

I have Keratoconus and need a corneal transplant. How quickly can I start to see?

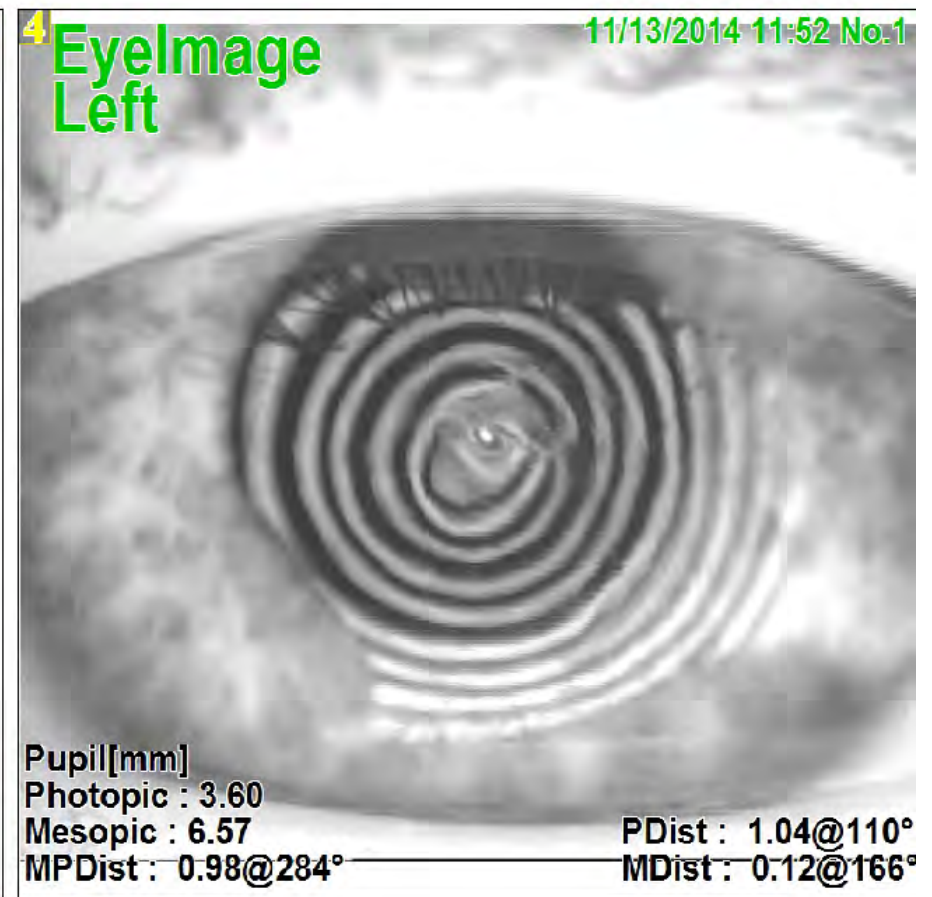
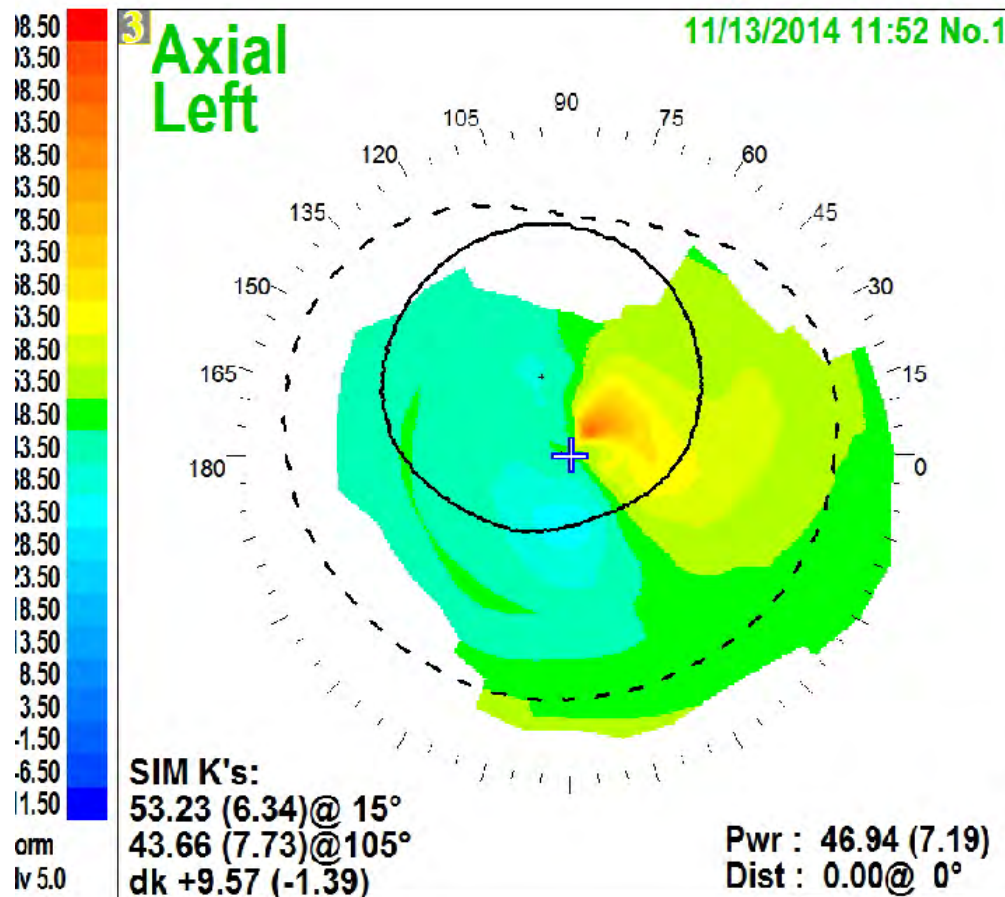
- DALK – few weeks (sometimes less!) 😊
- PK – years (maybe) 😞

Case 1: 31 yo Male lives in Cleveland

Left Eye

Left: severe keratoconus/central cornea scar VA 20/300

Right: had a Penetrating Keratoplasty (PK) done in Cleveland in 2004 – doesn't see well out of that eye.

