

Focus on OCT- Dispensing Opticians Extended Services Event



FYEye
Ltd.

Consultants to the Ophthalmic Sectors



WORKSHOP 1

Example OCT pathology cases with discussion

Jason Higginbotham BSc (Hons) MCOptom Prof
Cert Glau Prof Cert Med Ret Prof Cert LV FBDO
MBCLA

Focus on OCT- Dispensing Opticians Extended Services Event

Learning Objectives

C-79655 Example OCT Pathology Cases (Discussion Workshop)

3 CET Points

Optometrist



Standards
of Practice



Ocular
Examination



Ocular Disease

Dispensing optician



Standards
of Practice



Ocular
Examination



Ocular
Abnormalities

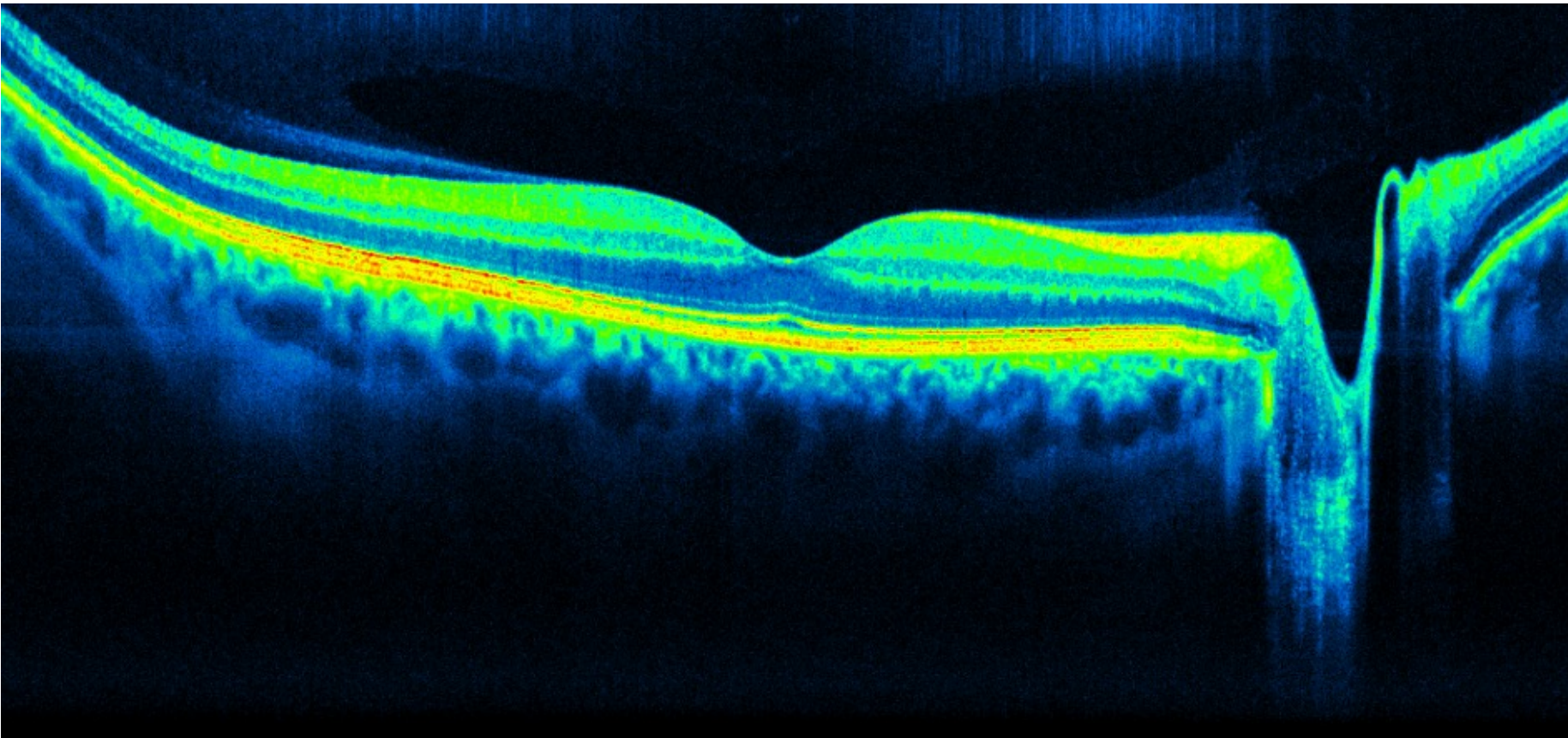
Introduction

Please remember to assign a table / group lead. Everyone must list their name, GOC number and email address please.

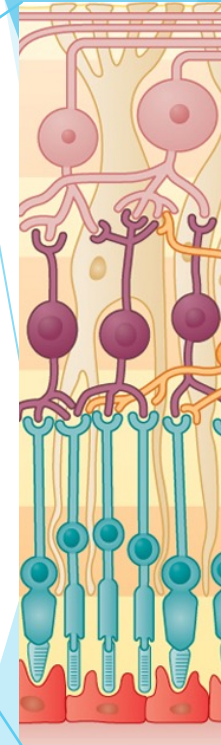
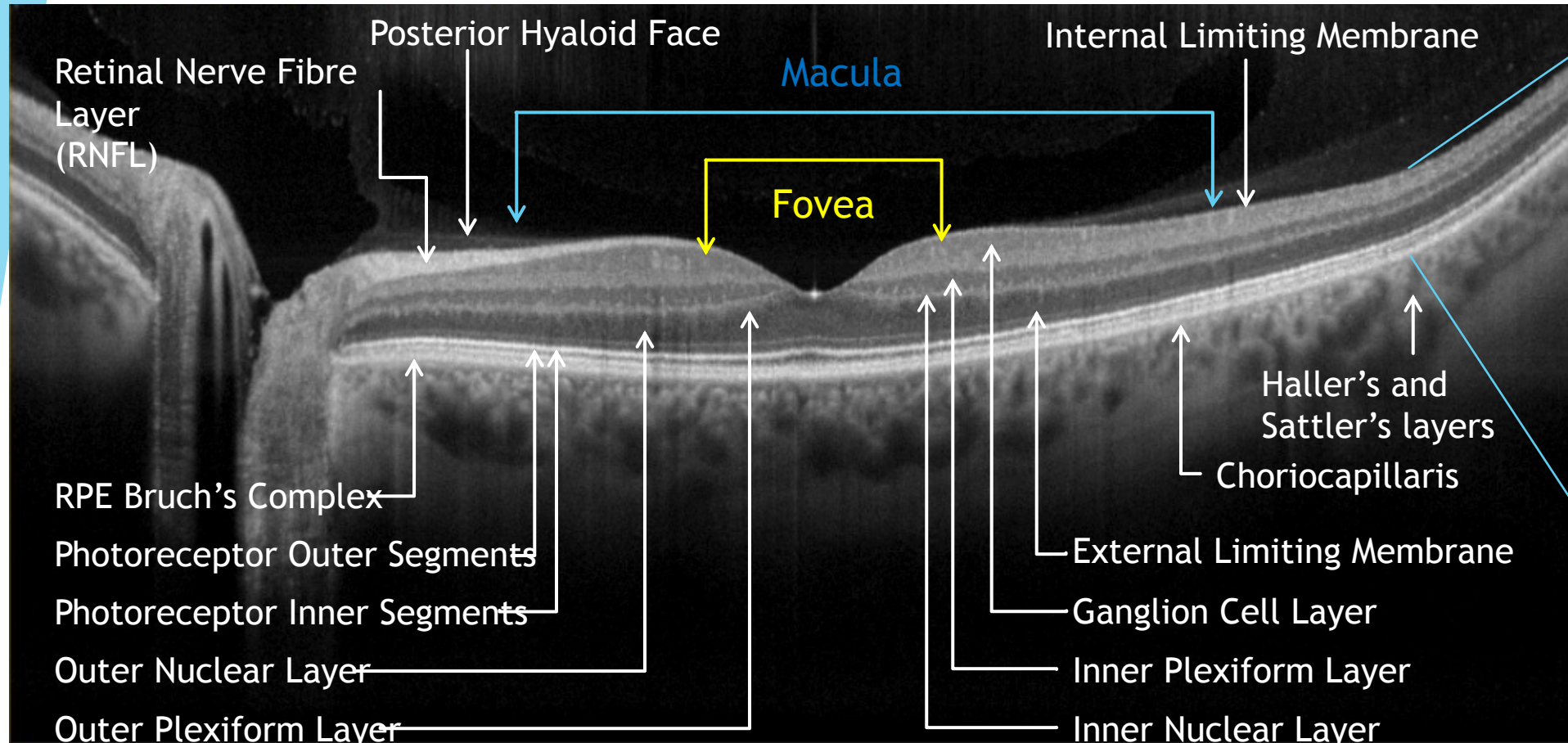
- **Quick Recap**
- **Cases with discussions**
- **Quickfire lesion identification**

Quick Recap

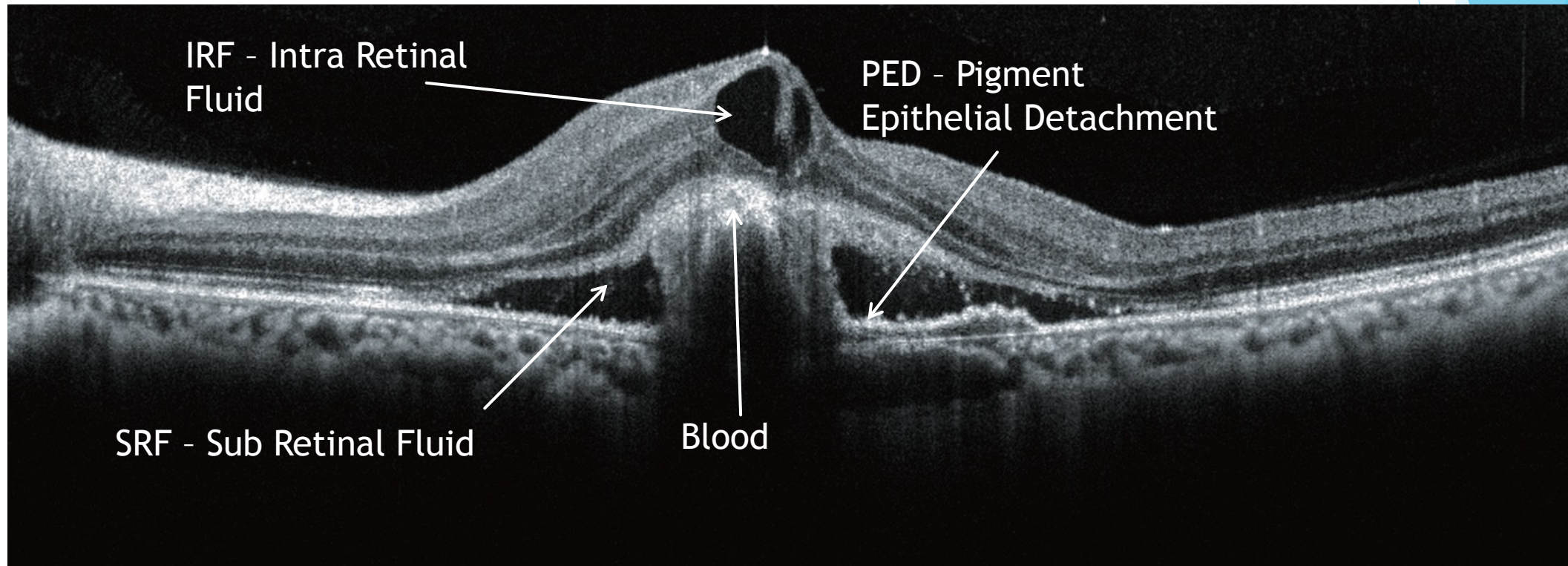
B-Scan



Quick Recap



Quick Recap



Quick Recap





Cases with discussion

Case 1

DOB: **28/08/1959**
Age: **61**

Exam date: 28/01/2021
Gender: **Male**
Eye: **Both**

Comments:



