

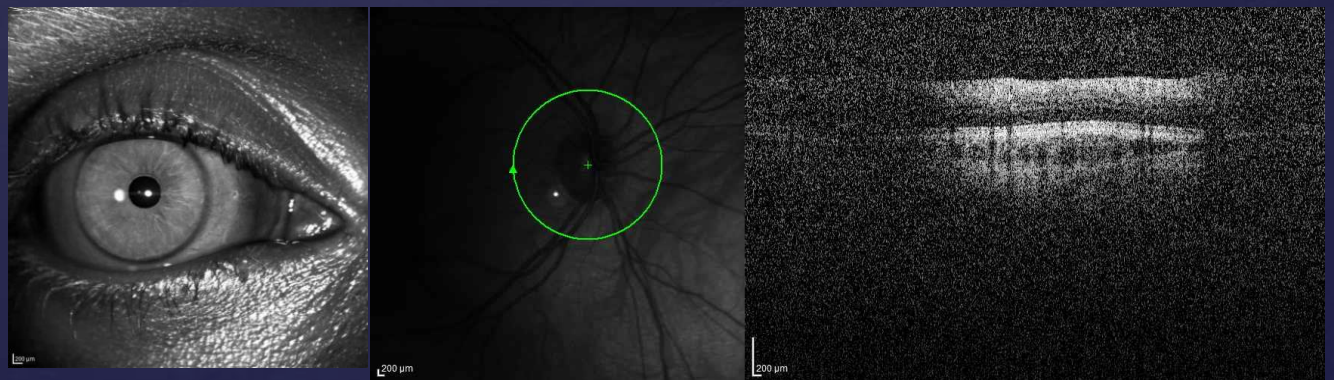
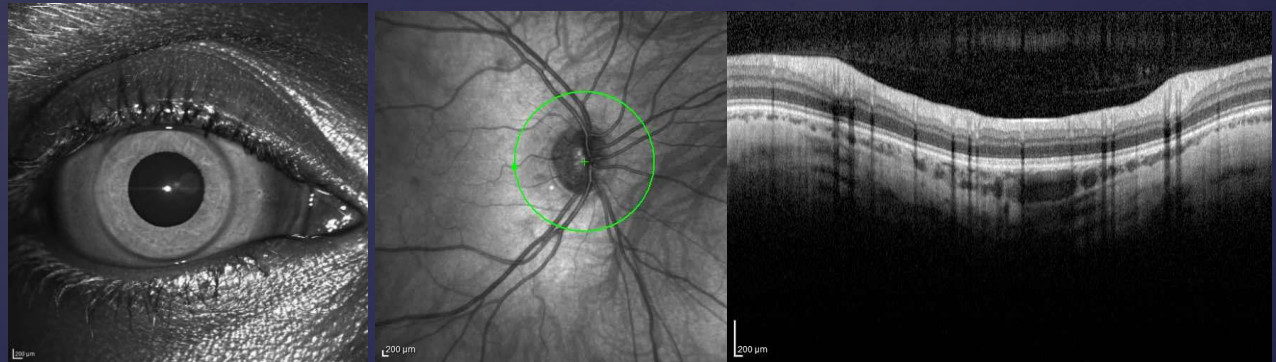
10 Tips & Tricks for Optimal OCT Scanning

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Duke University Eye Center

Sadly, no financial interest to report

1. Use pupillary dilation to facilitate stronger OCT saturation and to avoid vignetting

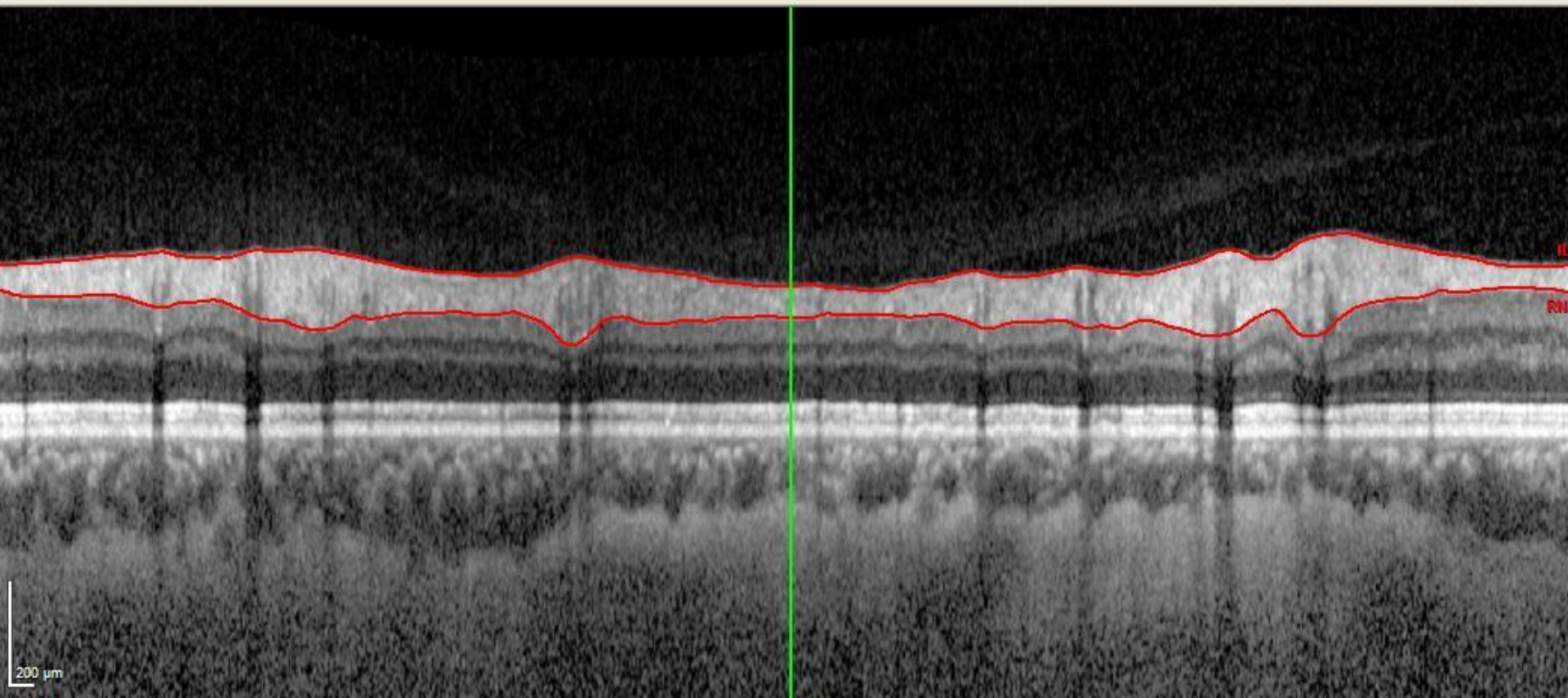


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2. Tell Patients to Blink before scanning.