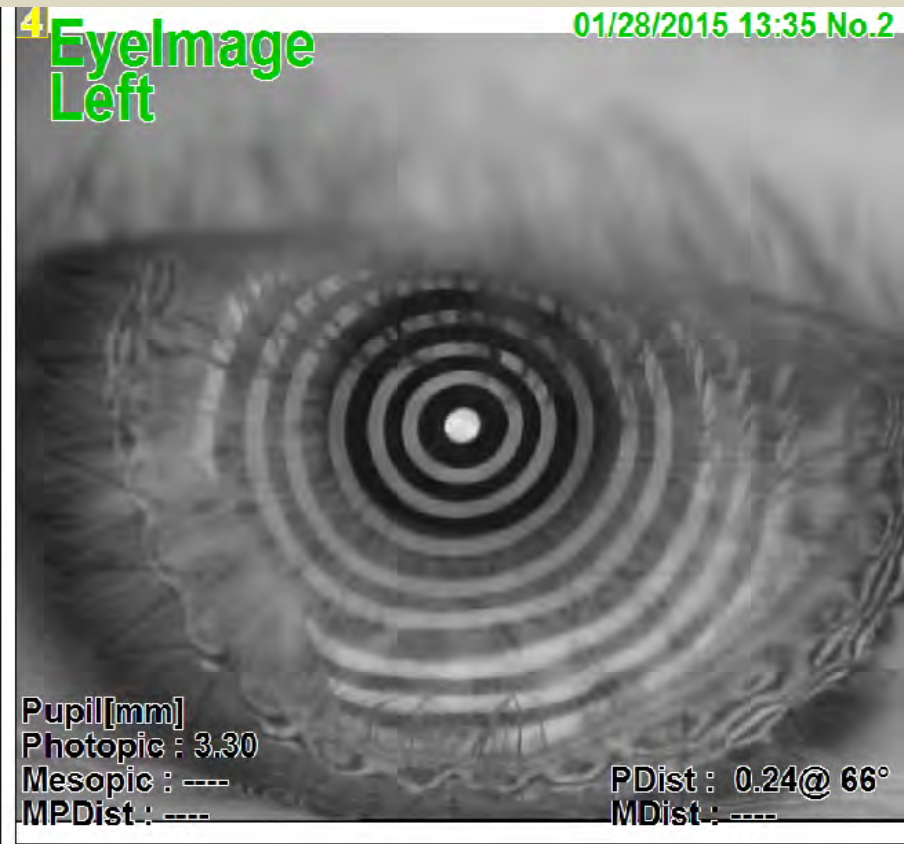
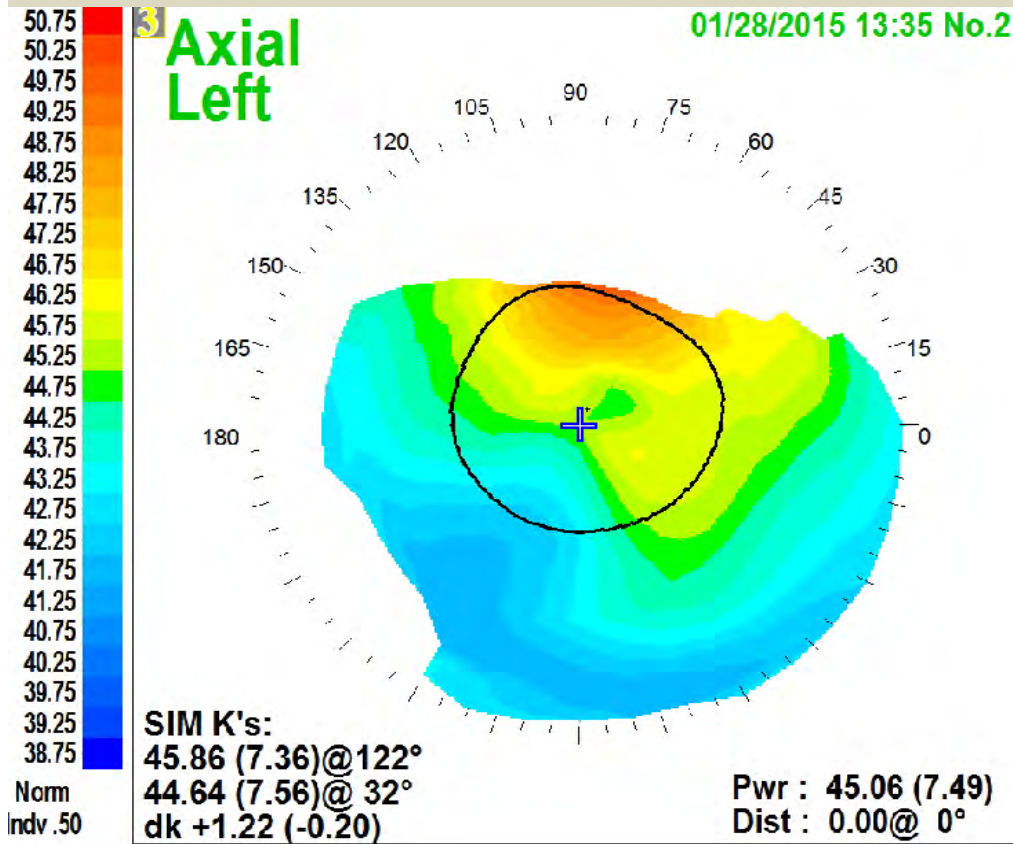


Very Early Visual Rehabilitation:

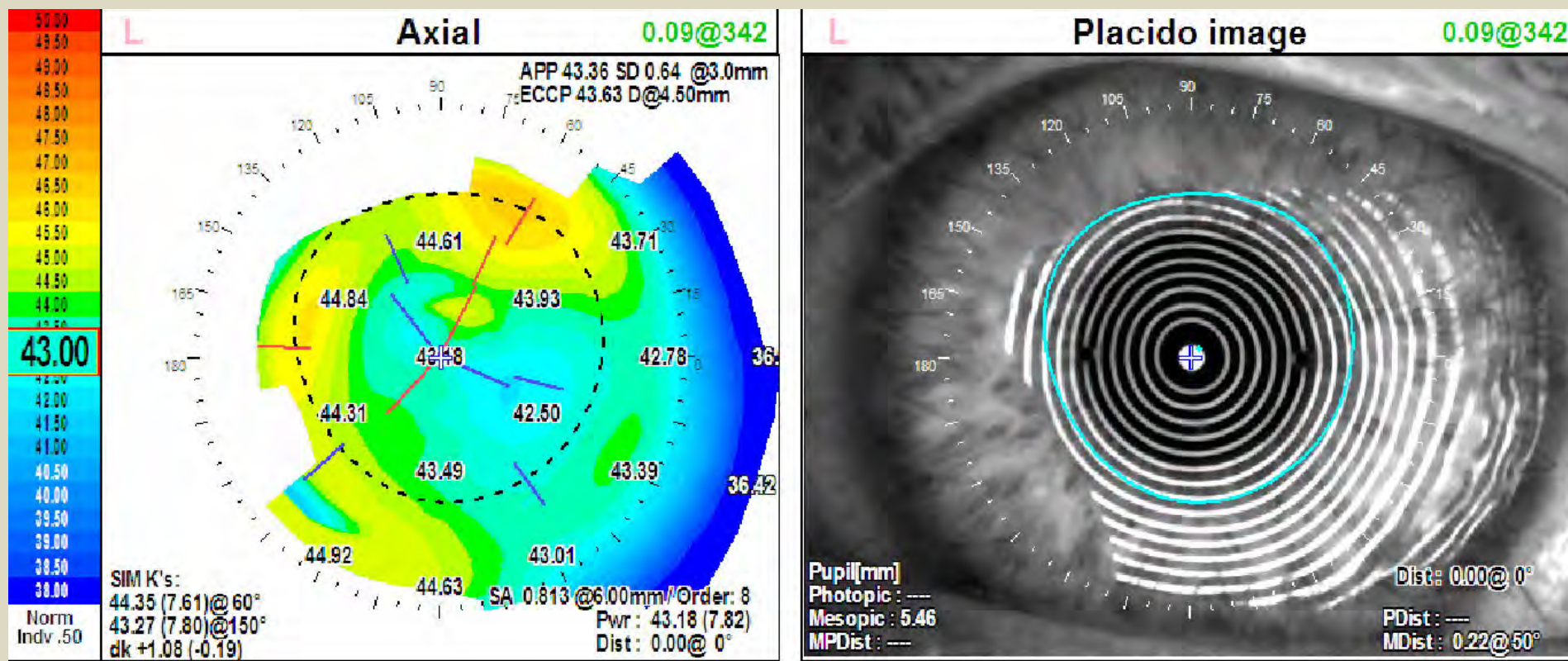
Large Diameter DALK (10mm dia.)