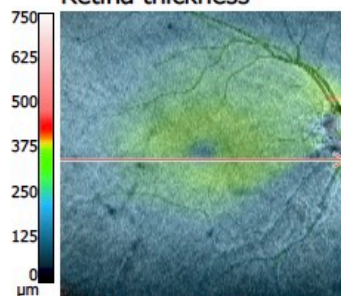
R 28/01/2021 10:02:10 QI: **9**
3D 10x10 mm

RETINA | BOTH EYES | RETINA

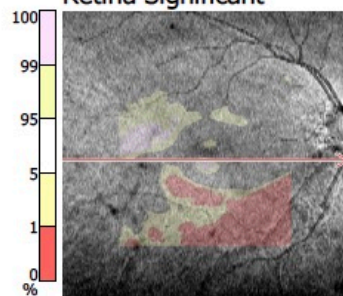
QI: **9** 28/01/2021 10:02:50
3D 10x10 mm

L

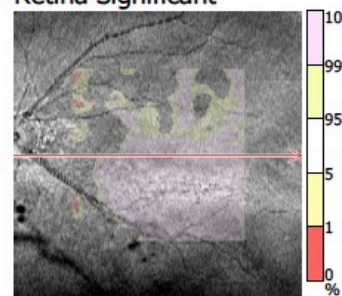
Retina thickness



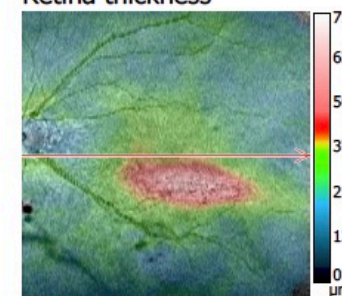
Retina Significant



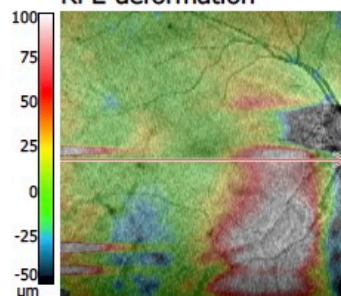
Retina Significant



Retina thickness



RPE deformation



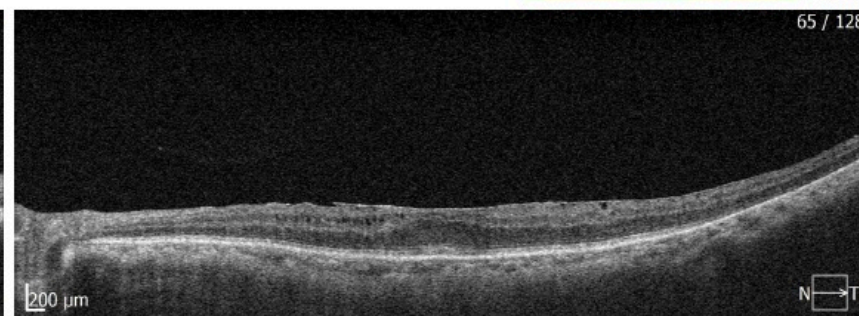
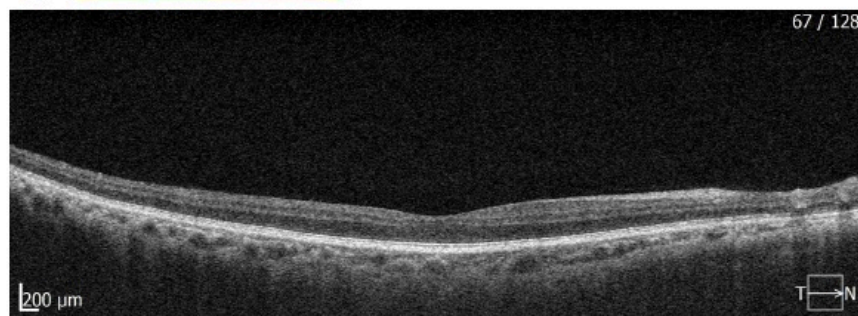
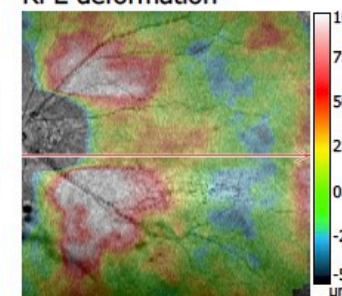
1/3/6 mm

Average

ILM - OS/RPE measurements	R	L	Diff (R-L)
Minimum in Fovea [μm]	221	347	-126
Central sector [μm]	269	376	-107
Area thickness [μm]	273	336	-63
Volume [mm ³]	7.71	9.51	-1.80



RPE deformation



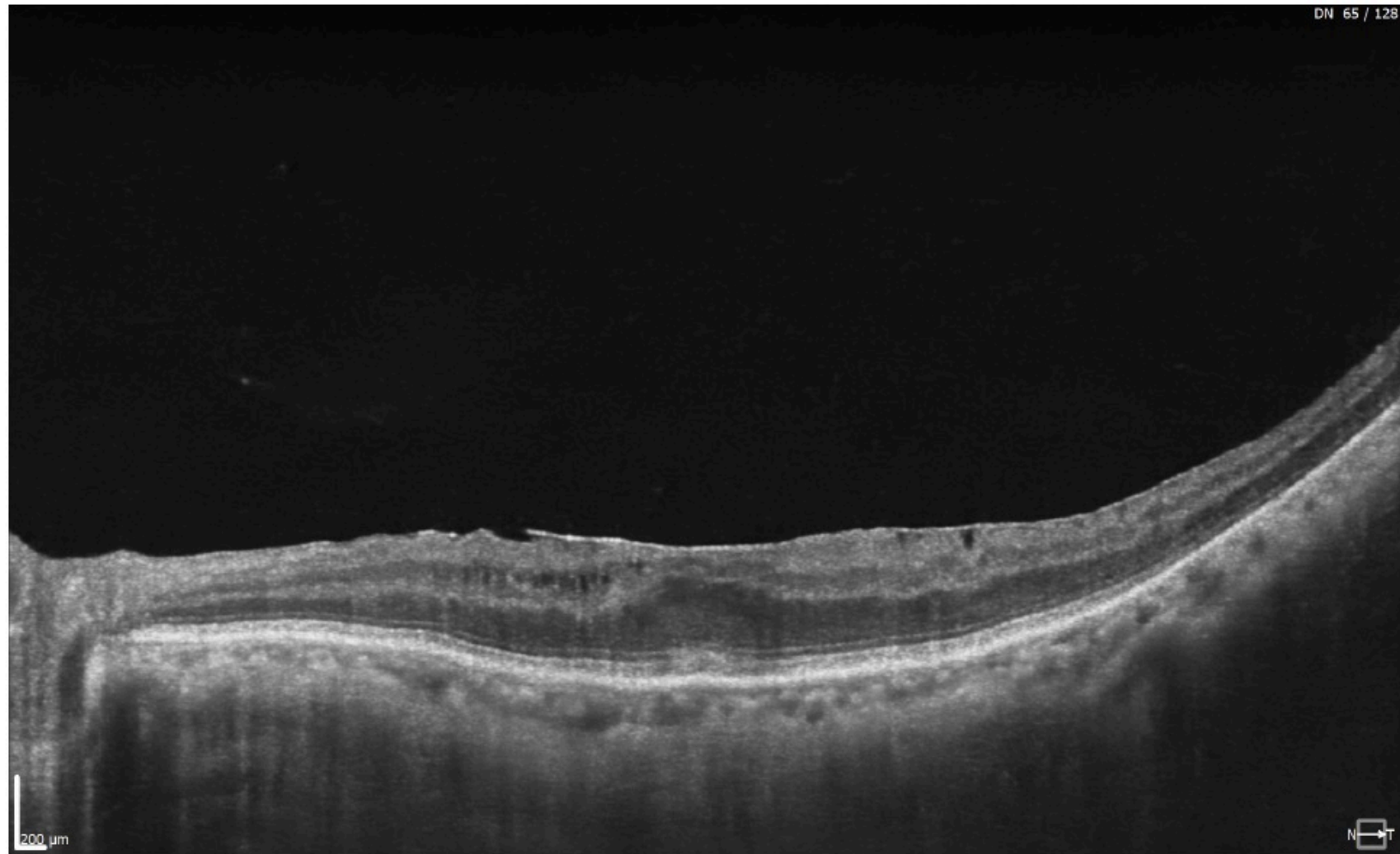
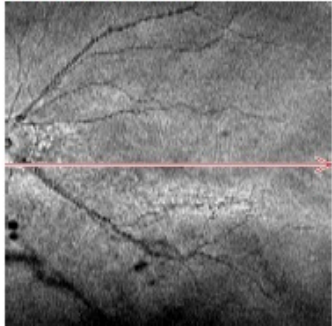
Case 1

L

28/01/2021 10:02:50 QI: 9
3D 10x10 mm

RETINA | Tomogram

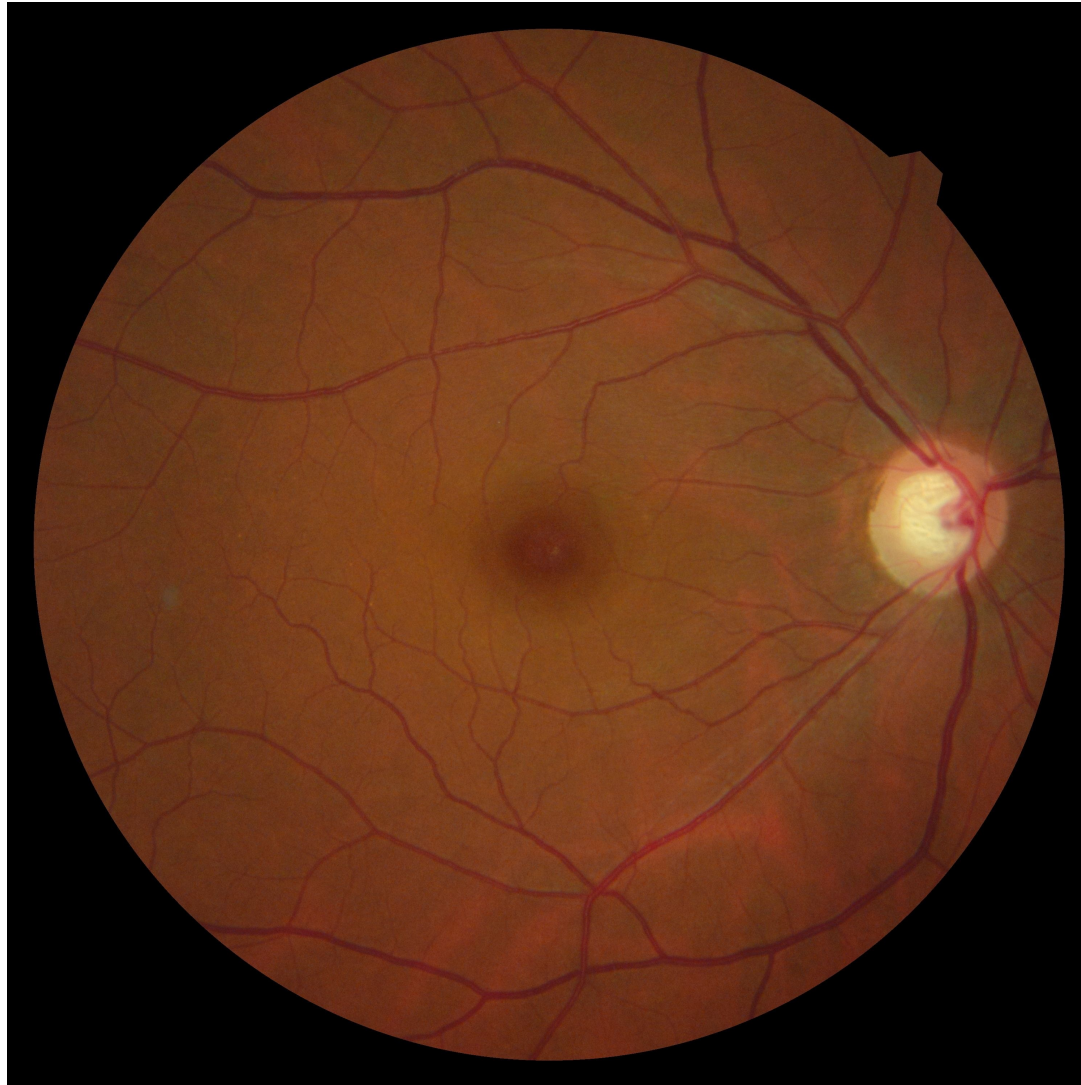
Reconstruction



Case 1 - Discussion

1. What does the pink colour mean on the left eye normative macula map?
2. Can you locate the likely lesion that is causing this effect?
3. What do you think this lesion might be called?
4. Do you know how it might be managed?