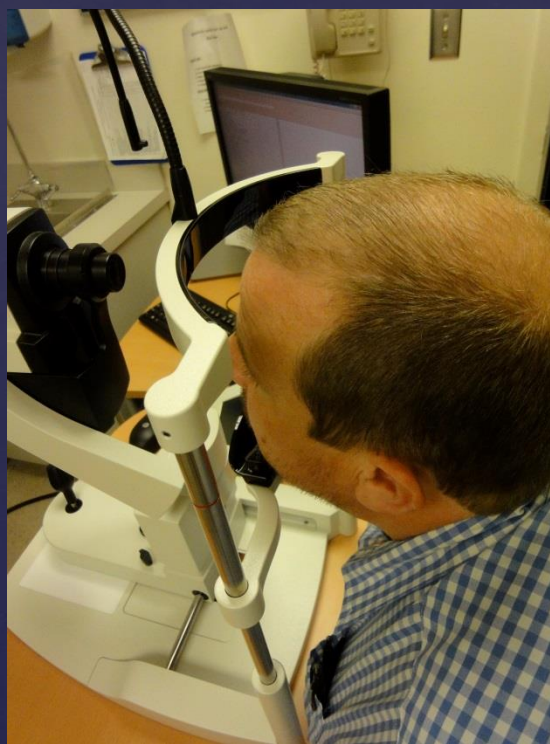
-With Eye-tracking: Ok to blink minimally during the scan.

-Without Eye-tracking: DO NOT blink during the scan.



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3. To reduce patient movement during OCT capture, ensure the patient is seated properly and can keep their head against the bar. Have the family member hold the head in place.



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4. Use Eye-tracking to eliminate blink artifacts and allow for the follow-up scans to be in the exact same location.



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5. Keep an eye on the signal strength during the scan.
...Range is 0-40. 15 and below is bad.

The screenshot displays the Heidelberg Spectralis OCT software interface. The top left shows an IR Reflectance Image of the retina with a blue circular scan area. The top right shows an OCT scan result with a blue horizontal bar indicating the scan range. The bottom left contains a Settings panel with the following information:

Settings	Timers
Eye: <input type="radio"/> OD <input type="radio"/> OS	ICGA: Not set!
Angle: 30°	FA: Not set!
Focus: -2.50 D	
Sens.: 58	Memory
Power: IR 25%	Images: 2
Mode: OCT Section	Free: 761 MB
Rate: 8.8/sec	
Res.: High Speed	

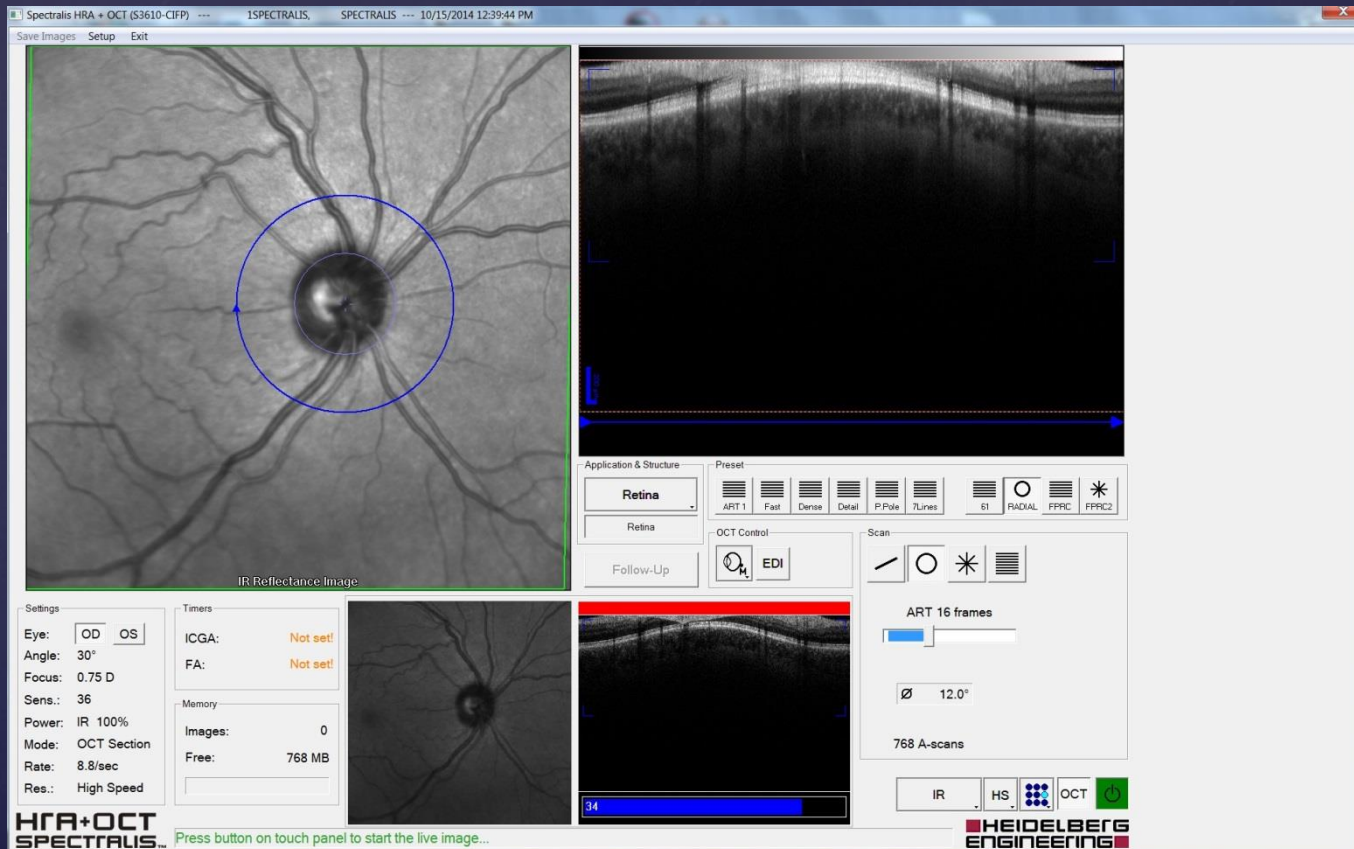
The bottom right contains a Scan panel with the following information:

Scan
ART 16 frames
Ø 12.0°
768 A-scans

The bottom left corner features the logo for HRA+OCT SPECTRALIS™ and the text "Use touch panel to operate the camera...". The bottom right corner features the logo for HEIDELBERG ENGINEERING.

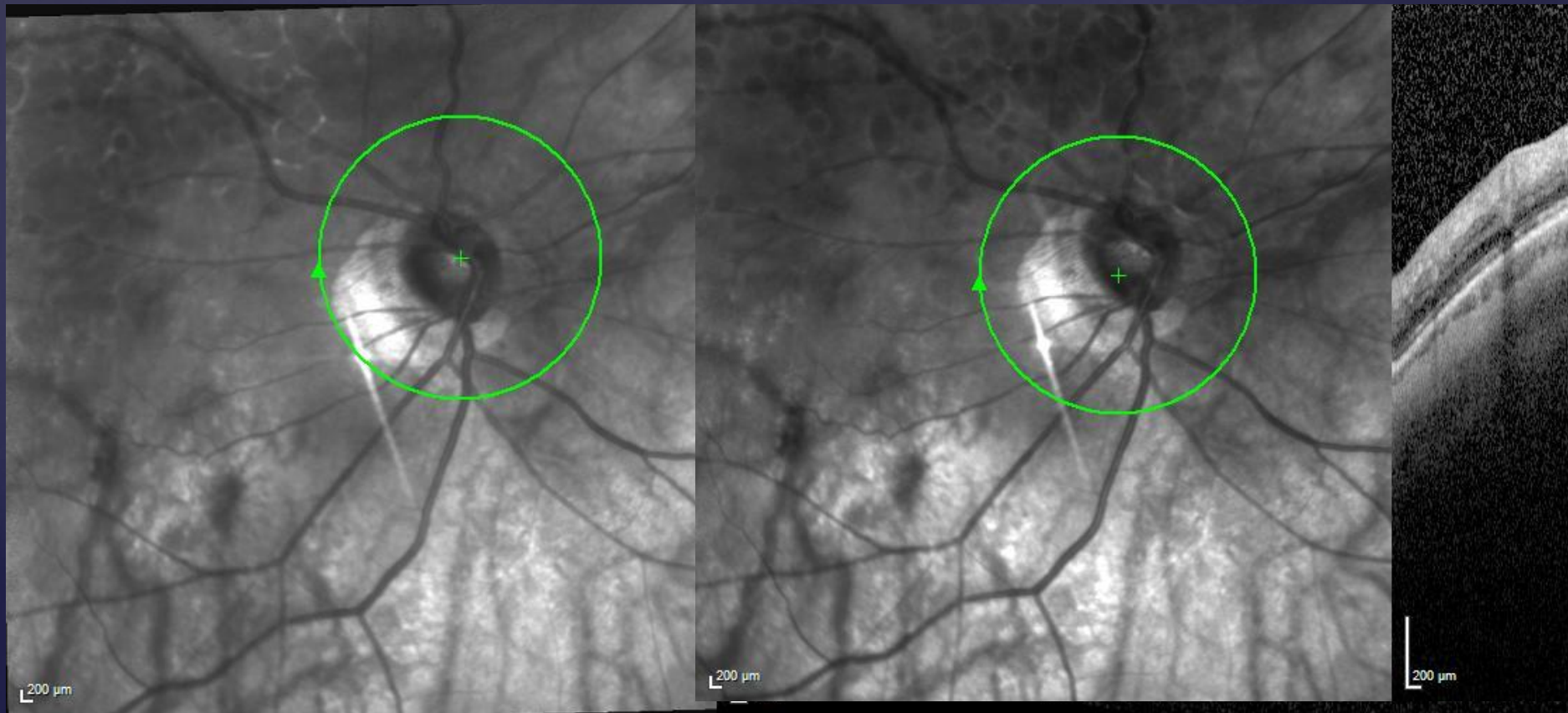
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6. Watch Alignment of the *LIVE* Scan during capture...if it 'jumps' out of the scan window –stop and re-scan.