8 days post-op: -9.0 20/30

3 wks post-op: fit with -8.25 soft contact lens 20/25



Large Diameter DALK (10mm dia)
4 yrs post-op: -10.0 + 1.0 x 60 20/25
running suture left in place (very low astigmatism)



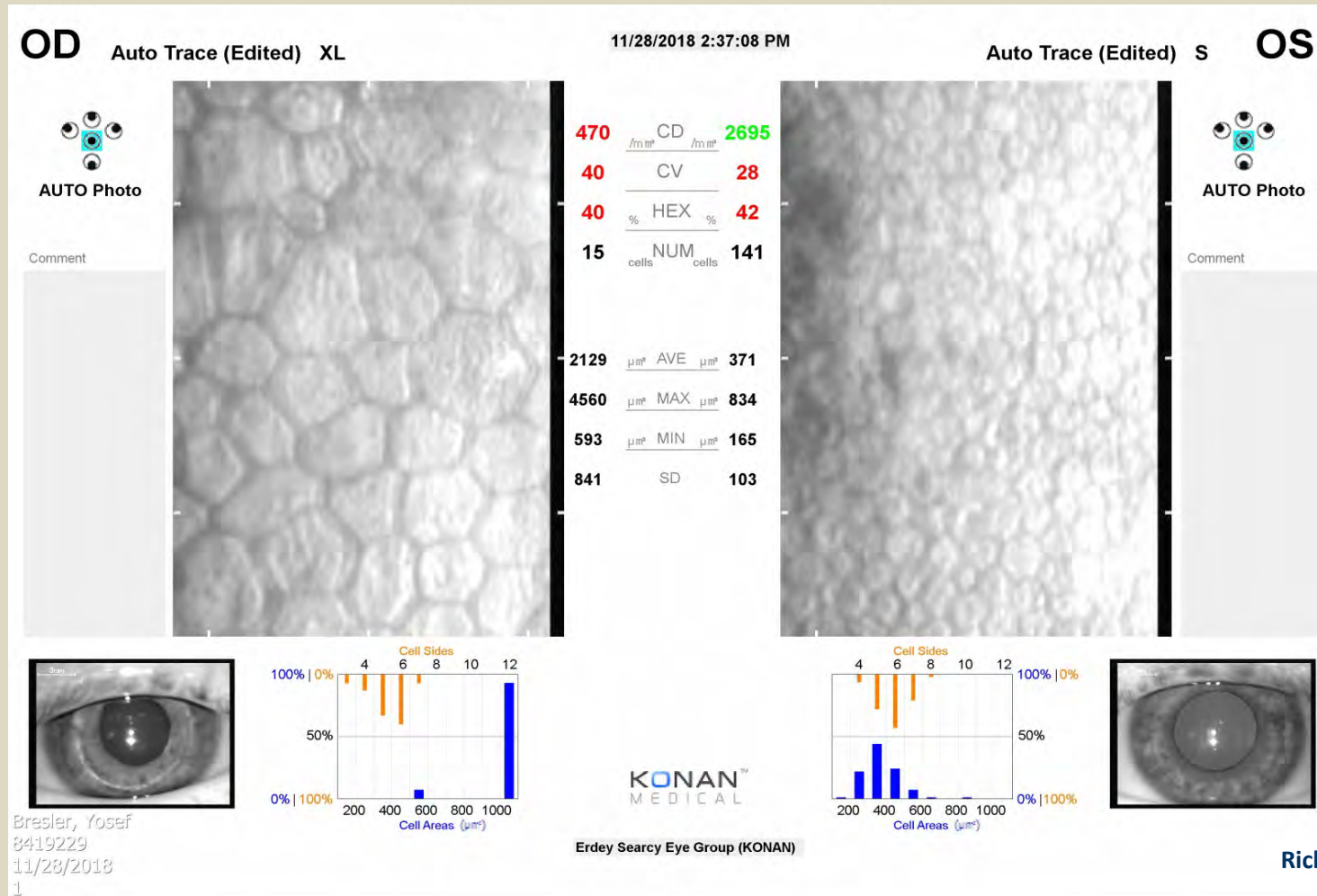
now 35yo

OD: PK 15 yrs ago

OS: DALK 4yrs ago

OD: low endothelial cell ct due to donor cell decay

OS: normal cell count

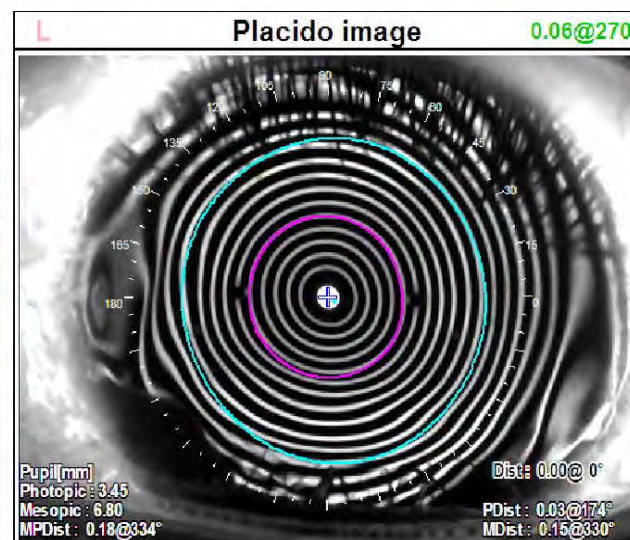
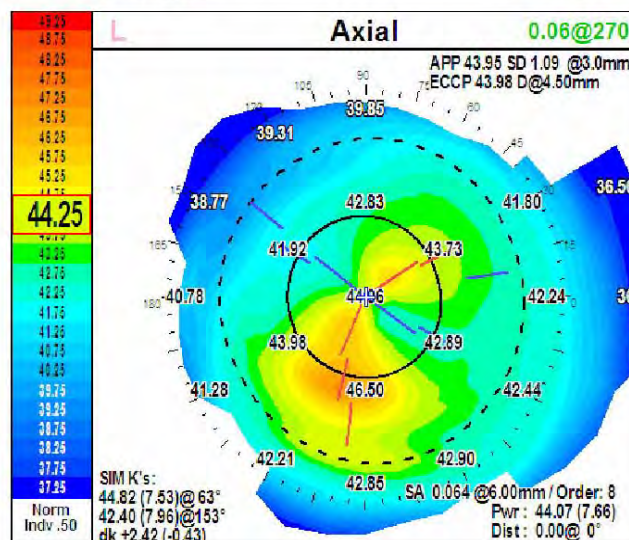
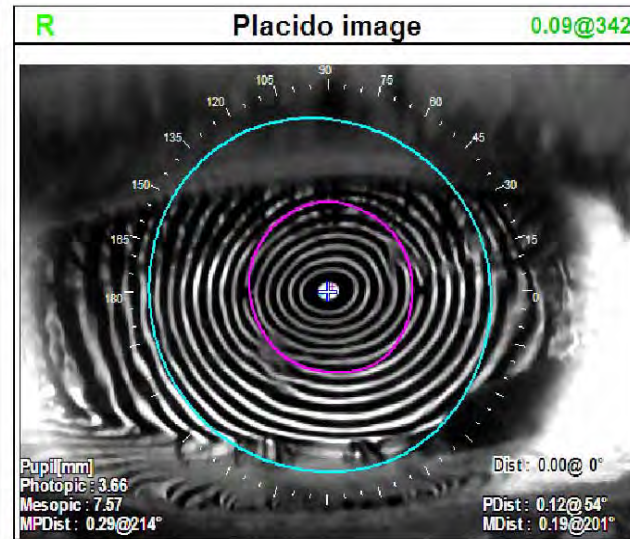
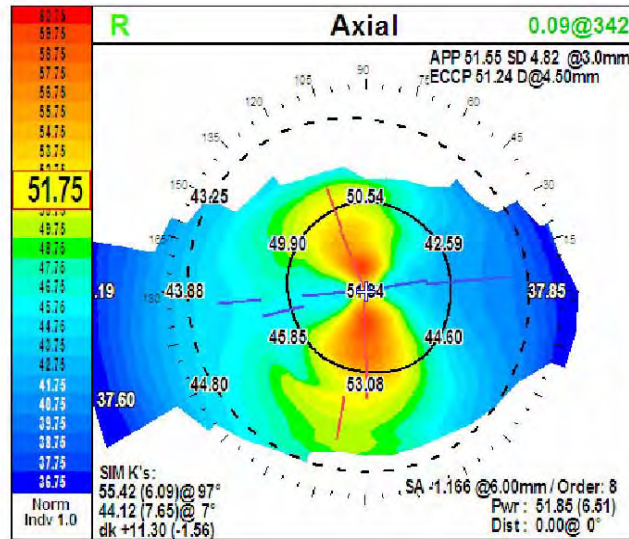