Case 2

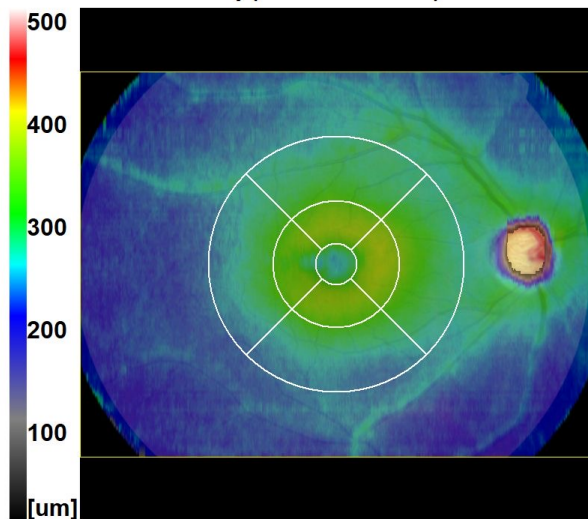


Case 2

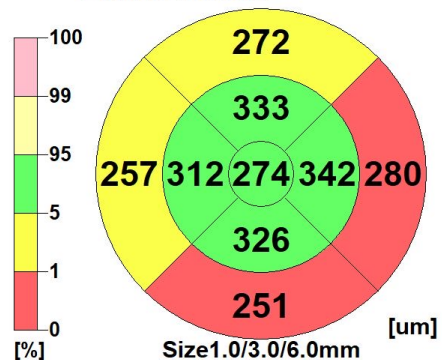


Case 2

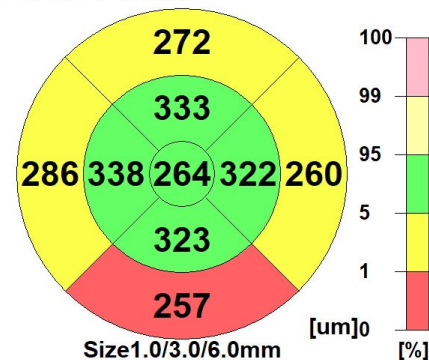
ThicknessMap(ILM - RPE/BM)



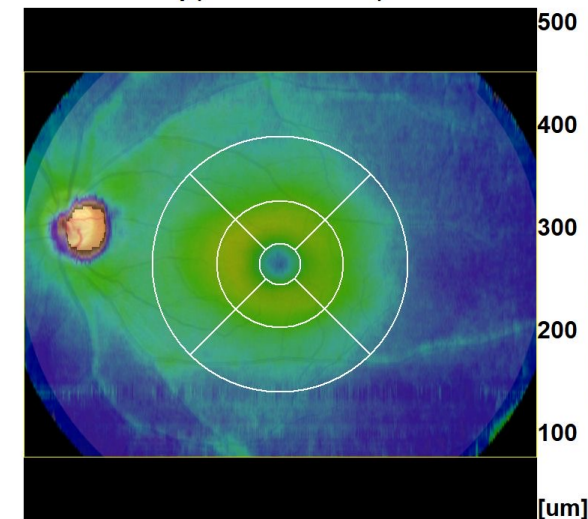
ETDRS 9 Sector



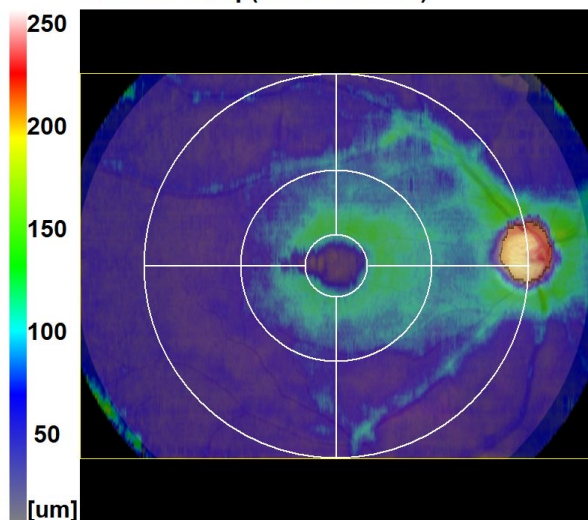
ETDRS 9 Sector



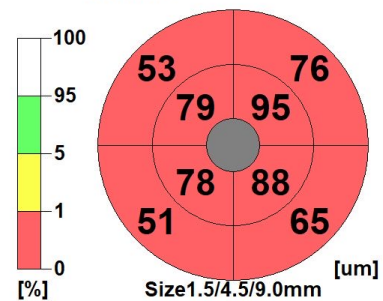
ThicknessMap(ILM - RPE/BM)



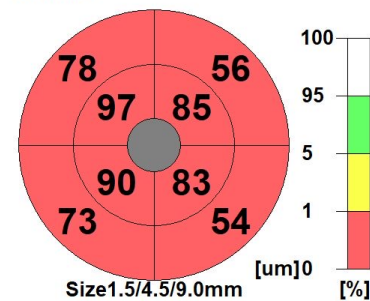
ThicknessMap(ILM - IPL/INL)



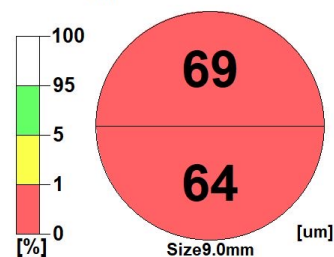
GChart



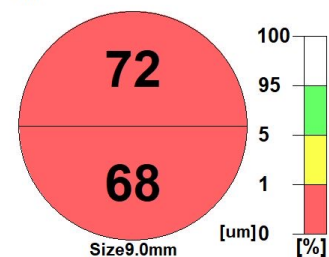
GChart



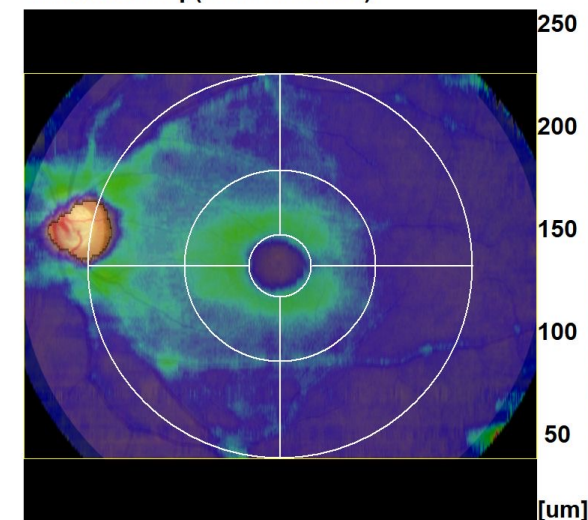
S/I



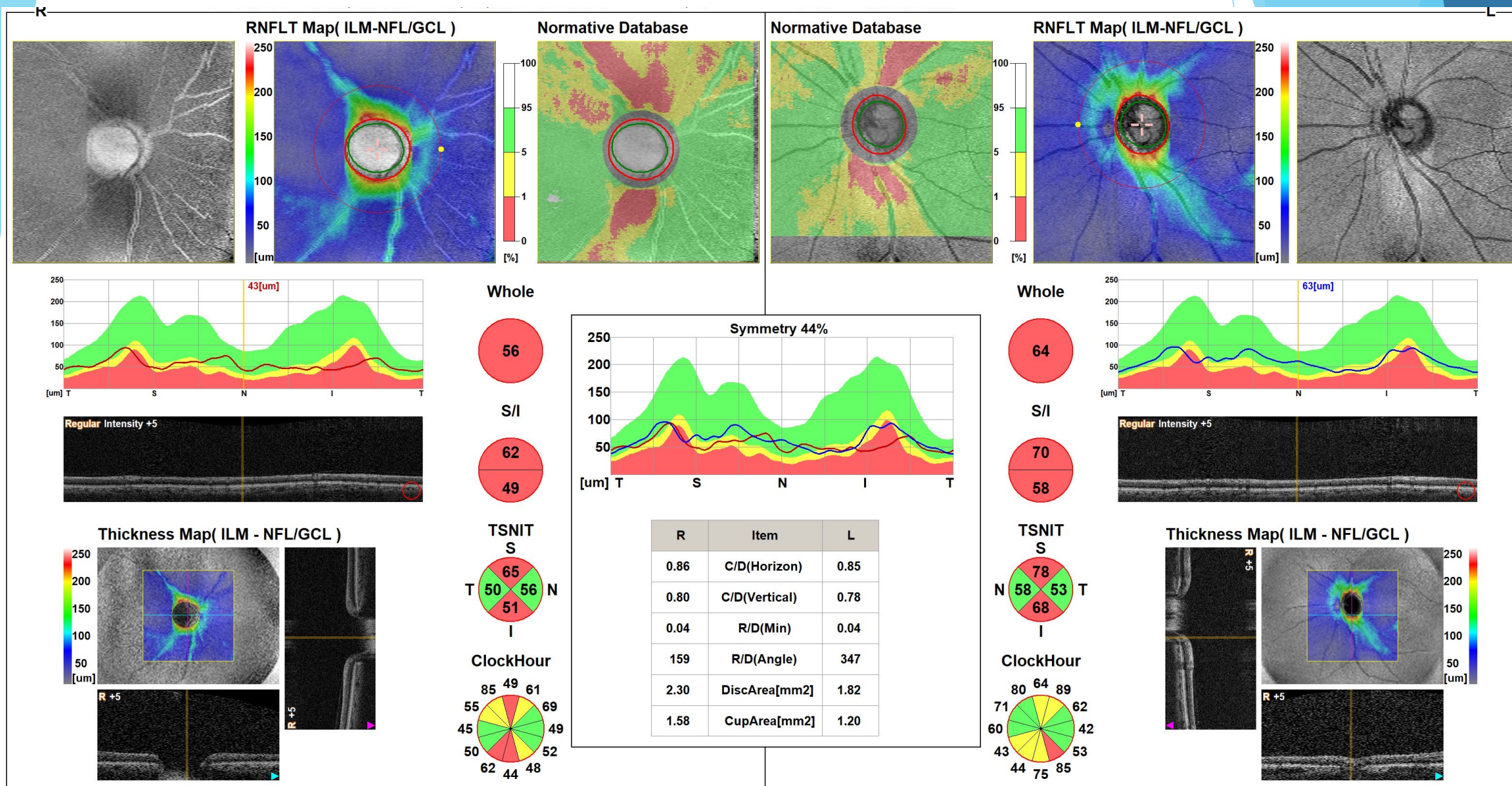
S/I



ThicknessMap(ILM - IPL/INL)