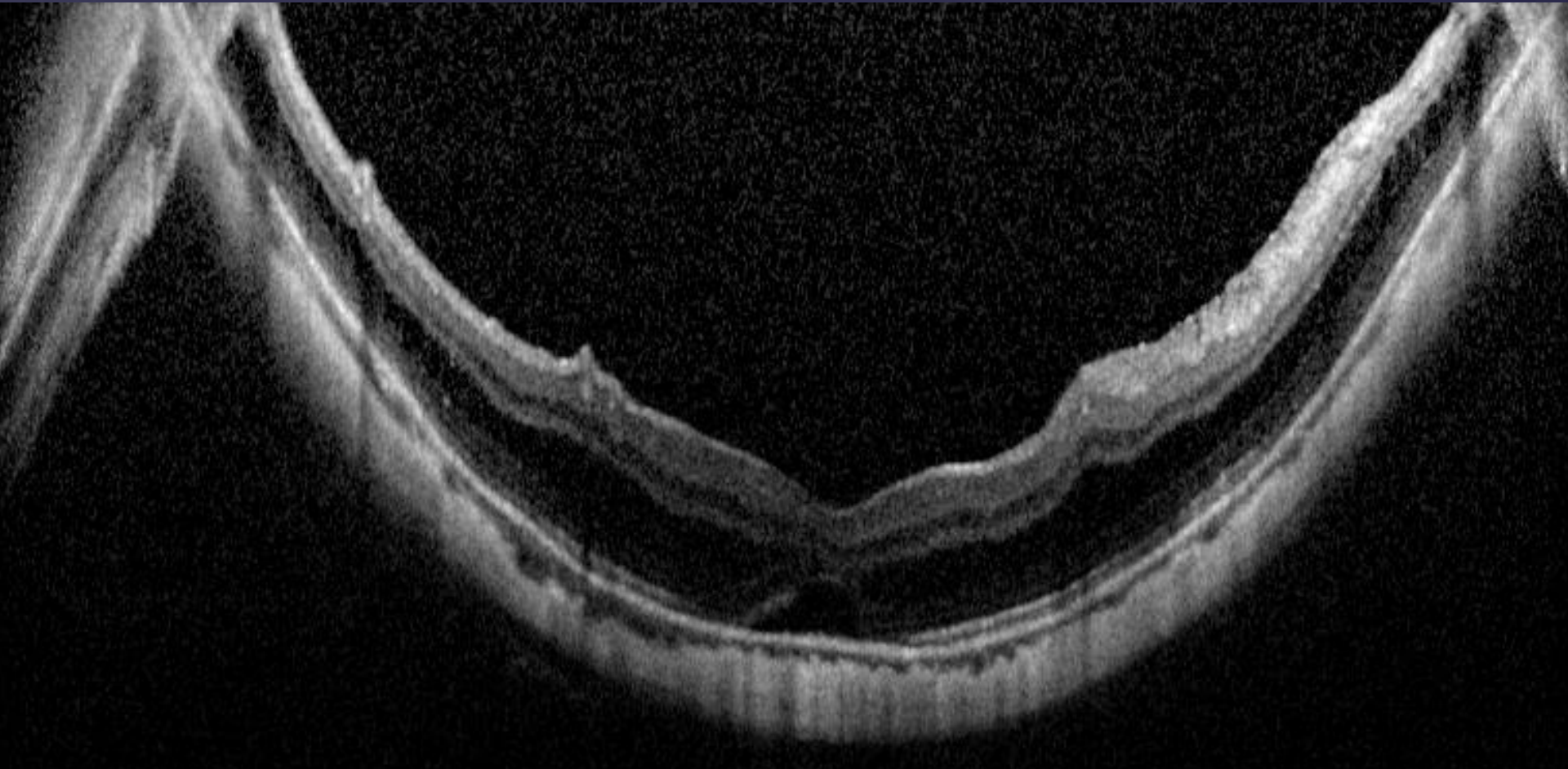
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7. De-Center the RNFL Circle scan to avoid peripapillary atrophy. (Eye-tracking!)



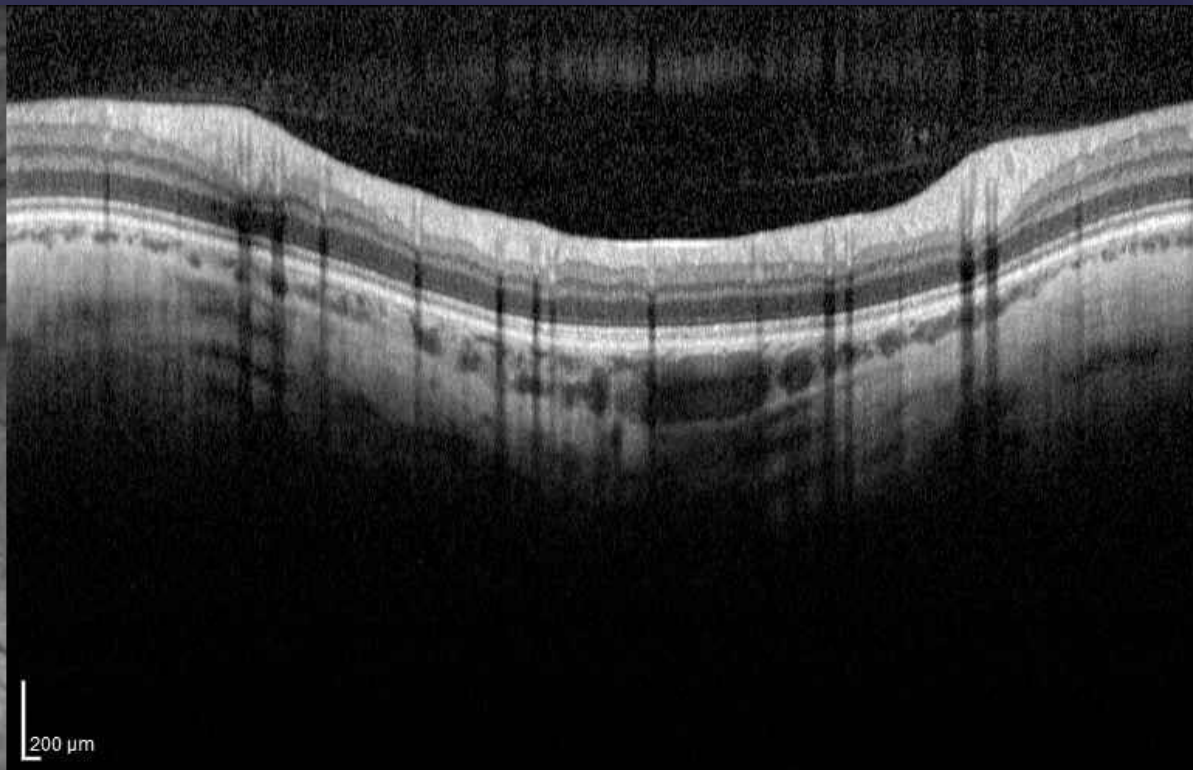
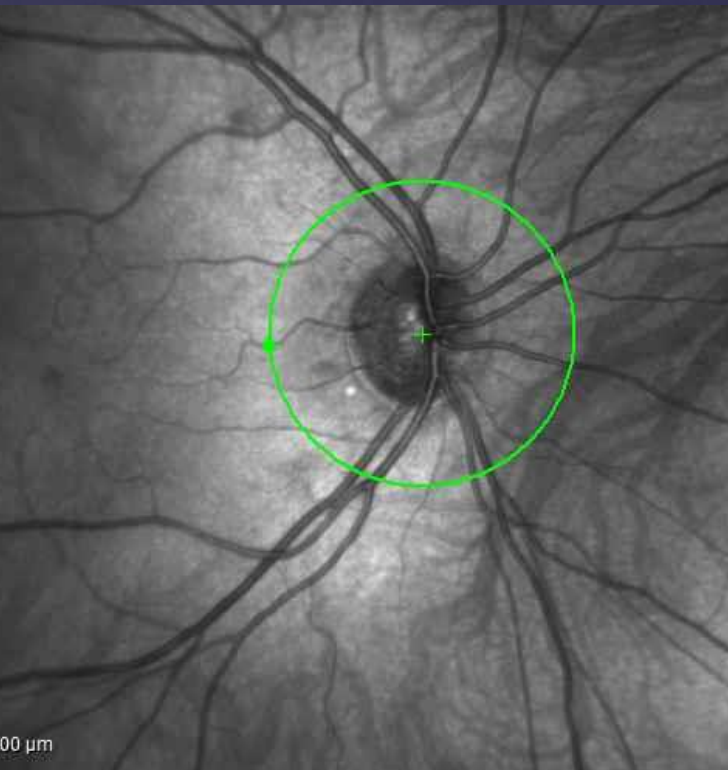
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8. For High Myopes, try using a vertical volume scan to 'flatten' the scan and allow for more accurate auto-segmentation line placement.



