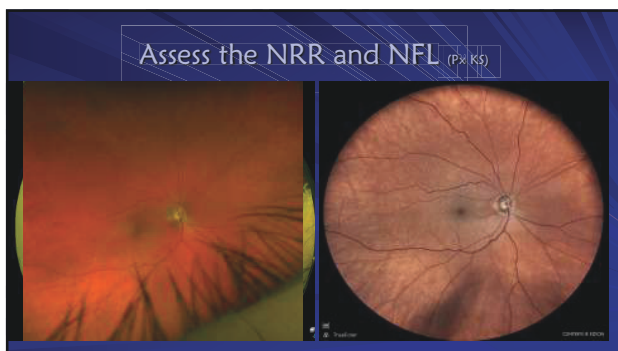
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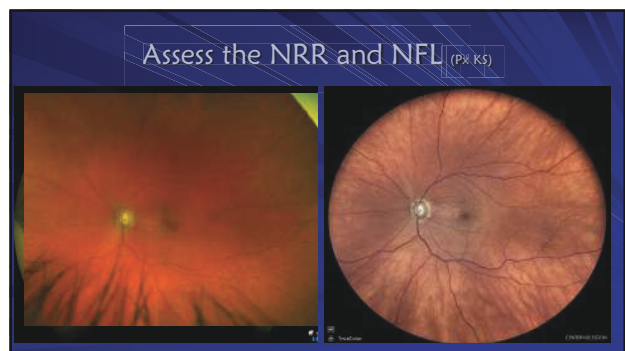
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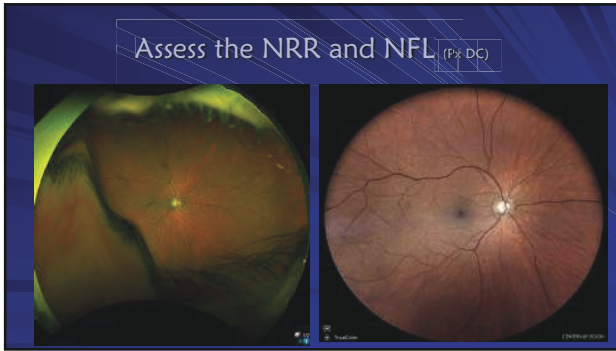
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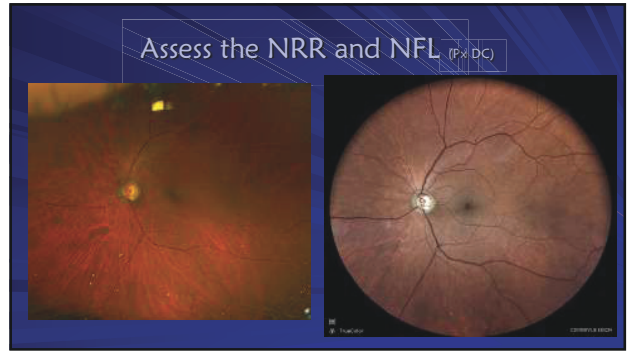
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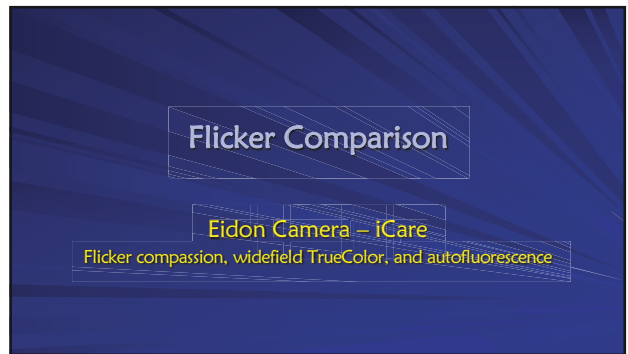
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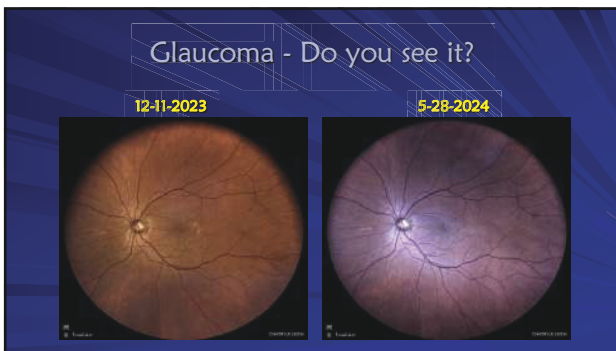
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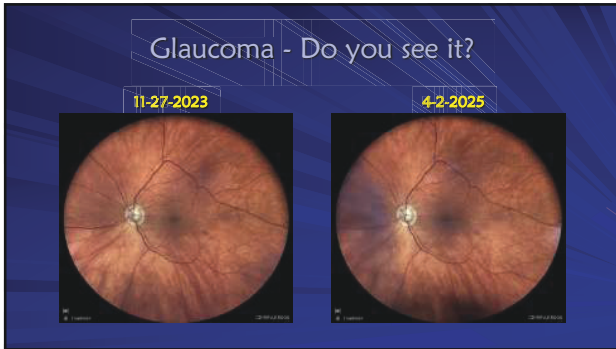