Case 2: 32yo female severe Keratoconus OD>OS RGP contact lens intolerant

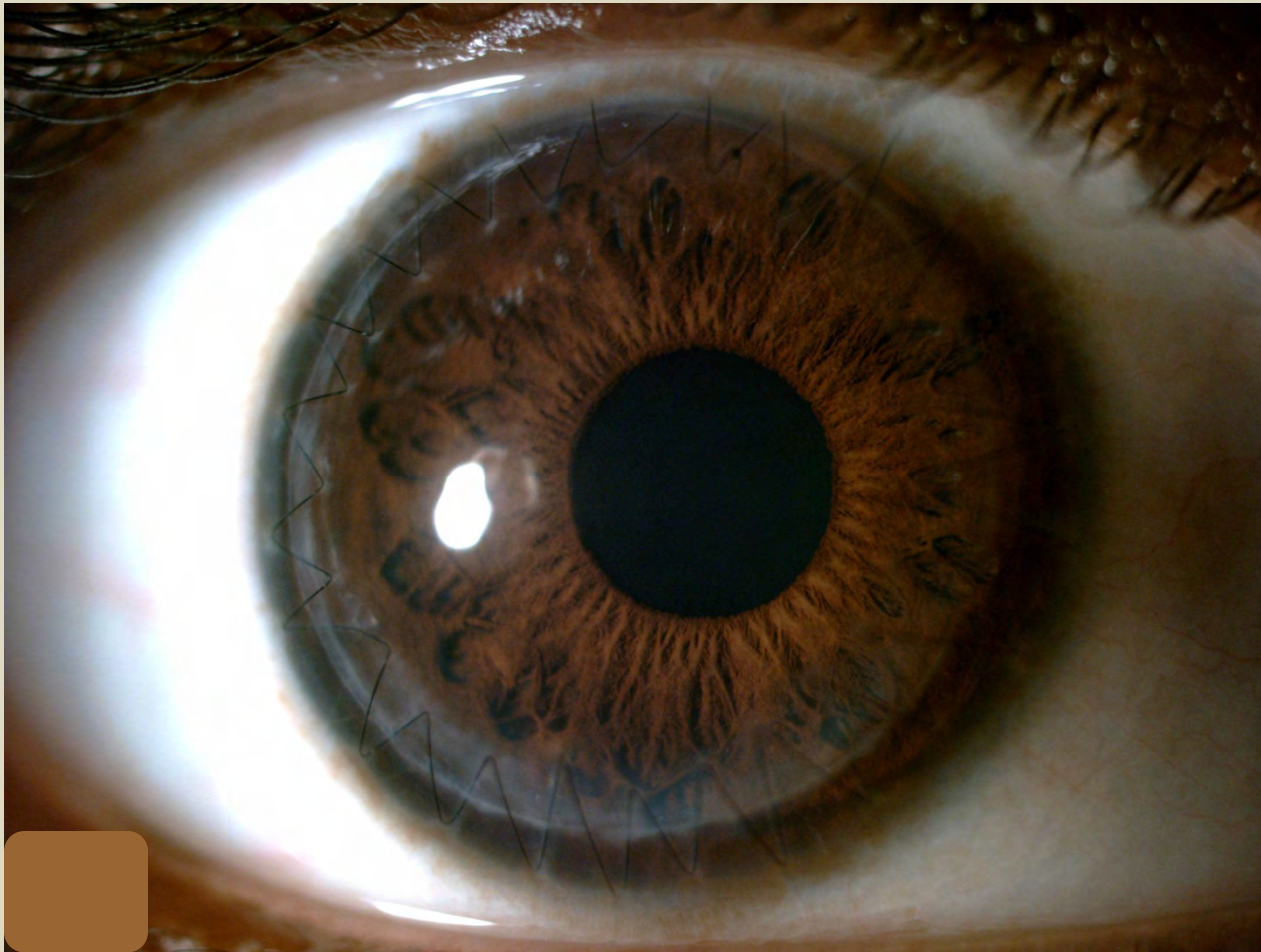
OD, Disabled with medical insurance “challenges”

OD: -13.50+8.0x100 20/200

OS: -2.0+2.5x57 20/30



Oct 2018: DALK 9.5mm



Richard Erdey, MD

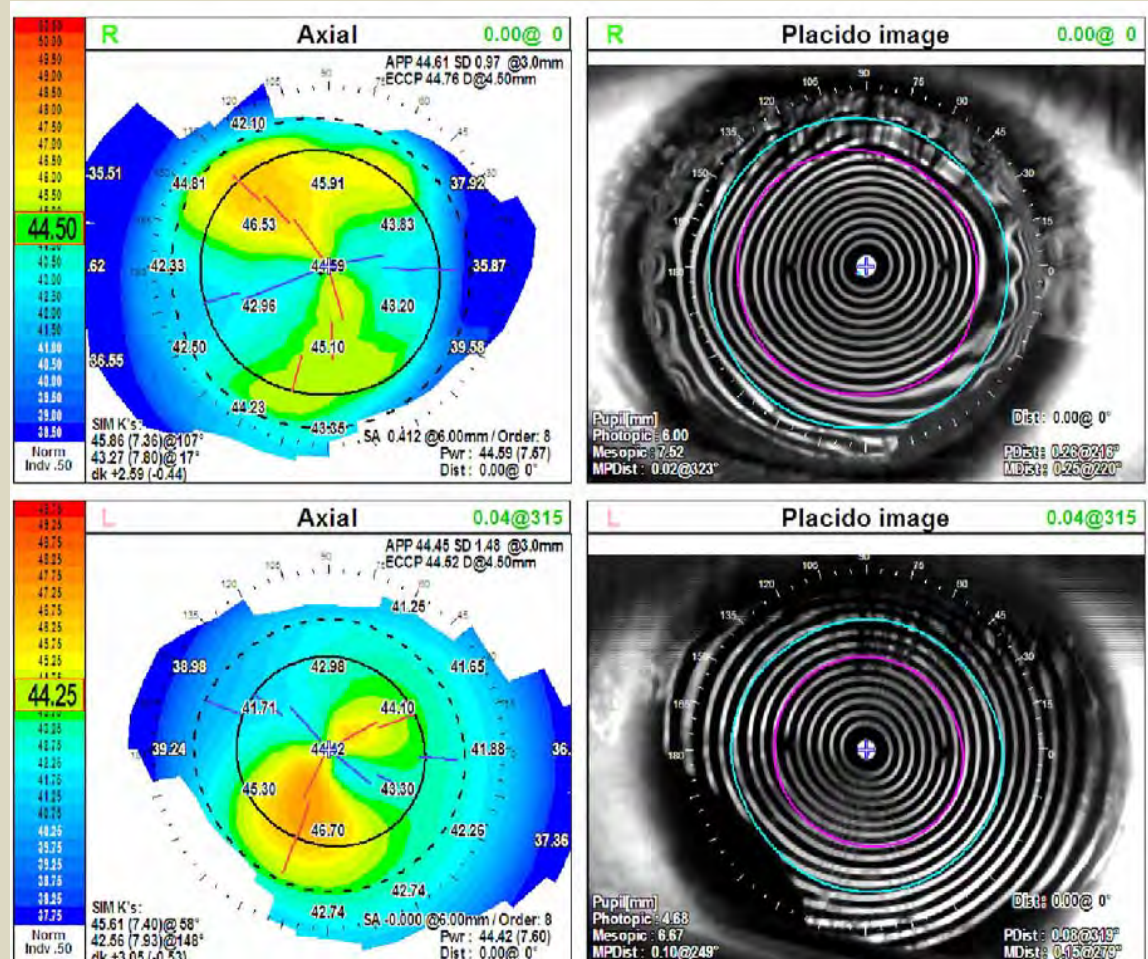
Very early visual rehabilitation:

1 wk. post op OD: -5.25+2.25x140 20/40

3 wks. post-op OD: -4.75+1.75x140 20/25 dispensed RX

OS: -2.0+2.5x57 20/30

1 year post op same RX OD/OS



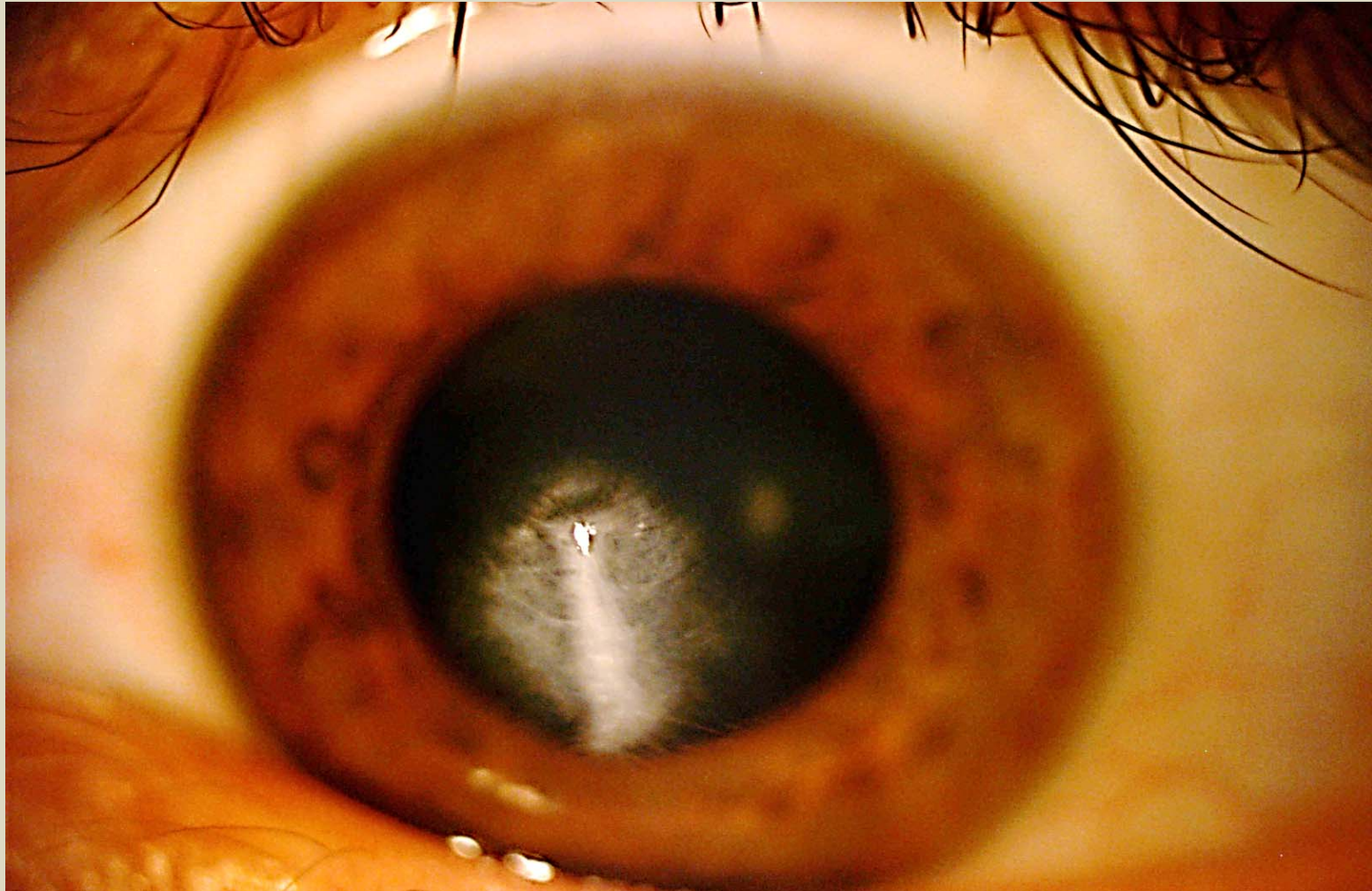
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Can see much better, able to drive,
more independent, can work!!