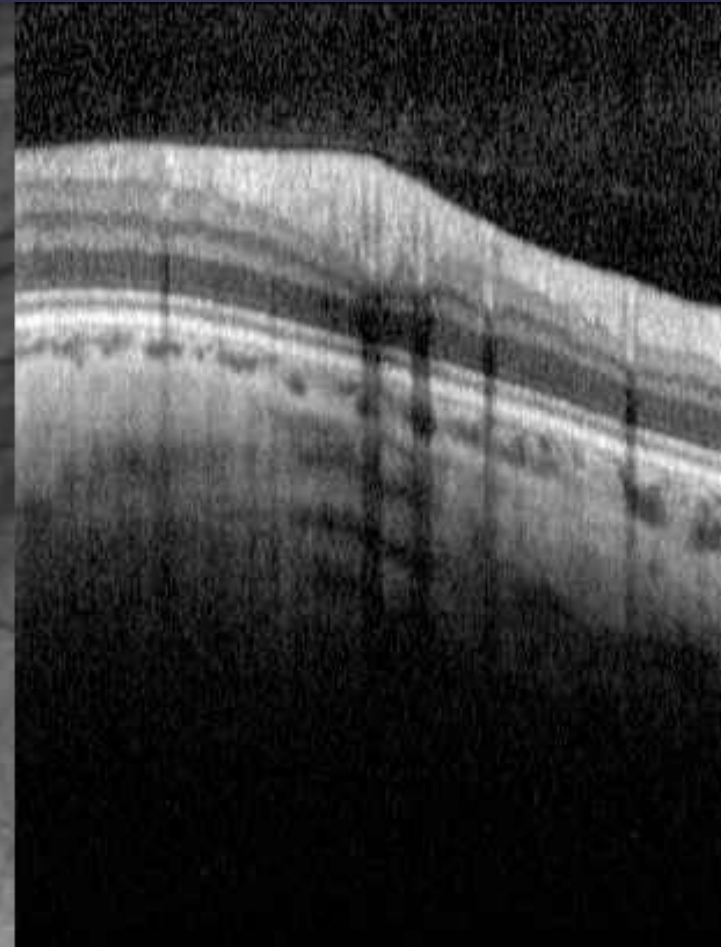
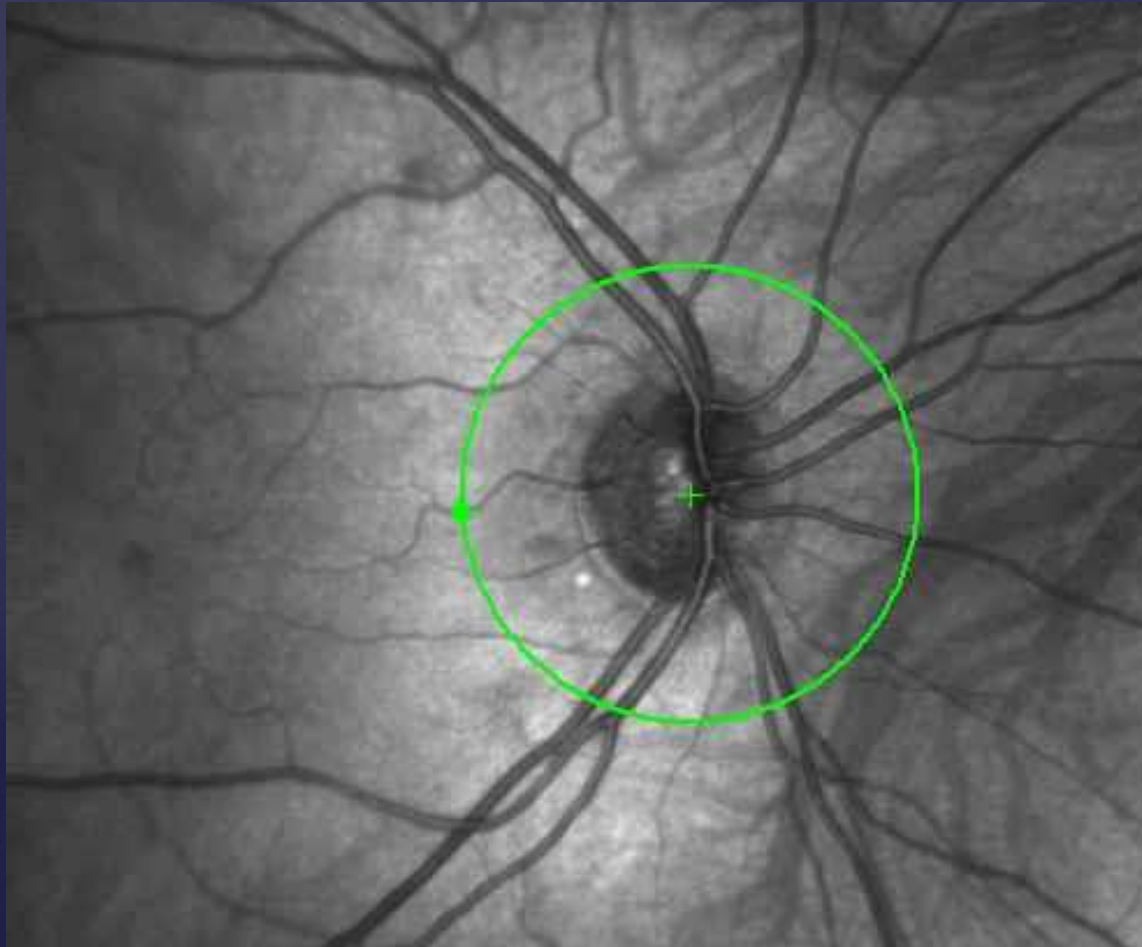
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9. Critically adjust the focus and exposure of the fundus image to MAXIMIZE OCT scan strength and to provide a usable fundus image to correlate with the OCT scan.