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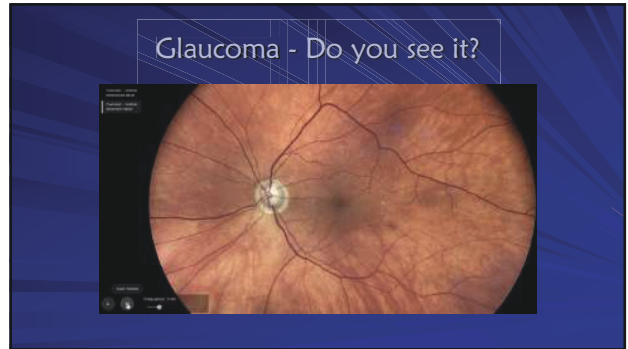
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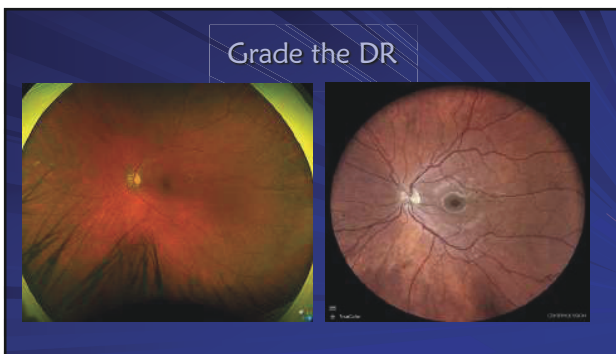
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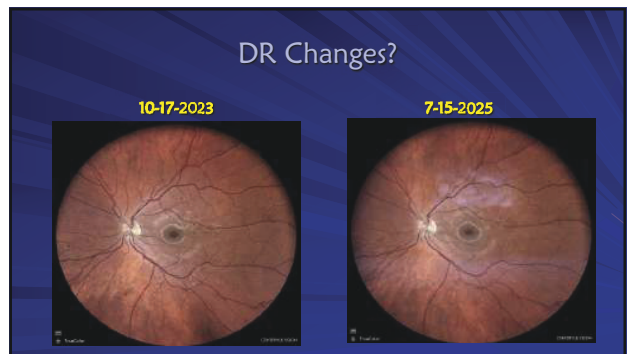
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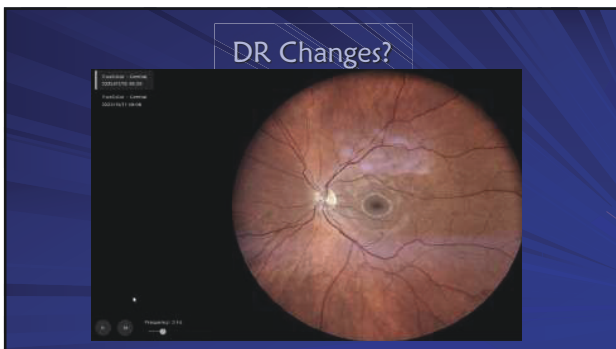
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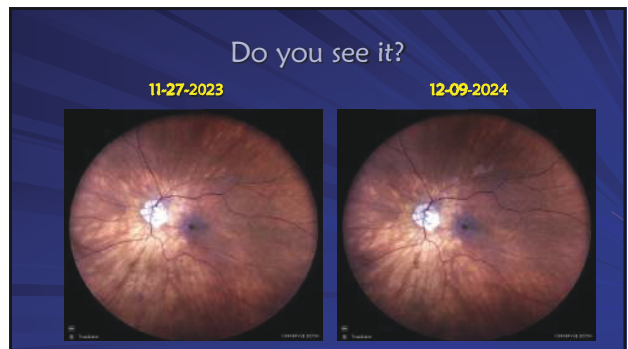
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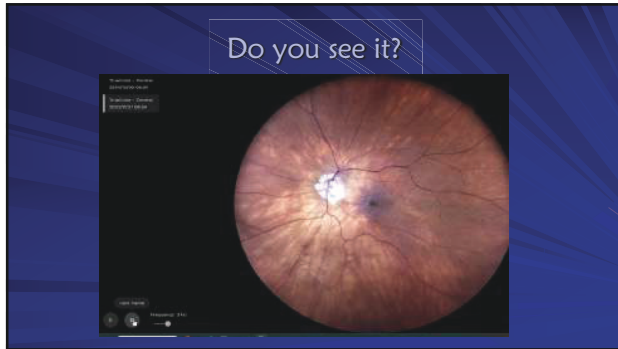