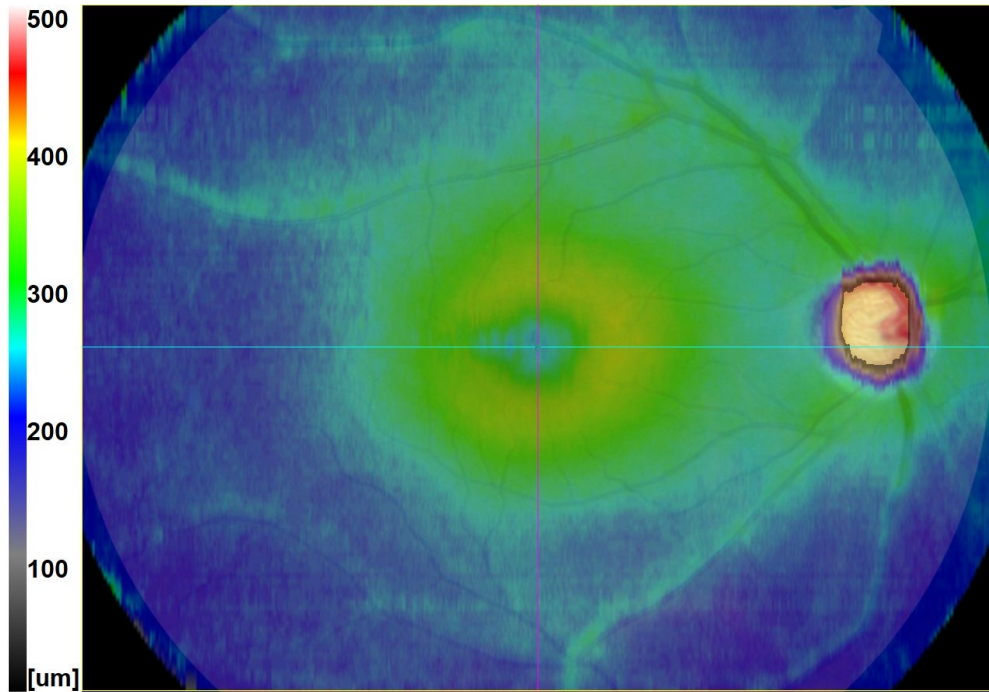


Case 2

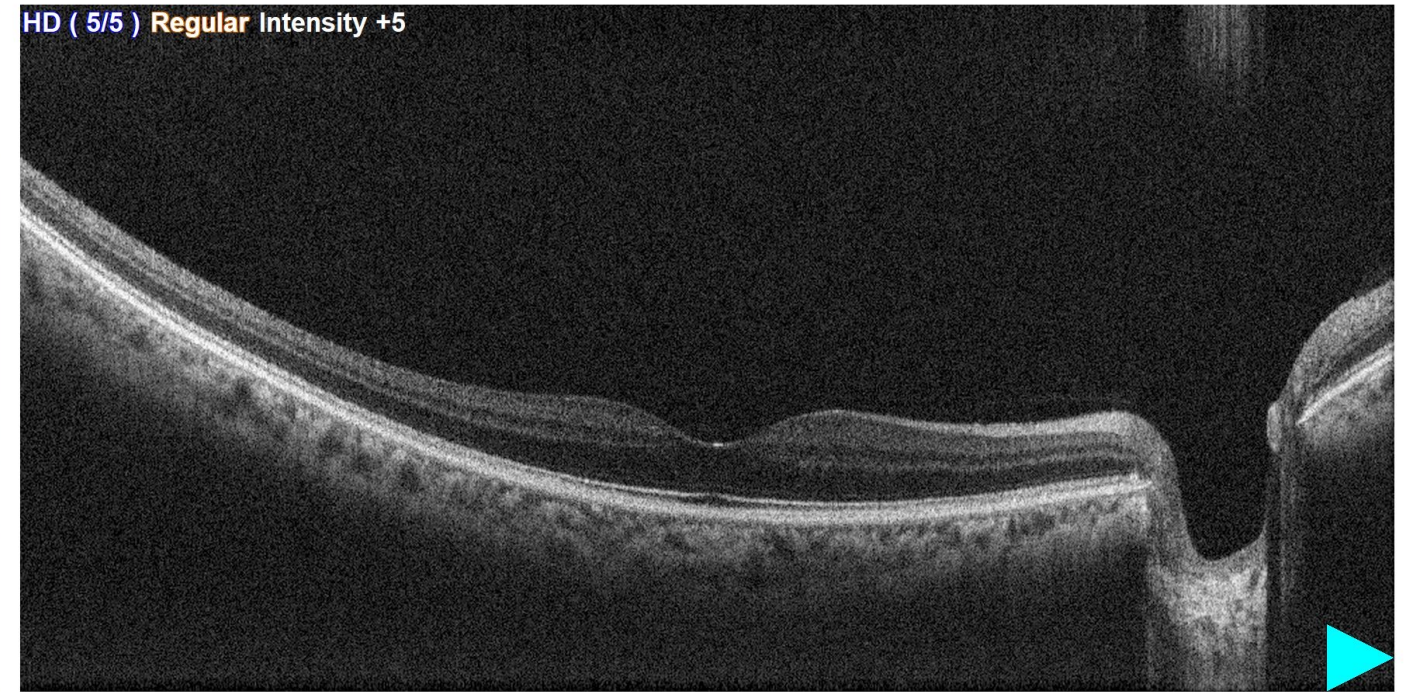


Case 2

Thickness Map(ILM - RPE/BM)

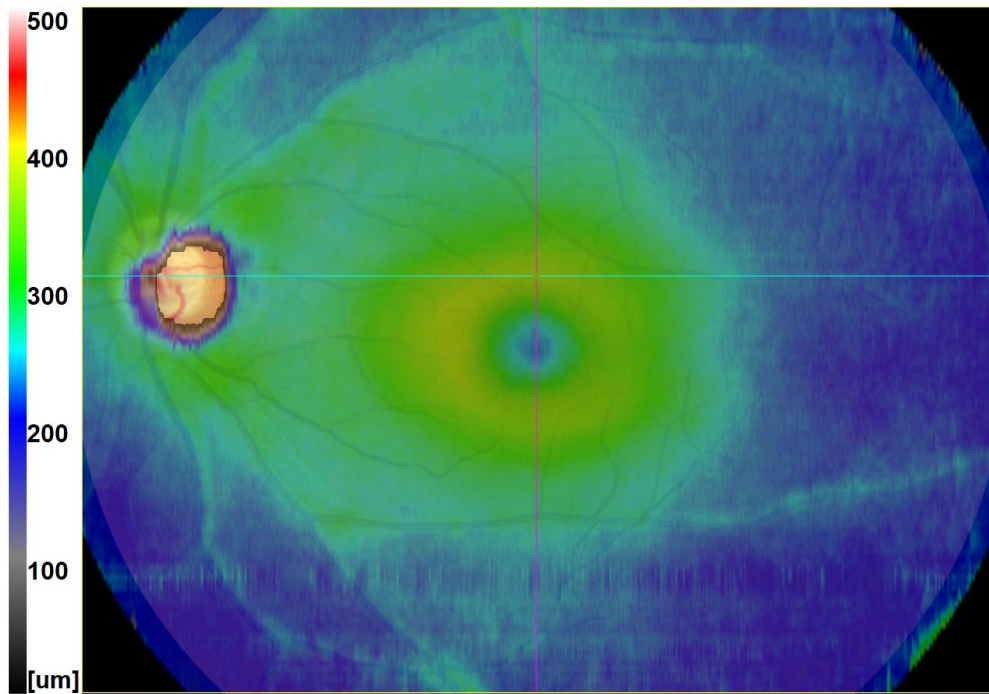


OCT(Horizontal Cross)

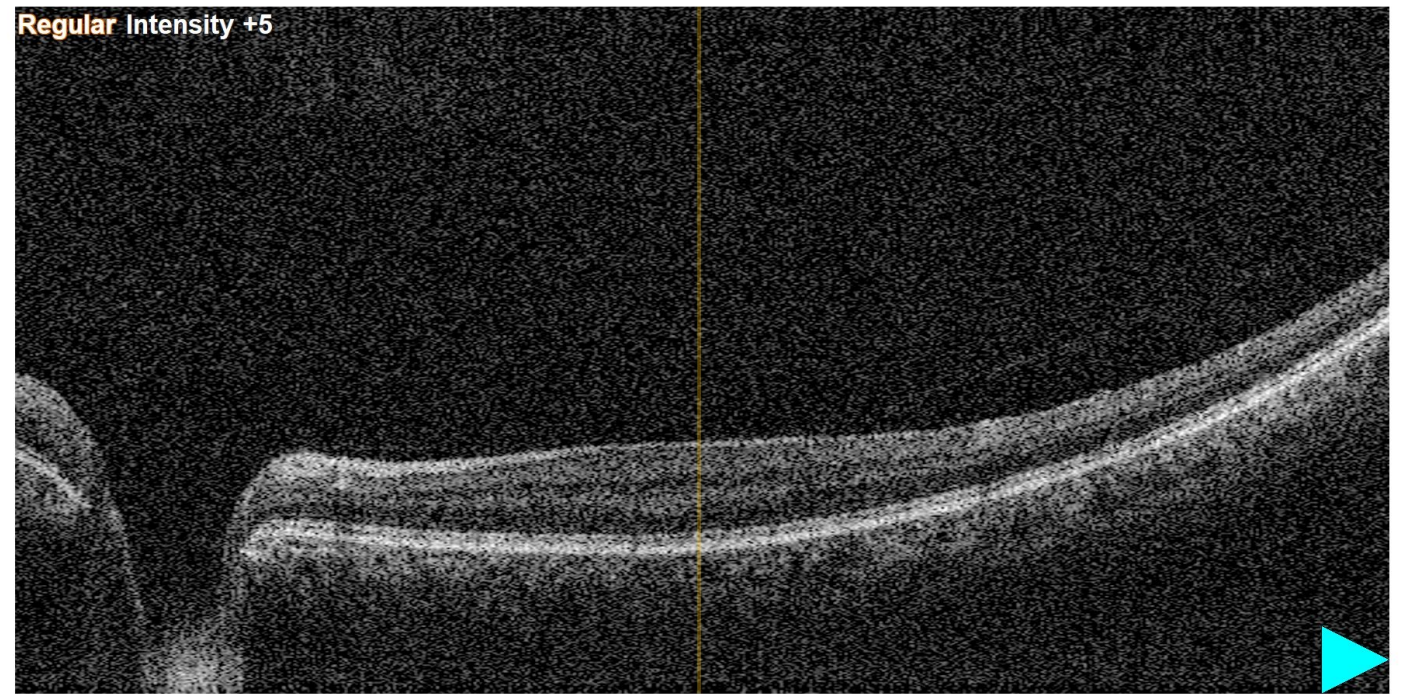


Case 2

Thickness Map(ILM - RPE/BM)



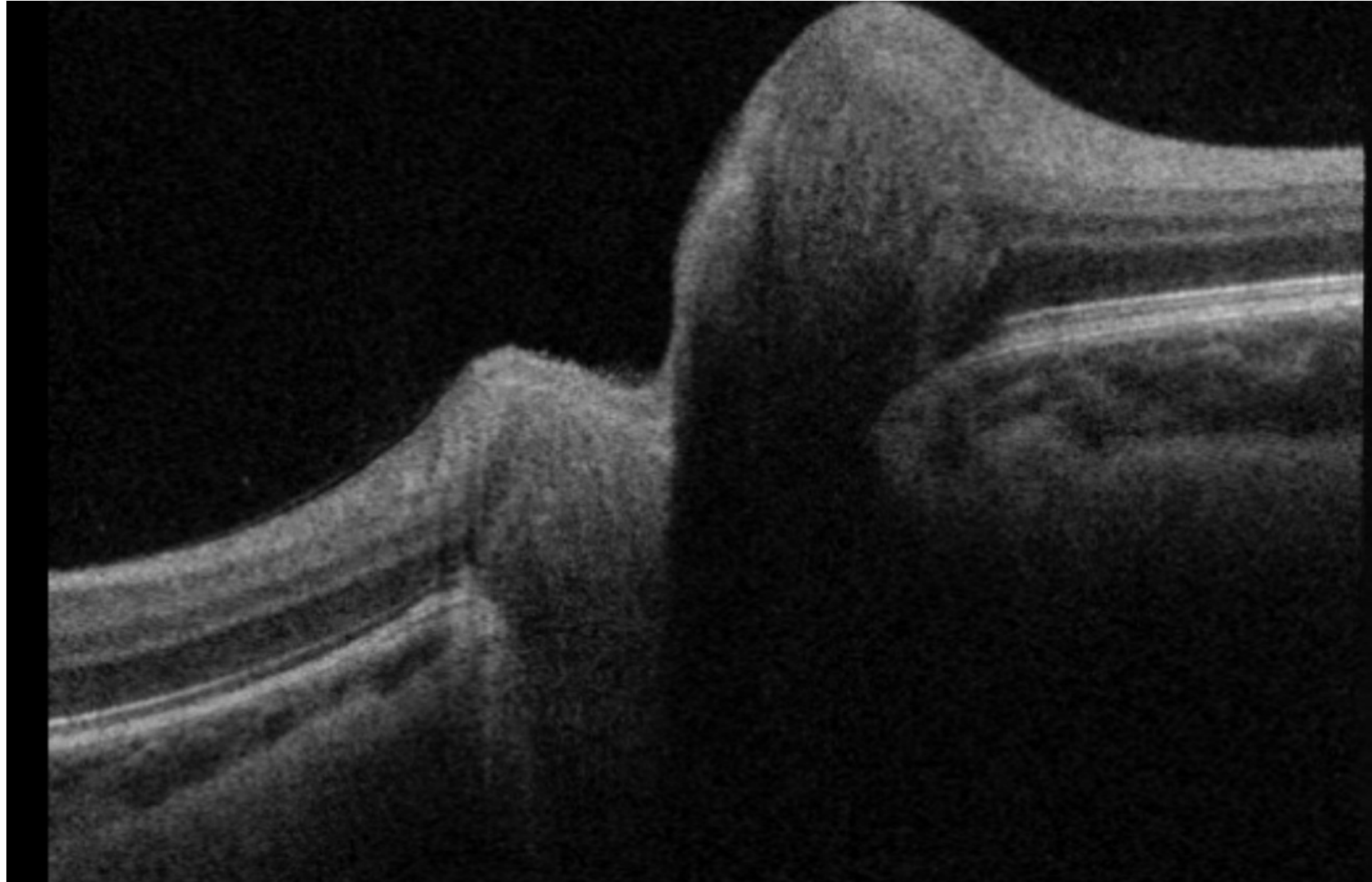
OCT(Horizontal 51 / 128)