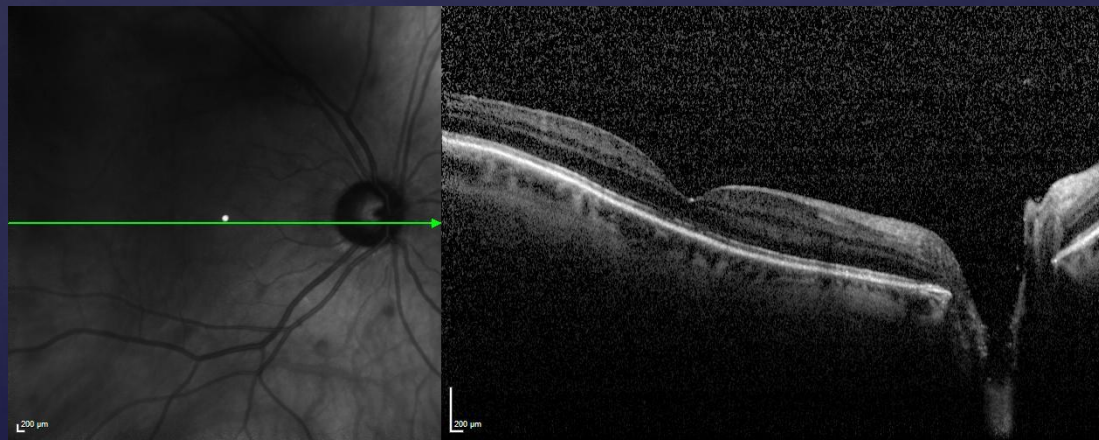
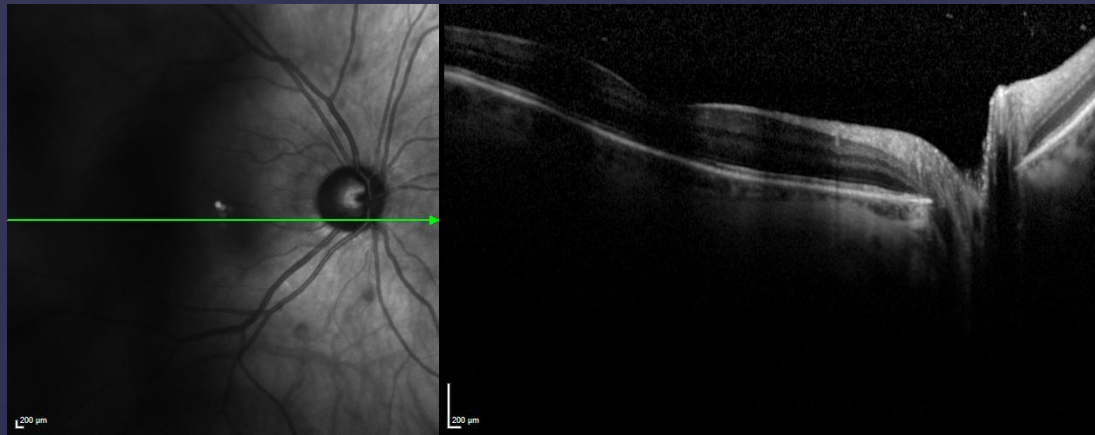
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10. Engage ART, then move the RNFL Circle scan as needed for exact placement....each time you move the Circle scan it re-starts the capture automatically -REALLY Nice Feature!