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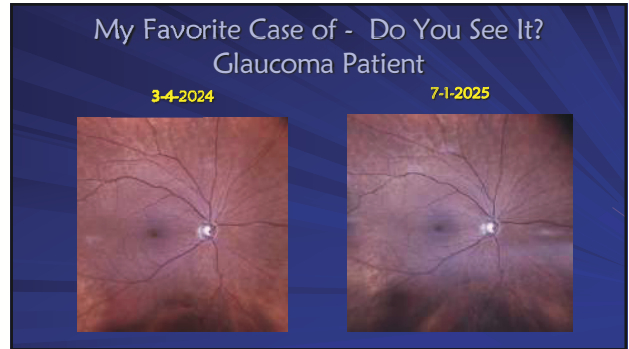
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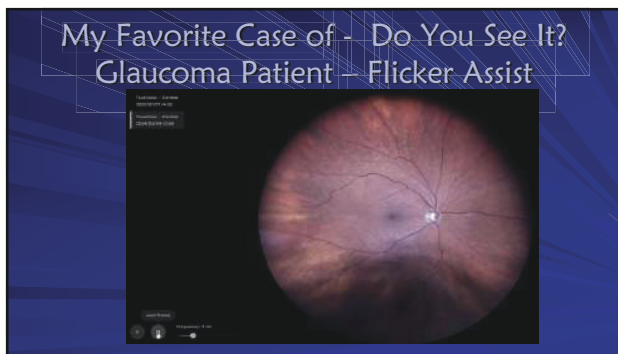
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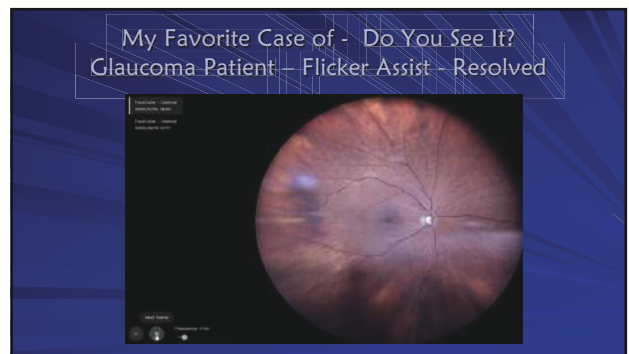
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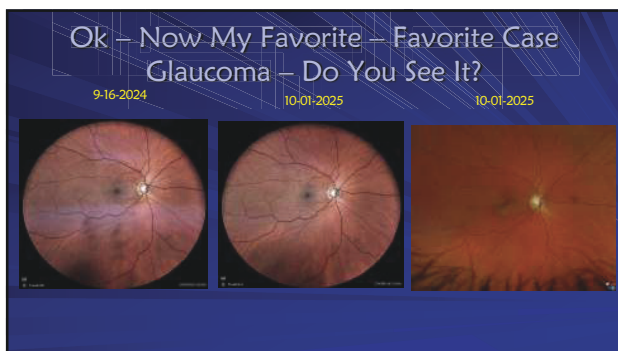
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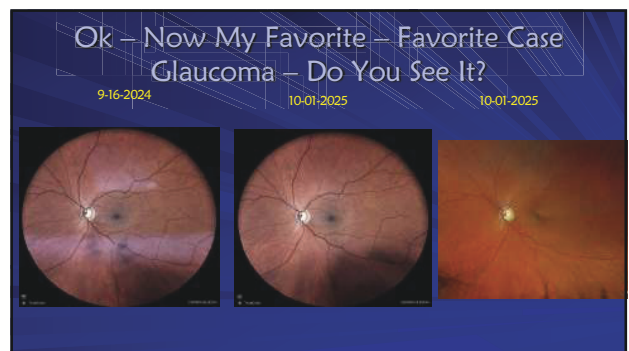
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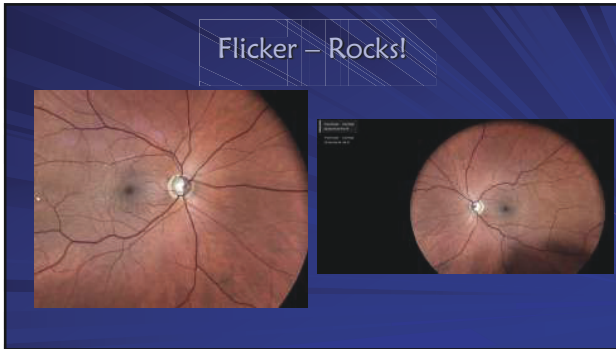