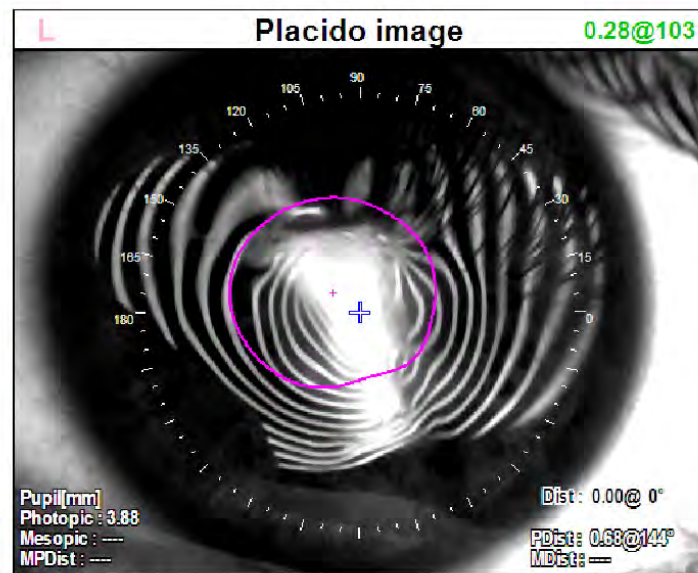
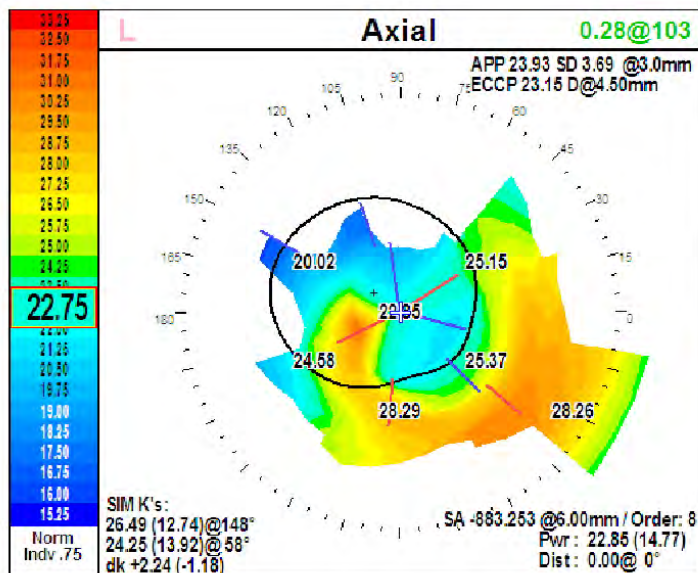
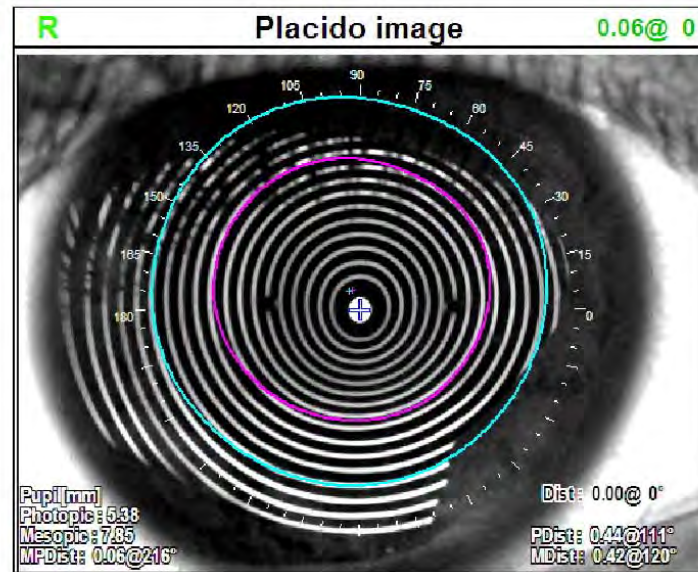
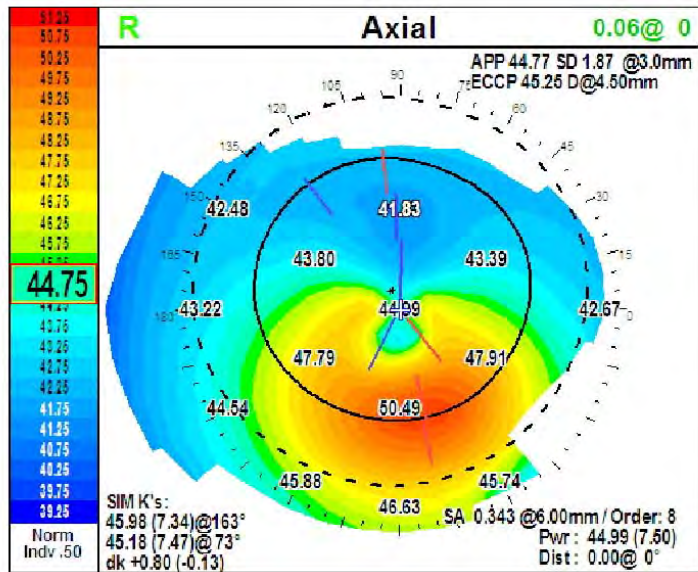


Case 3: Left Eye: 27 yo with Severe Keratoconus

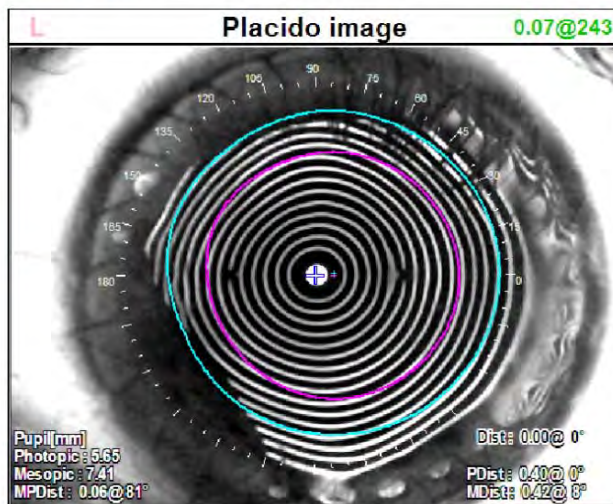
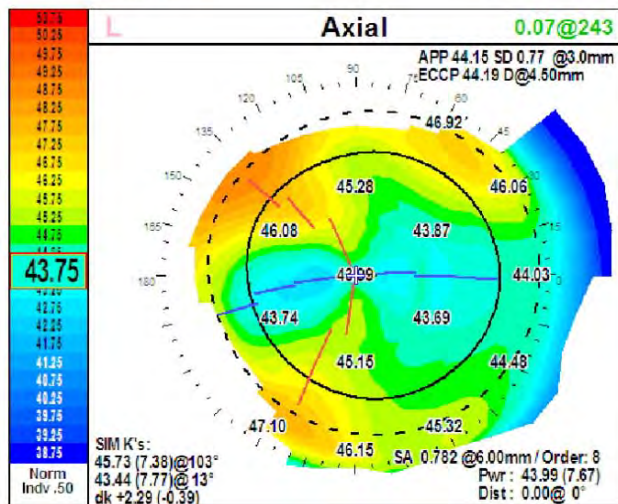
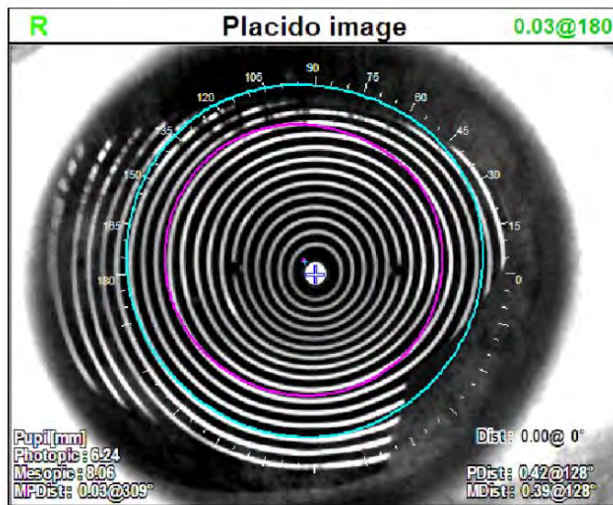
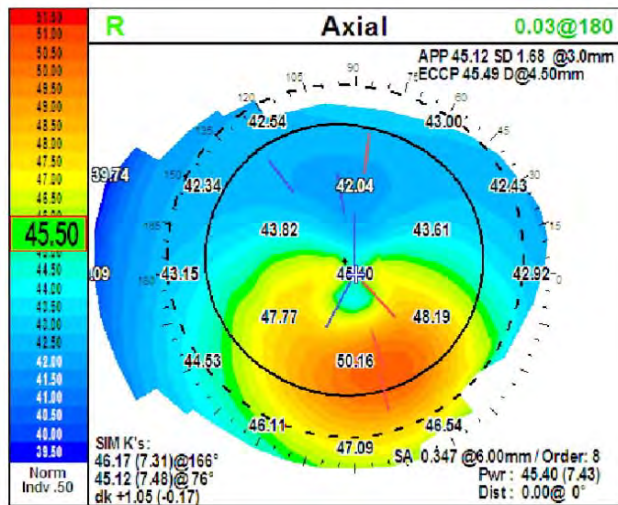