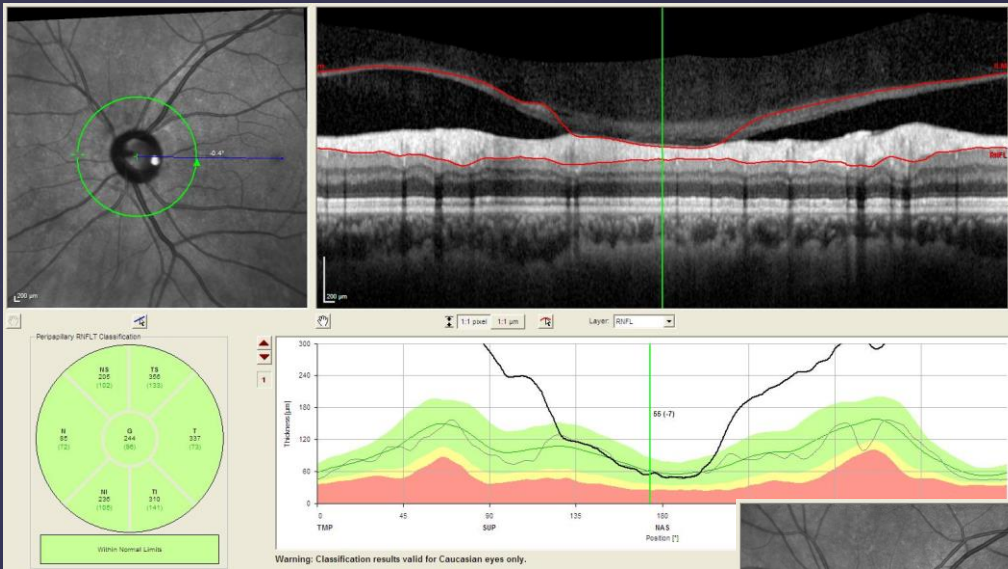
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BONUS Tip 11: Large Floater or Vitreous Hemorrhage?
Have the patient look away for a few seconds, then look back quickly to the fixation point -this allows for a small window of time to get the scan.

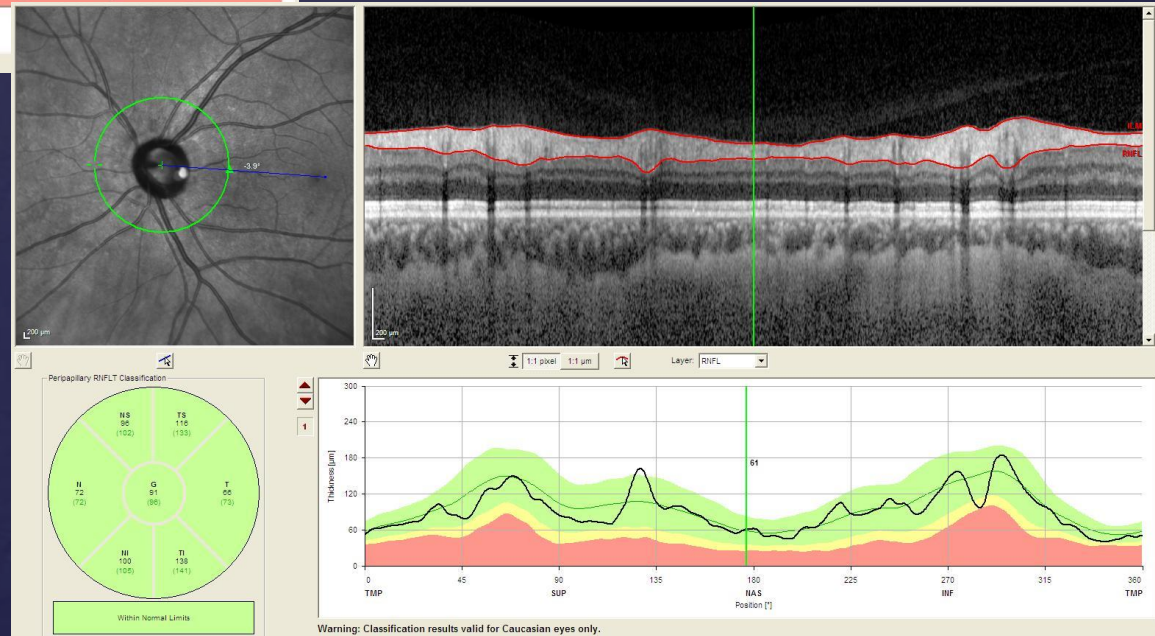


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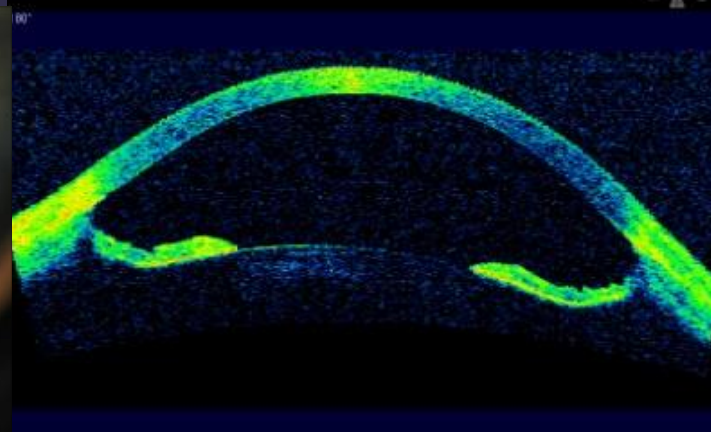
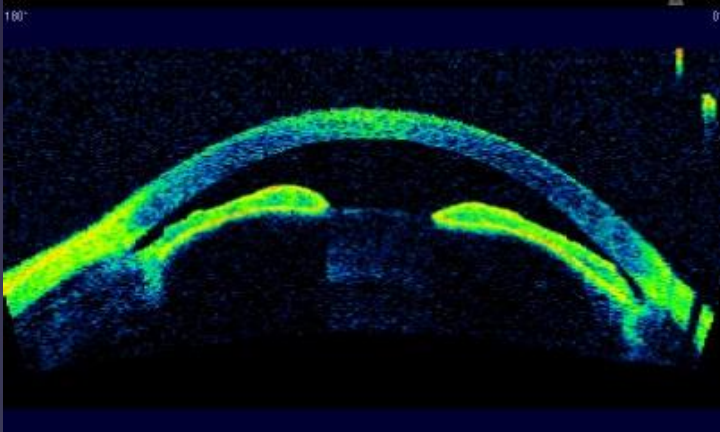
BONUS Tip 12: Use EDI in the presence of VMA, VMT, or VPT to perform a 'Virtual Vitrectomy' allowing correct placement of the Auto-segmentation lines.