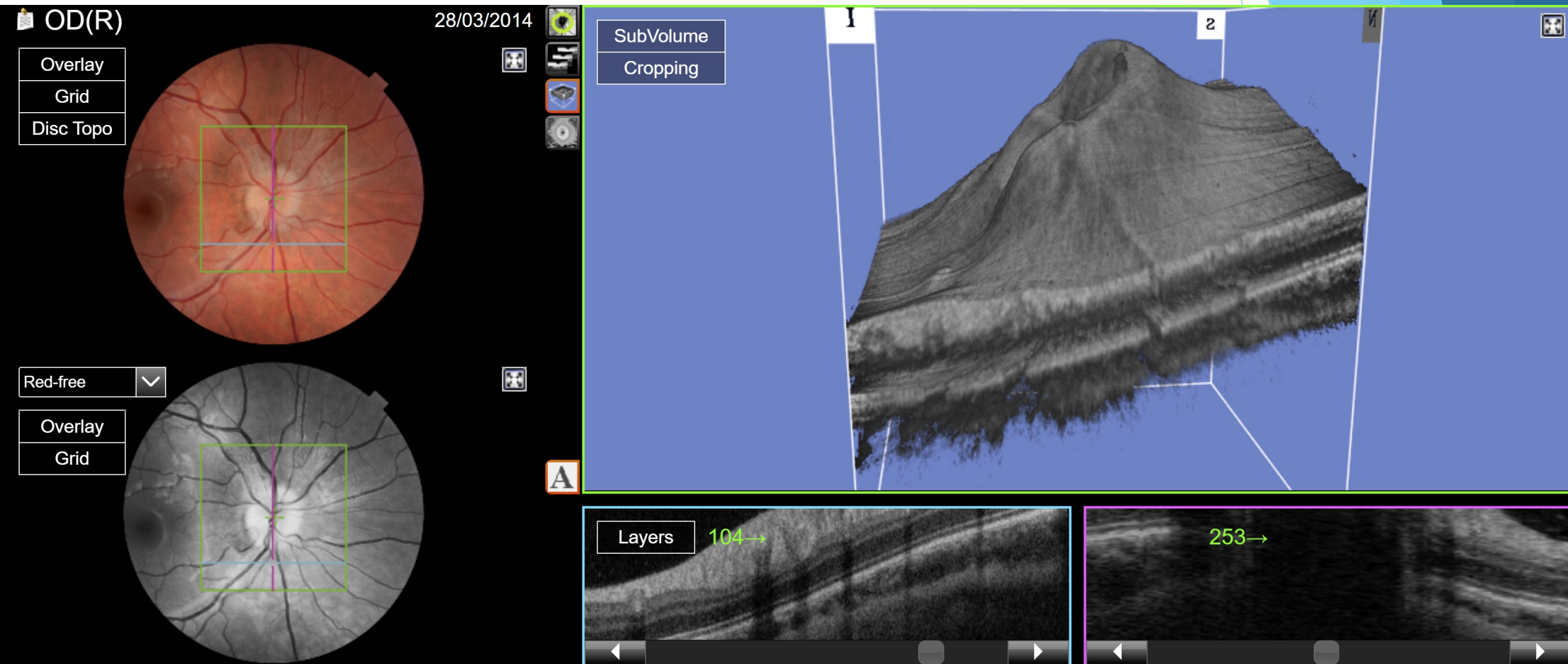
Case 2 - Discussion

1. What does the red colour mean on the bilateral macula maps?
2. Which layers of the retina are primarily affected?
3. What do you think might be causing this?
4. What other tests might need to be done to identify this condition?

Case 3



Case 3



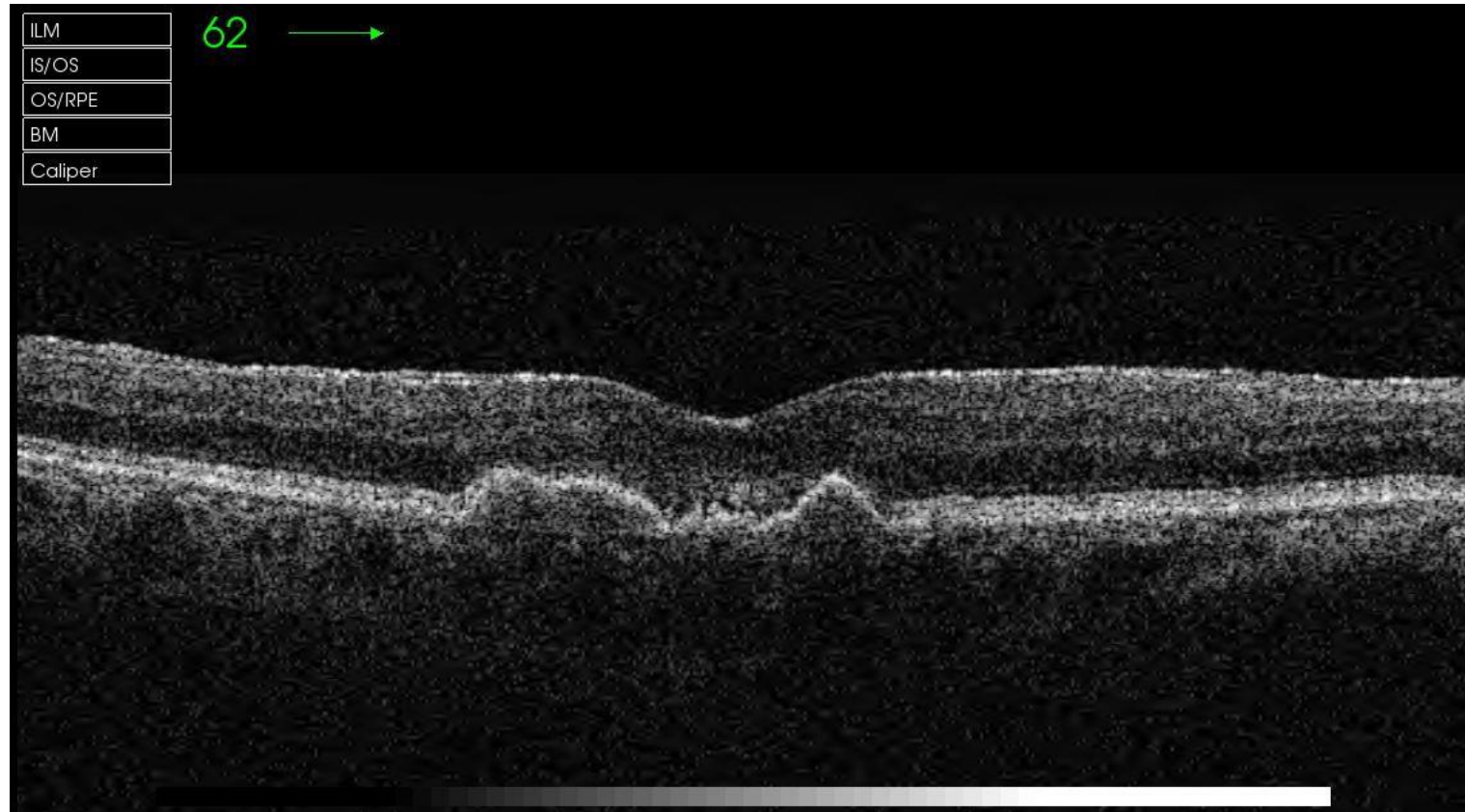
Case 3 - Discussion

1. What area of the retina is the B-scan showing you?
2. How might you describe the structure shown in the 3D image?
3. What do you think this condition might be called?
4. Do you know what it can be confused with?
5. Do you know what other tests might be performed by the optometrist?

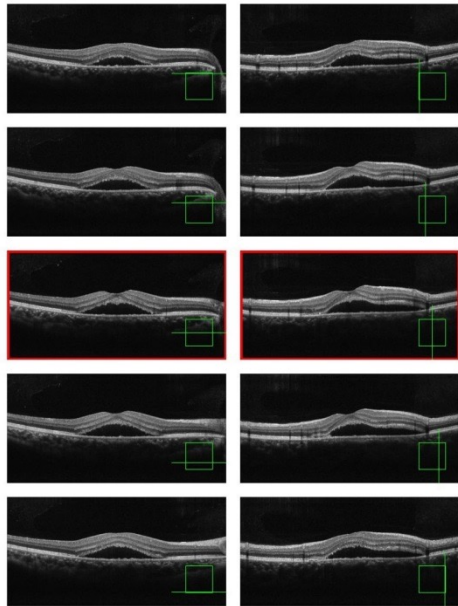
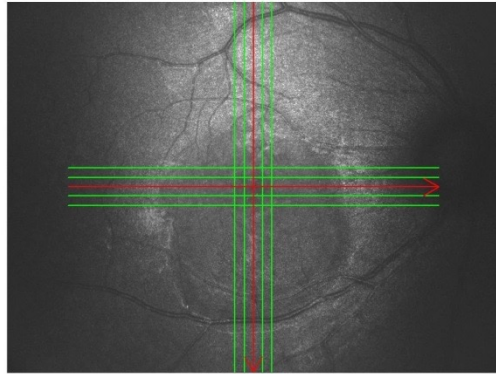
Quickfire Lesion Identification



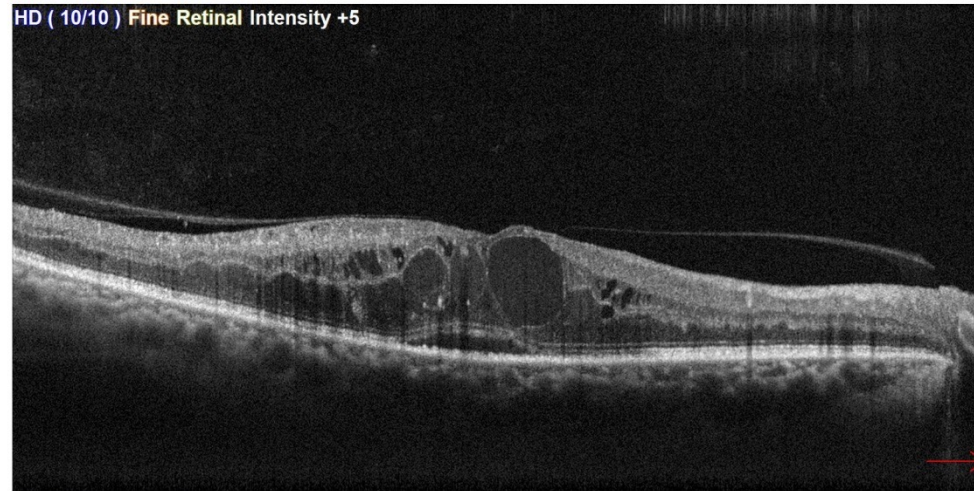
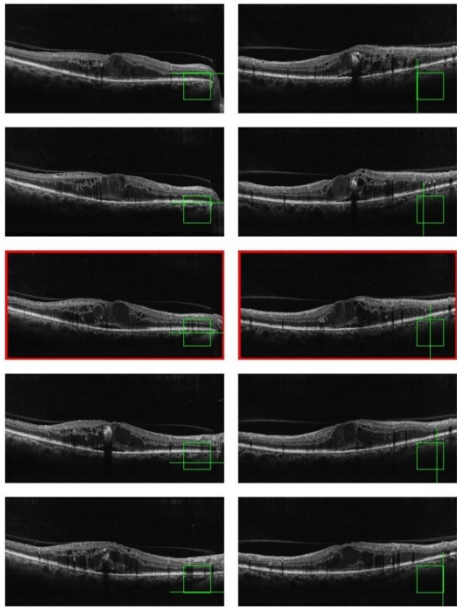
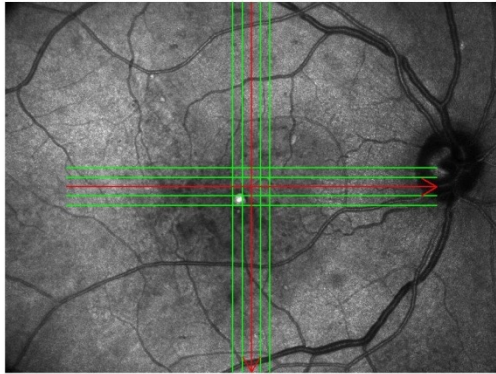
Quickfire 1