Right eye: Mild Keratoconus (Top)

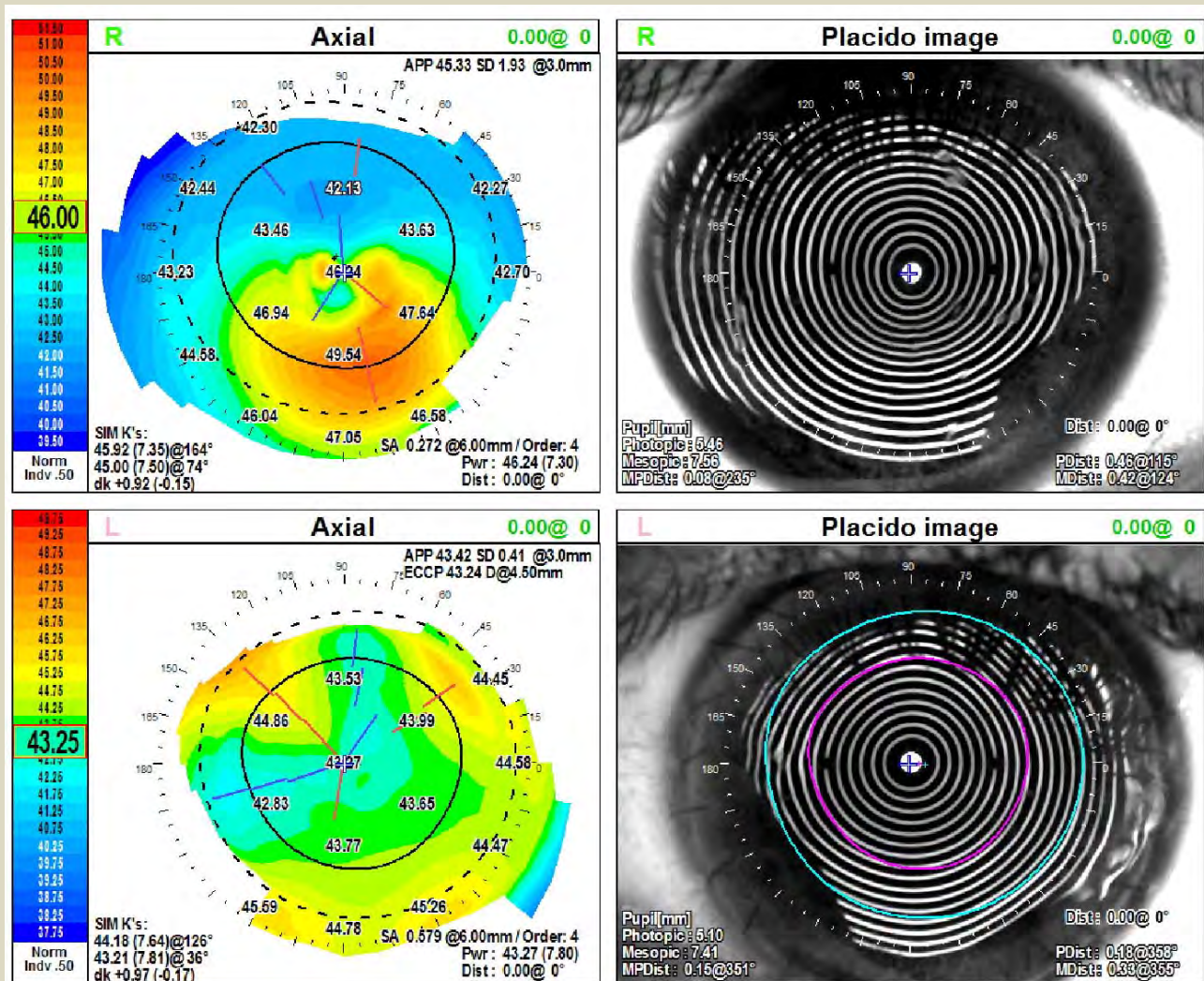
Left eye: Severe Keratoconus (Bottom)



Left eye (Bottom): DALK 10.0mm 2 mos later: Uncorrected VA 20/40

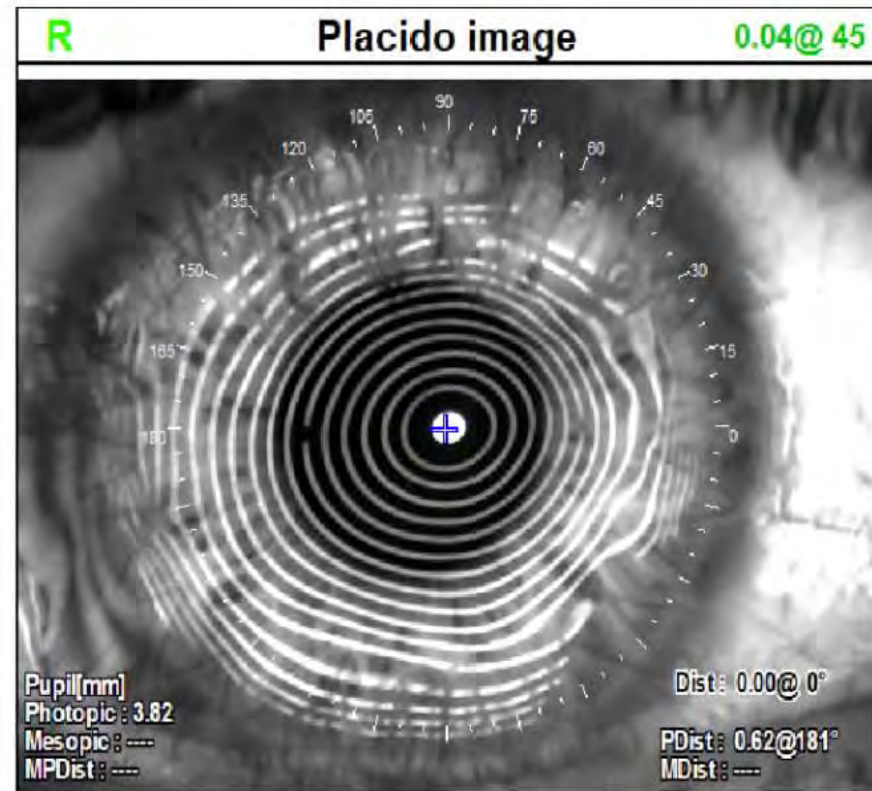
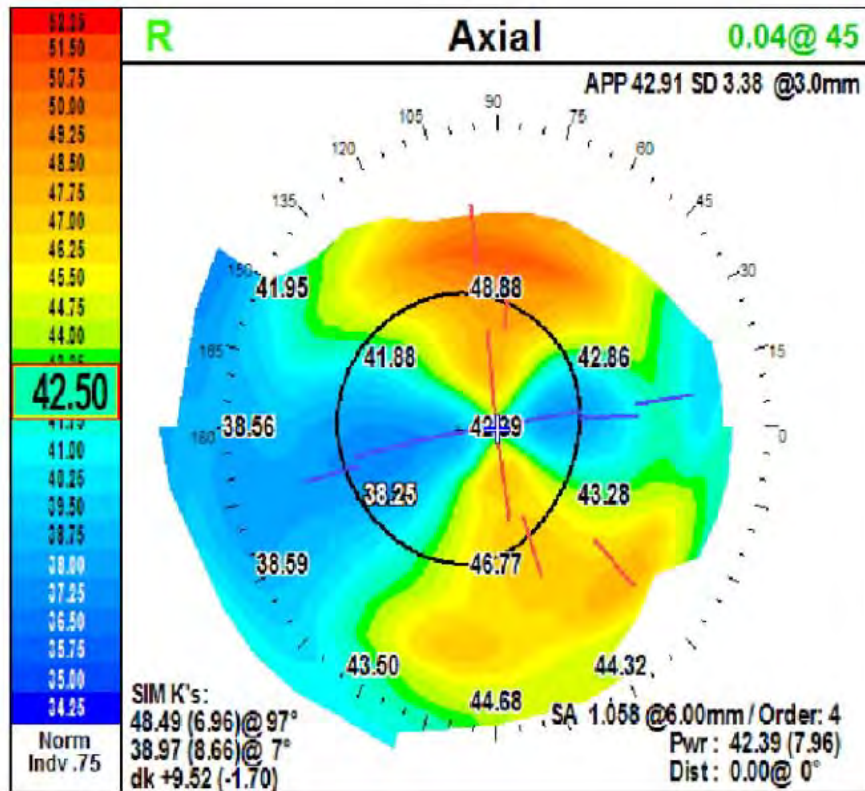