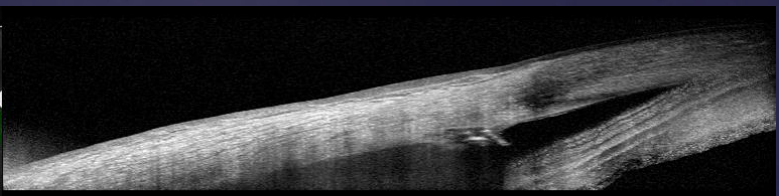
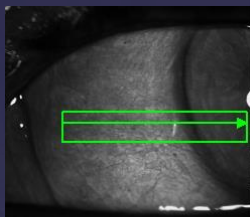
= Standard Scan



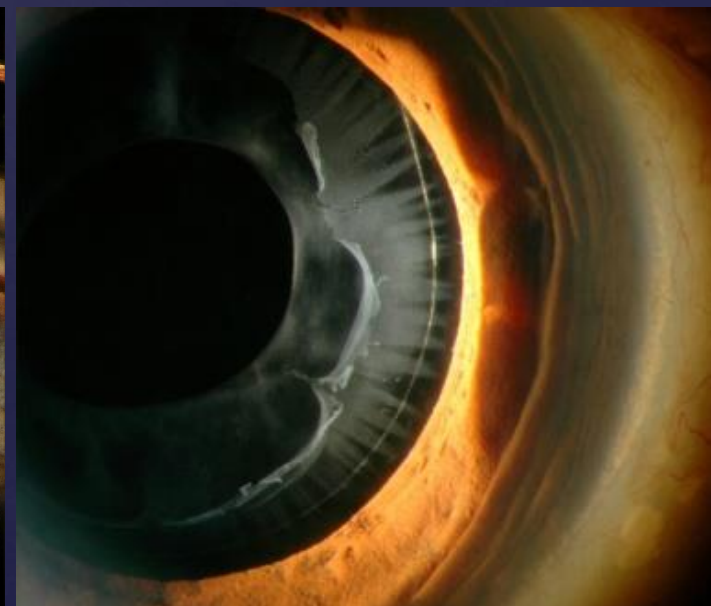
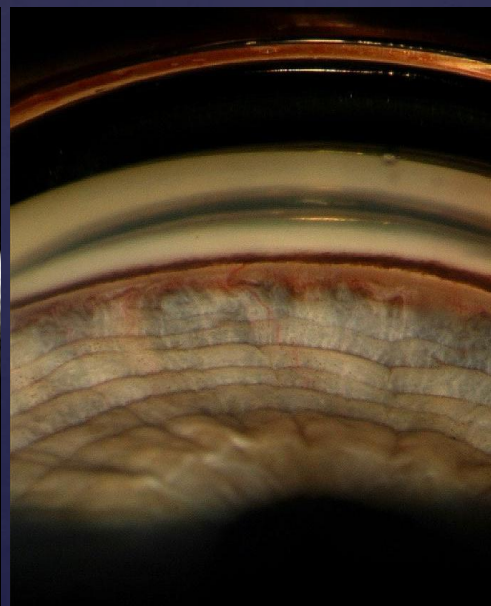
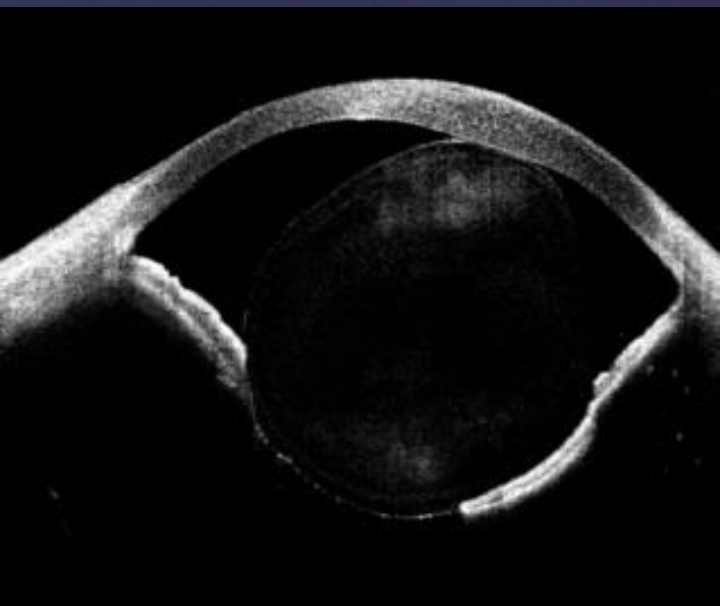
Engaged EDI =



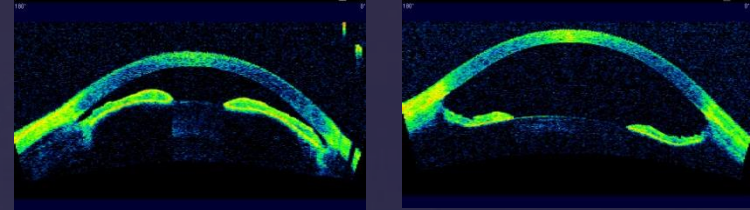
Thank you



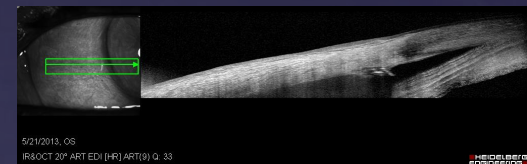
5/21/2013, OS
IR&OCT 20° ART EDI [HR] ART(9) Q: 33



...looking forward to the
26th Annual Glaucoma Symposium in 2014...



Special Segment:
OCT for Glaucoma: Ensuring Accuracy



- When to use OCT *Enhanced Depth Imaging (EDI)* for RNFL
- Subtle OCT Capture Errors can = Misdiagnosis...-how to avoid them.
- Bleb-Imaging Techniques with Anterior-Segment OCT .
- Overriding Auto-Segmentation line placement: When? How?
- AS-OCT techniques to image Schlemms Canal & iStent
- **SD-OCT RNFL-Scan placement challenges & considerations**
(peripapillary atrophy, nystagmus, etc)
- Eye-Tracking for Follow-up Scan Repeatability