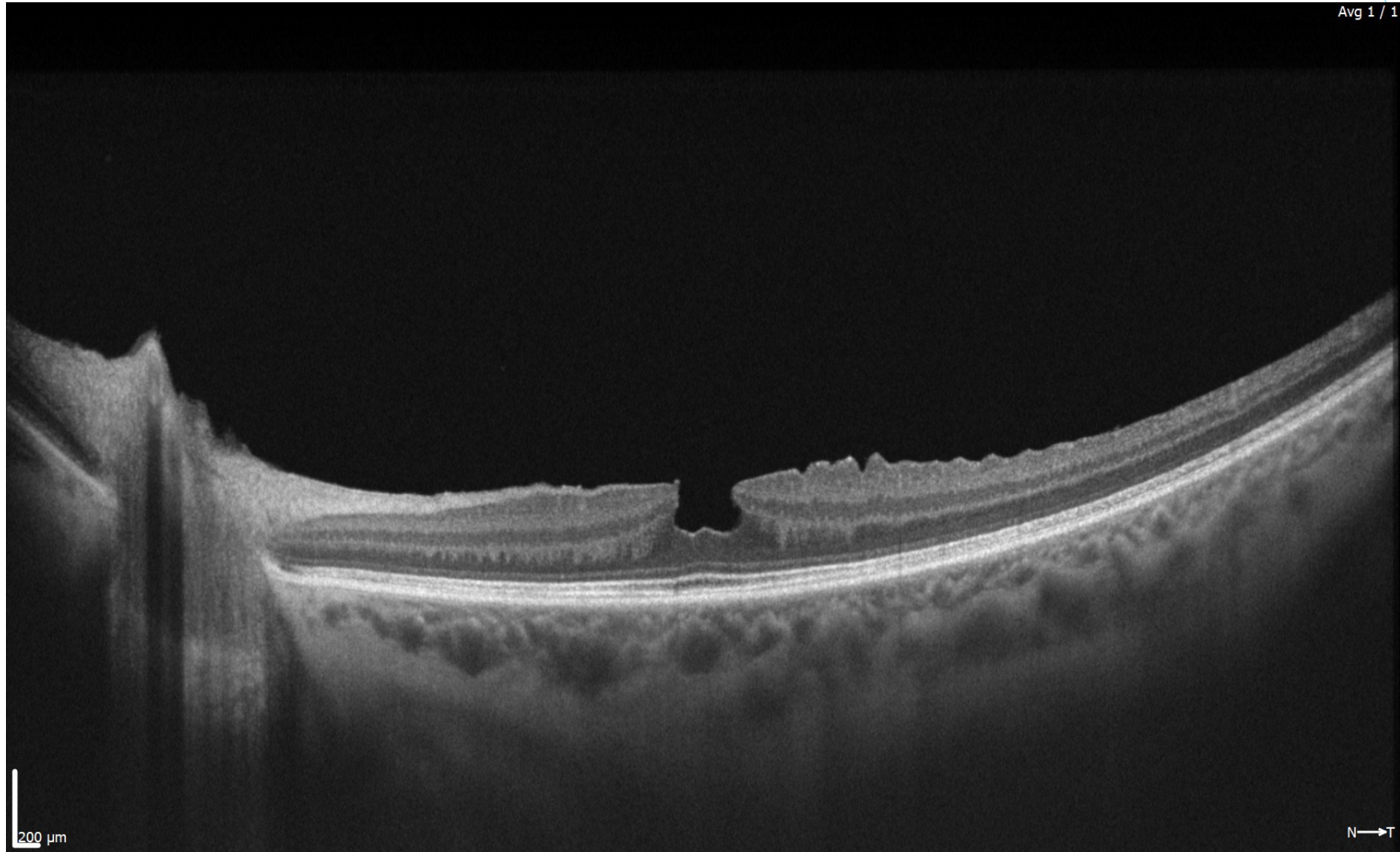
Quickfire 2



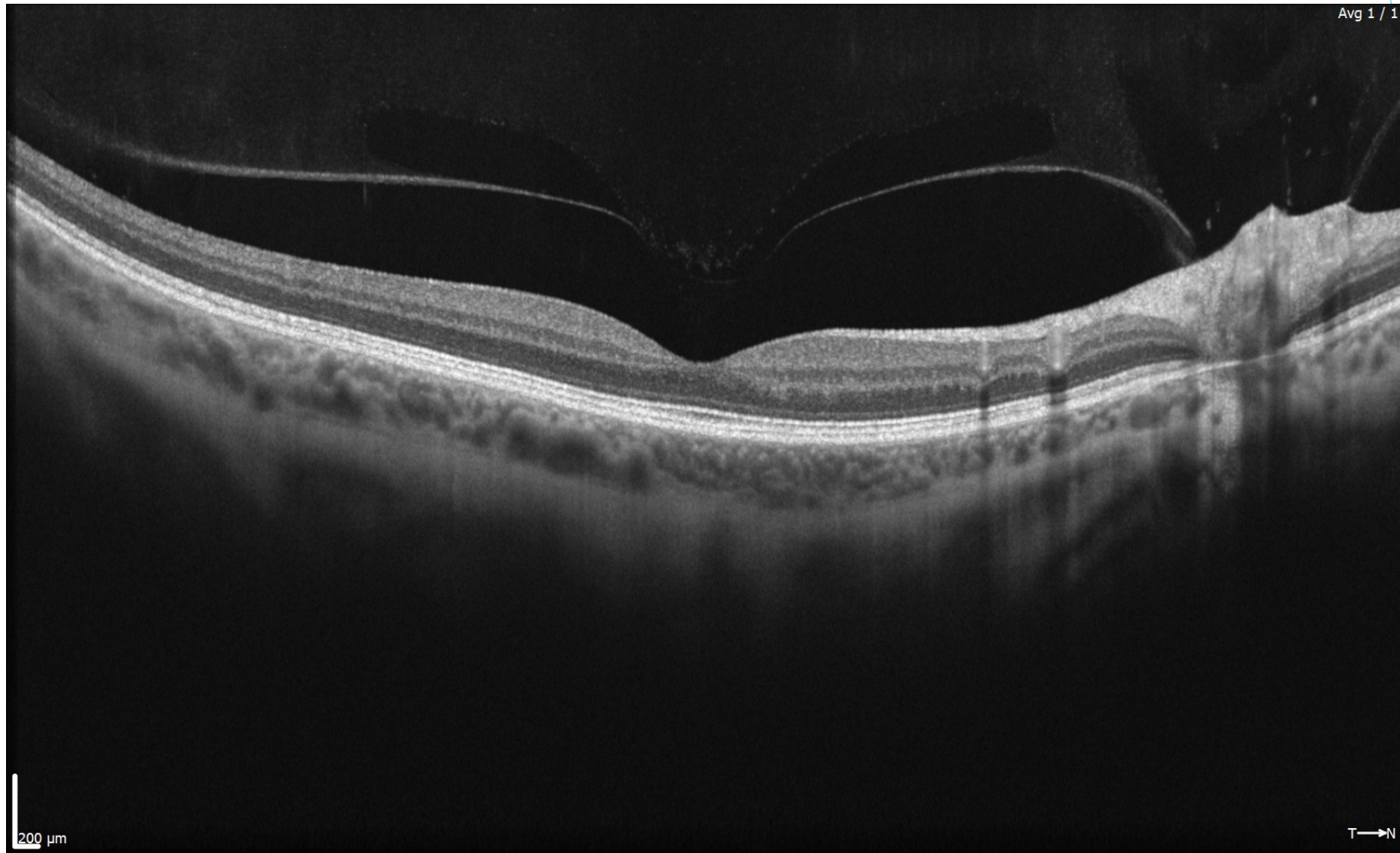
Quickfire 3



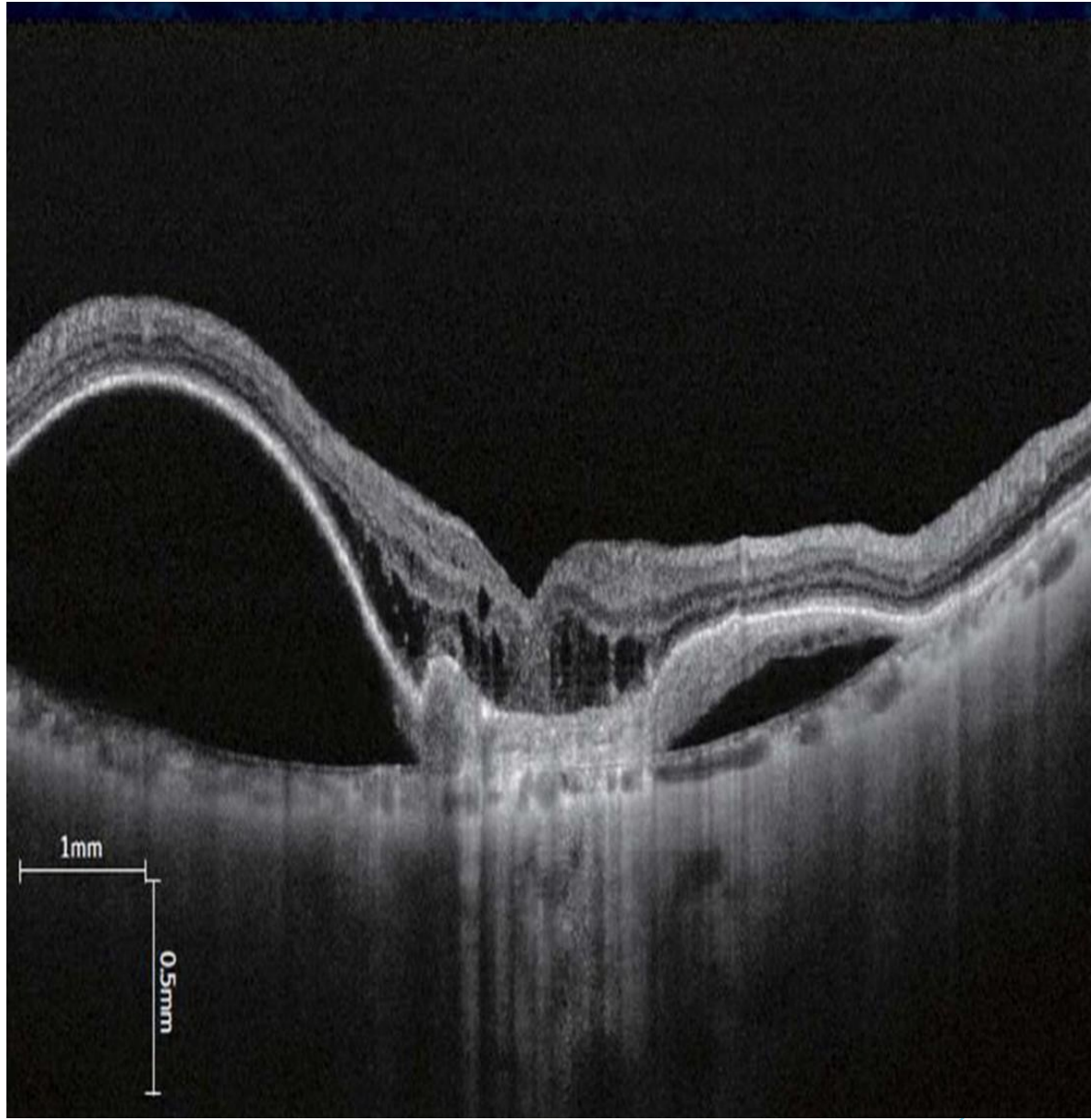
Quickfire 4



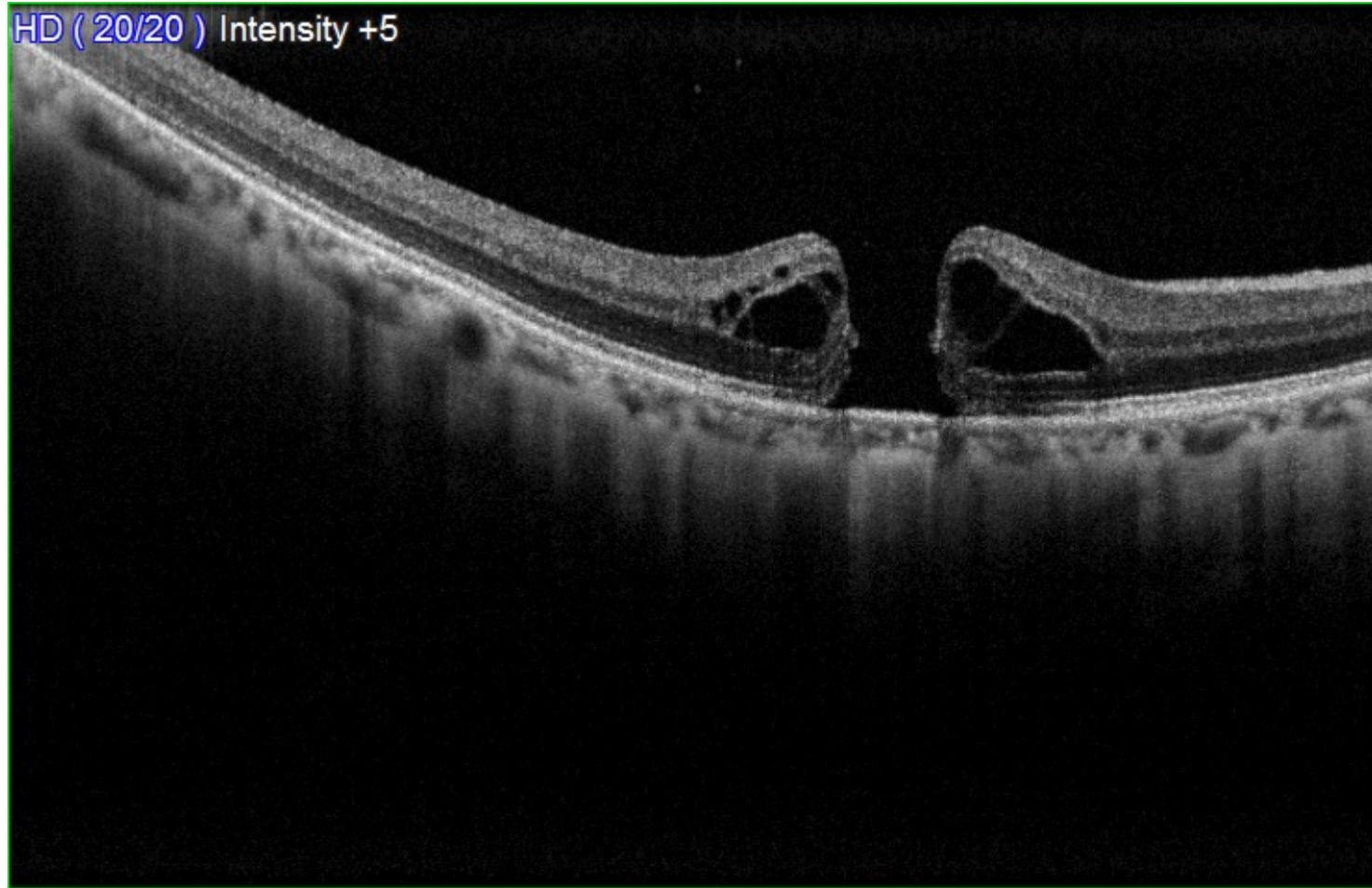
Quickfire 5



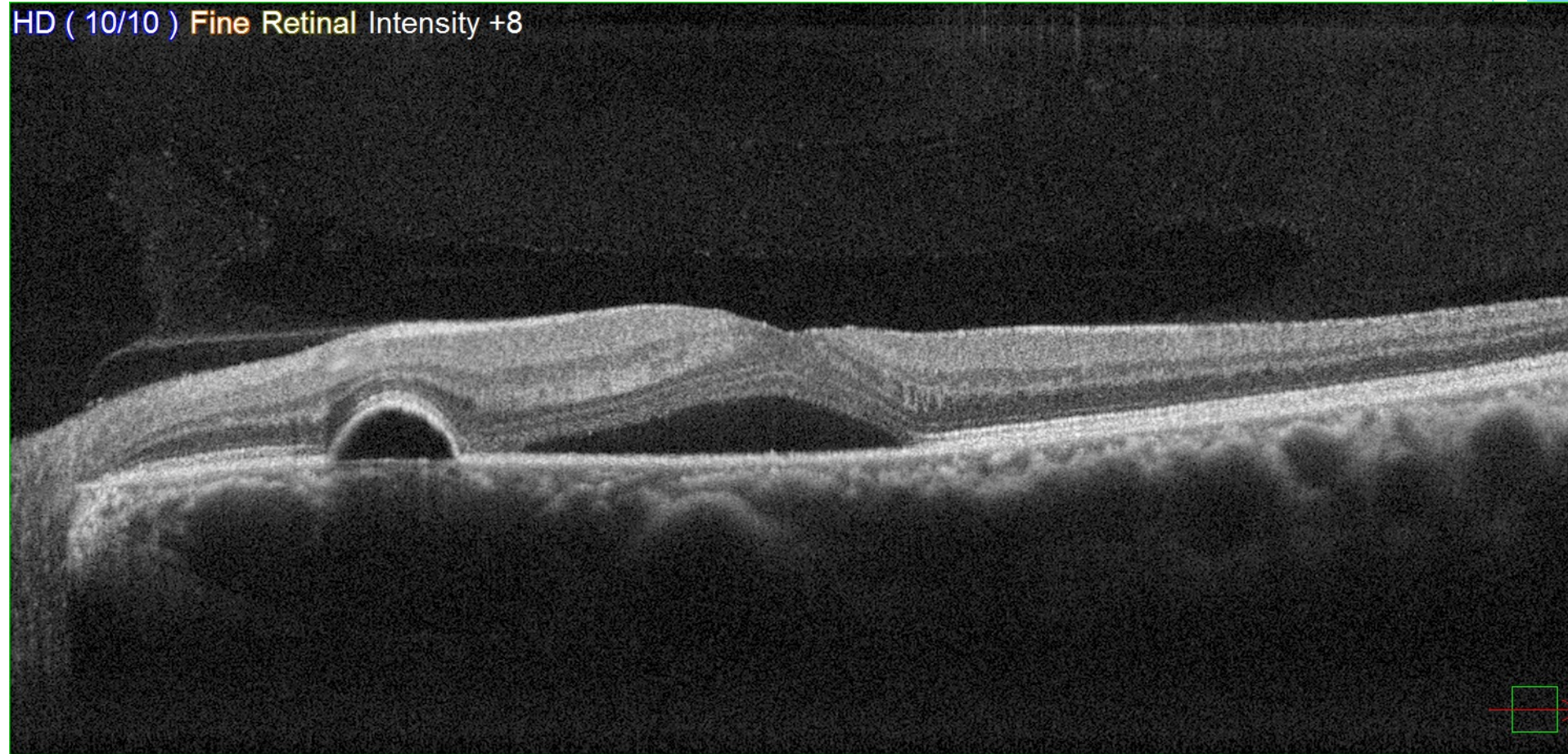
Quickfire 6



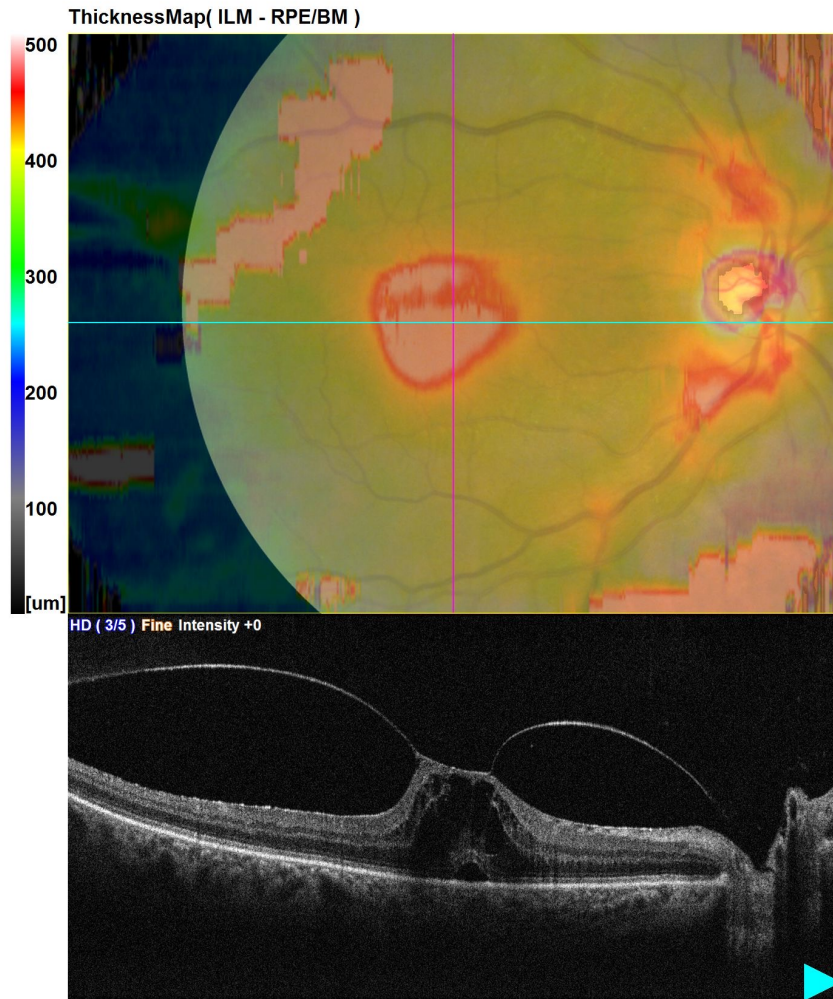
Quickfire 7



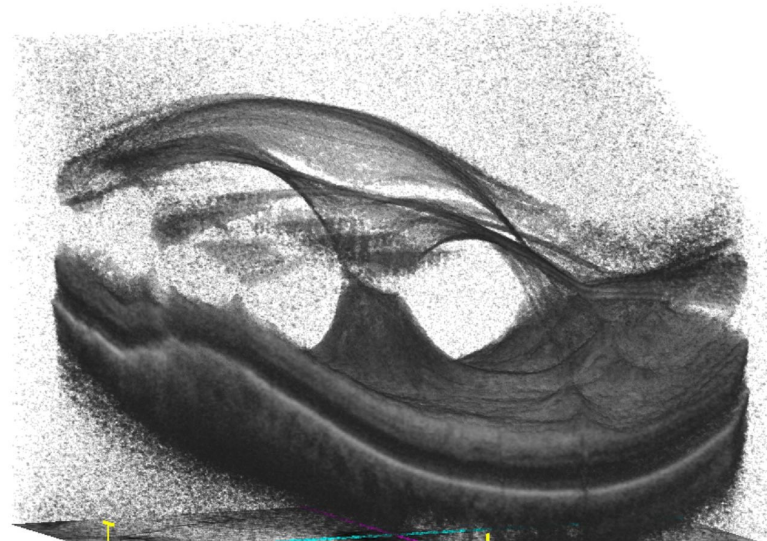
Quickfire 8



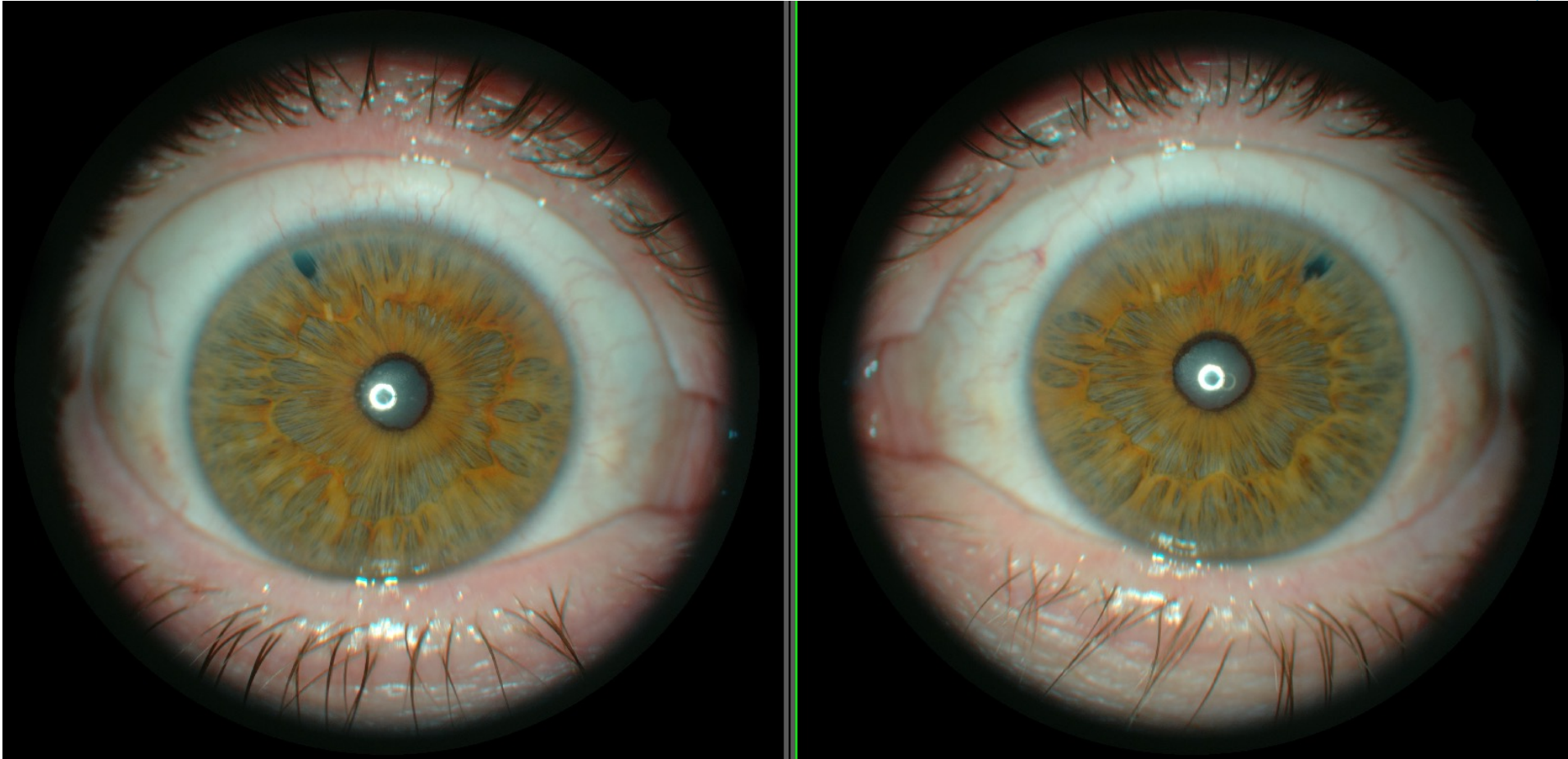
Quickfire 9



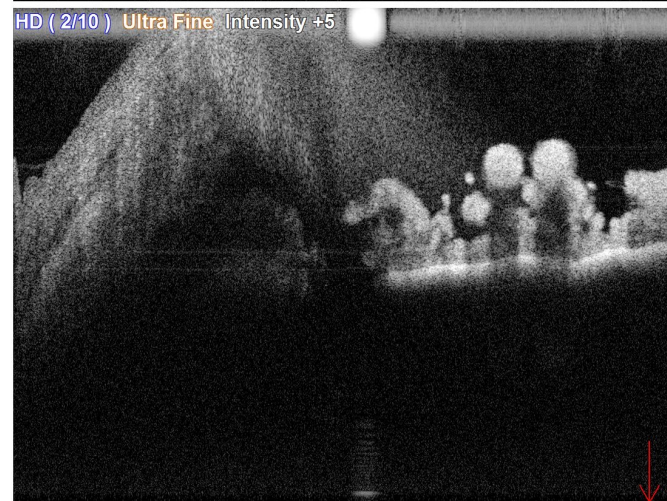
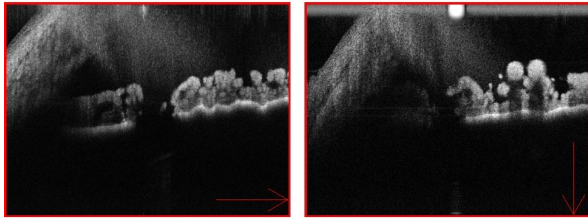
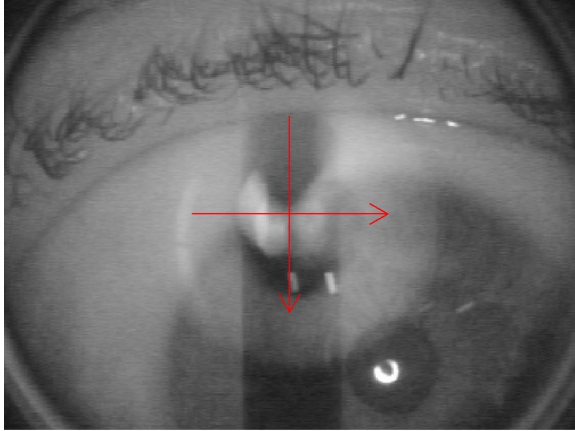
3D(Volume)



Quickfire 10

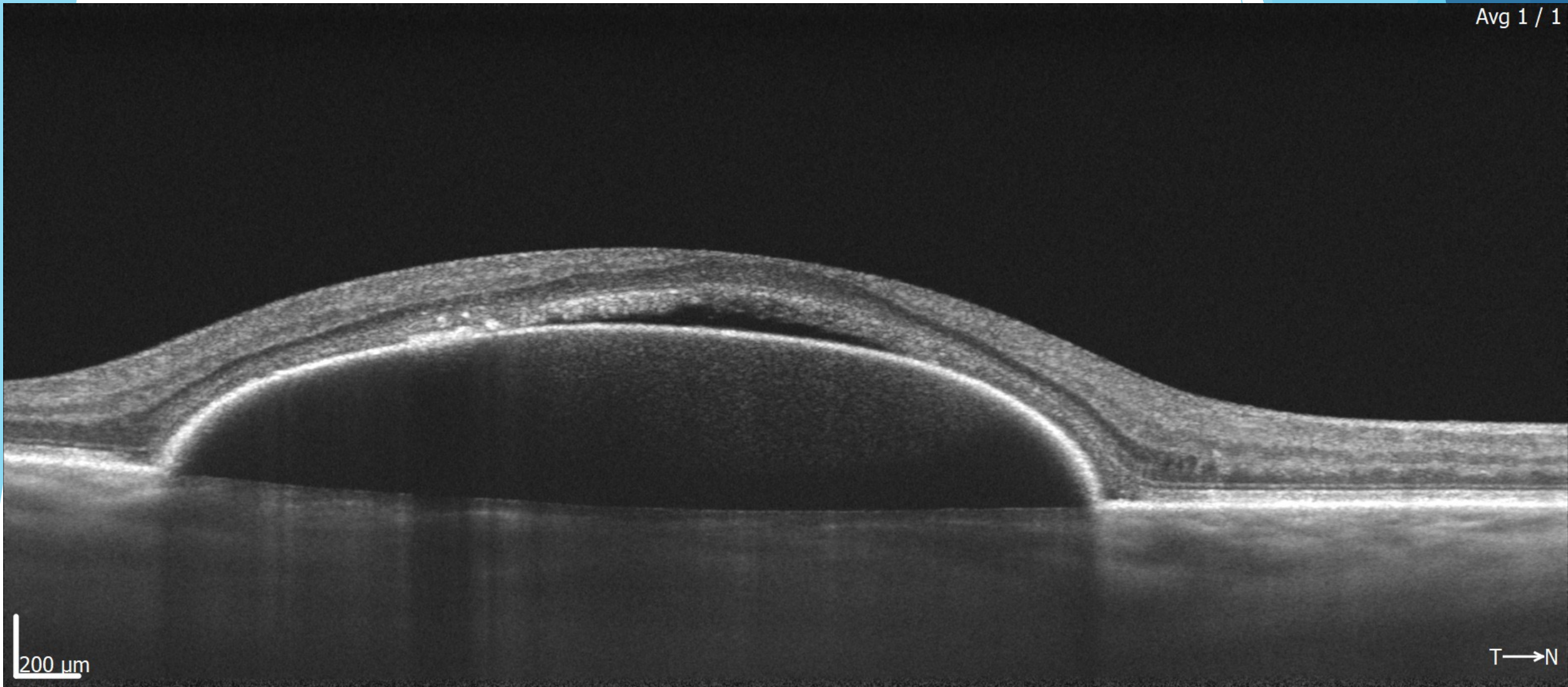


Quickfire 10



Quickfire 11

Avg 1 / 1



The background features abstract, overlapping geometric shapes in various shades of blue, ranging from light sky blue to deep navy blue. These shapes