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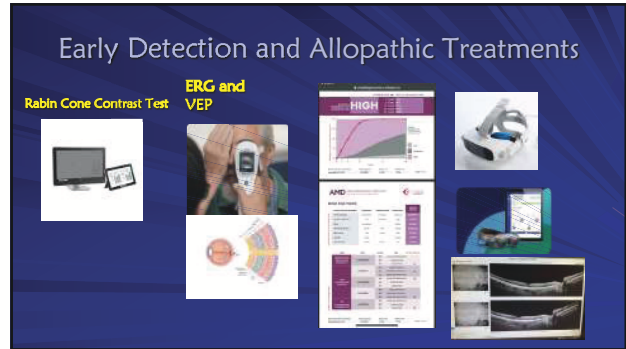
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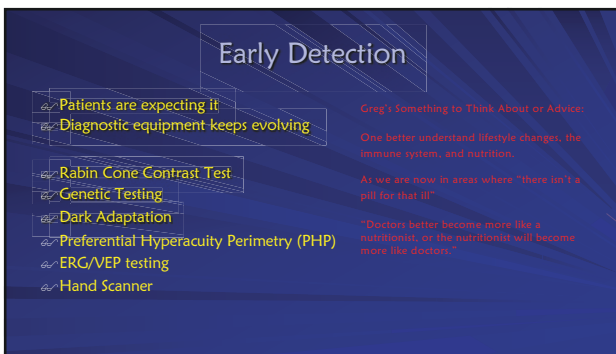
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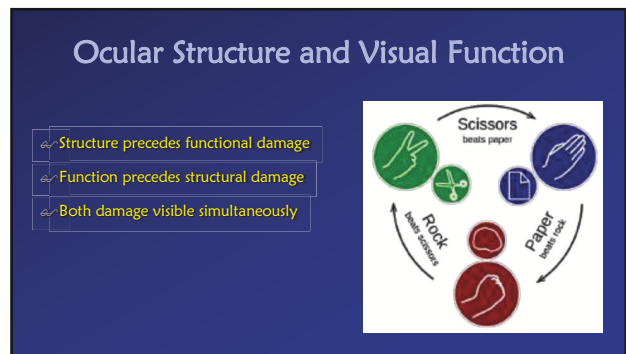
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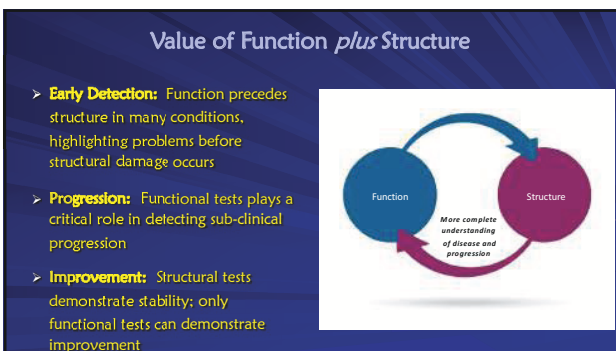
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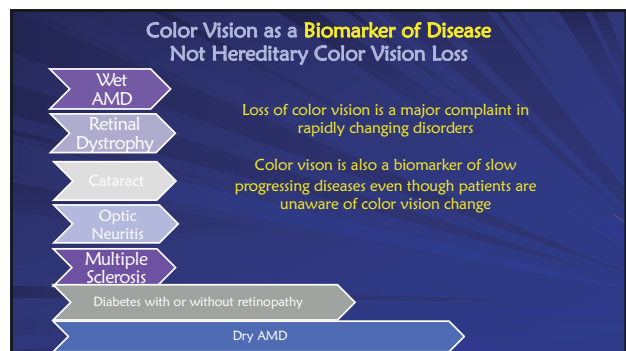
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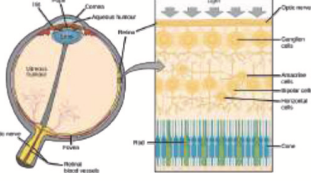