are primarily located on the left and right sides of the frame, creating a modern, dynamic border around the central text.

Thank you for listening

References

1. Central Mersey LOC referral guidelines
2. Alexander T. Nguyen MD, David S. Greenfield MD, Amitabha S. Bhakta PhD, Jennifer Lee MD, William J. Feuer MS. Detecting Glaucoma Progression Using Guided Progression Analysis with OCT and Visual Field Assessment in Eyes Classified by International Classification of Disease Severity Codes. *Ophthalmology Glaucoma*, Volume 2, Issue 1, January-February 2019, Pages 36-46.
3. Andrew J. Tatham FRCOphth, FRCS, Felipe A. Medeiros MD, PhD. Detecting Structural Progression in Glaucoma with Optical Coherence Tomography. *Ophthalmology*, Volume 124, Issue 12, Supplement, December 2017, Pages S57-S65.
4. D. Garway-Heath. OCT in assessing glaucoma progression. *Acta Ophthalmologica* 23rd September 2015.
5. Kuang Hu, Alison Davis, Eoin O'Sullivan. Distinguishing optic disc drusen from papilloedema. *BMJ* 2008; 337.
6. E Z Karam, T R Hedges. Optical coherence tomography of the retinal nerve fibre layer in mild papilloedema and pseudopapilloedema. *BMJ Ophthalmology*, Volume 89, Issue 3.

References

7. A. Mishraa, S.R. Mordekaral, G. Rennieb, P.S. Baxtera. False diagnosis of papilloedema and idiopathic intracranial hypertension. European Journal of Paediatric Neurology, Volume 11, Issue 1, January 2007, Pages 39-42.
8. H. Richard McDonald MD, William P. Verre MD, Thomas M. Aaberg MD. Surgical Management of Idiopathic Epiretinal Membranes. Ophthalmology, Volume 93, Issue 7, July 1986, Pages 978-983.
9. College of Optometrists - Urgency of referrals