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Importance of Color Vision in Disease Management



- Color vision begins at the photoreceptor level ... and is dependent on each layer of the visual pathway
- Damage to any part of the macula or visual pathway affects cone function: color vision & visual acuity
- Change in color vision can be detected early in disease and is a natural predictor of impending visual acuity loss
- Functional changes often precede structural changes *and* can demonstrate improvement

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Rabin CCT Color Profile: Acquired Conditions

AMD

Pre/ Diabetes

Neurological/
Glaucoma

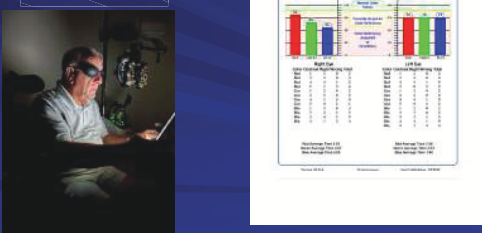
- AMD**
 - Often begins with Red and/or Green degradation
 - Moderate/ advanced cases affect all cone types
 - Begins with mild degradation, progresses to severe
- Pre/ Diabetes**
 - Blue cones typically more affected than other cone types
 - Moderate/ advanced cases affect all cone types
 - Begins with mild degradation, progresses to severe
- Neurological/ Glaucoma**
 - Often affects all 3 cone types
 - More severe degradation than retinal cases for similar disease stage

Disclaimer: No two cases are alike. These are guidelines only & should never be used alone to determine a diagnosis

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Glaucoma Patient Rabin Color Vision


Cataract OD > OS



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Rabin Cone Contrast Test

- Sensitive color contrast testing
 - ★ There is difference between traditional color vision tests
- Rabin Cone Contrast Test can be used for early detection:
 - ★ Age related macular degeneration
 - ★ Diabetic retinopathy
 - ★ Glaucoma
 - ★ Retinal disease



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Cone Contrast Test Results



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Rabin Cone Contrast Test

- Based in science
 - ★ Co-developed between Innova Systems and US Air Force
- Combines Cone Isolation technology and Contrast Sensitivity
- Color vision technology sensitive enough to detect subtle changes from disease
- Threshold test, similar to visual field
 - ★ But just faster...
 - ★ CPT 92283 - \$52 national average



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