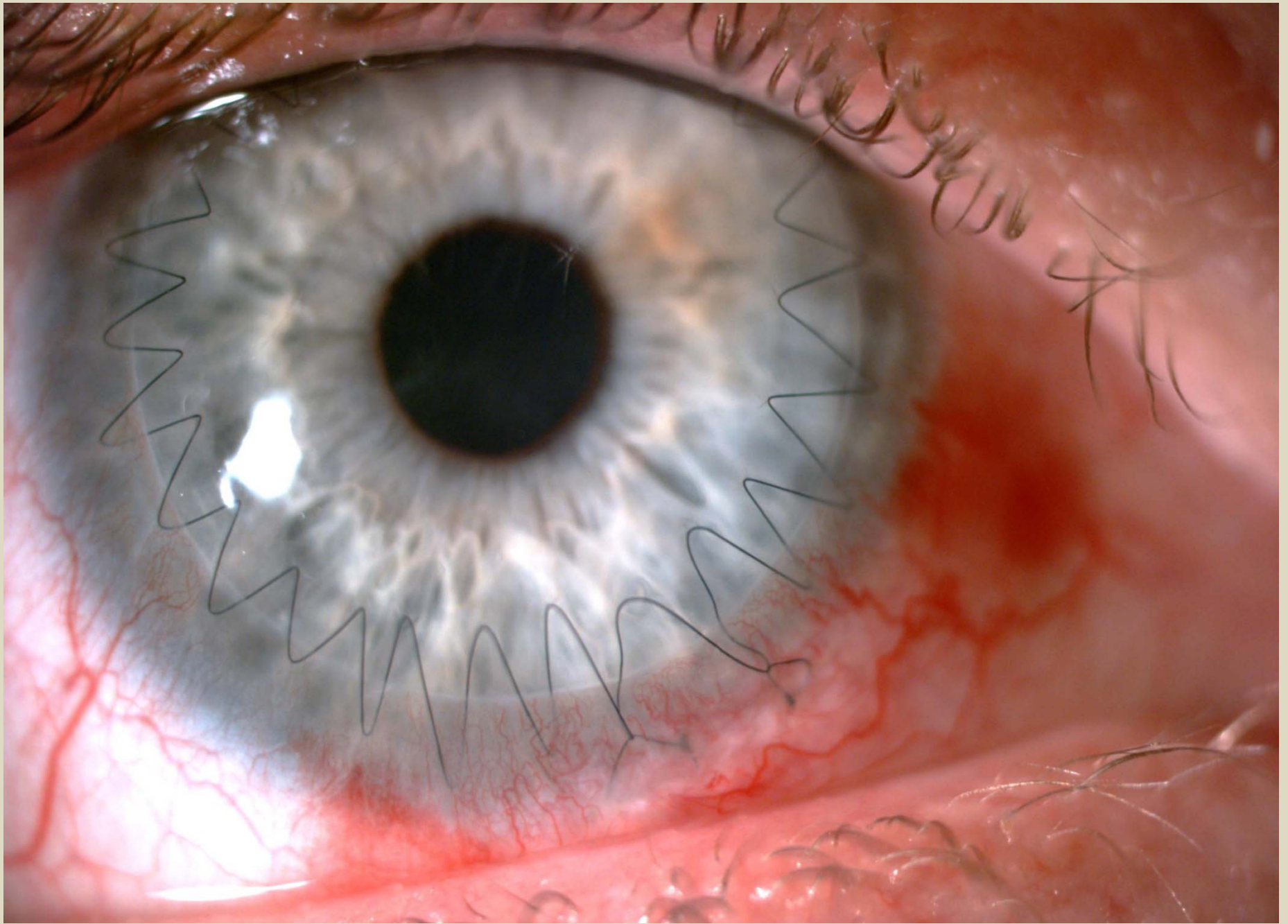
Left eye (Bottom): DALK 10.0mm 1yr later: Uncorrected VA 20/25 -0.75 20/20



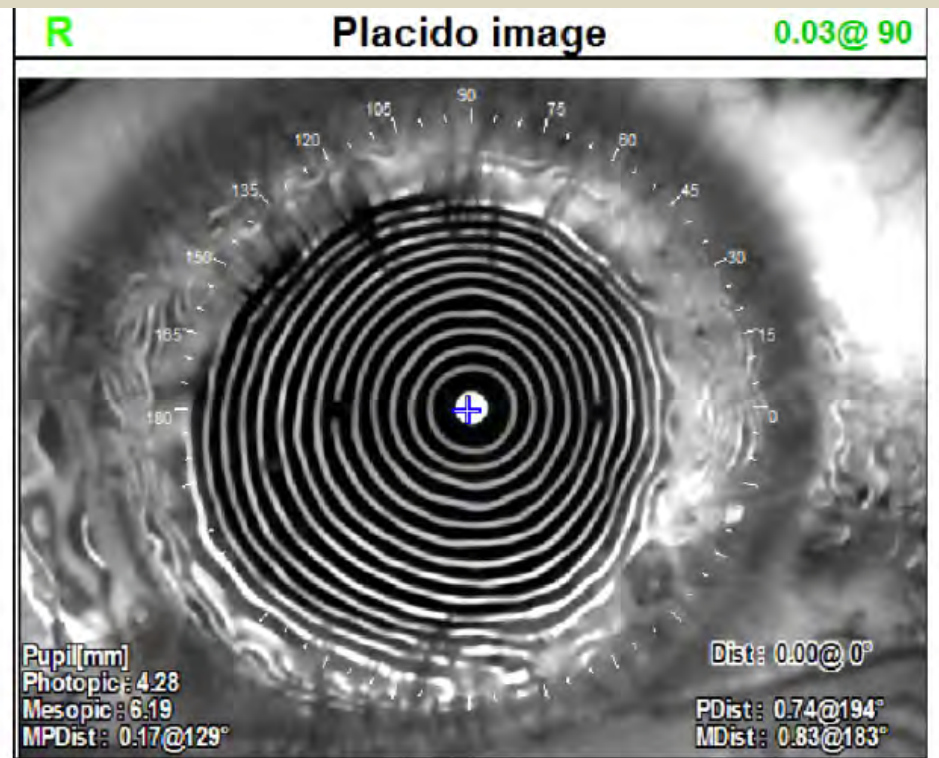
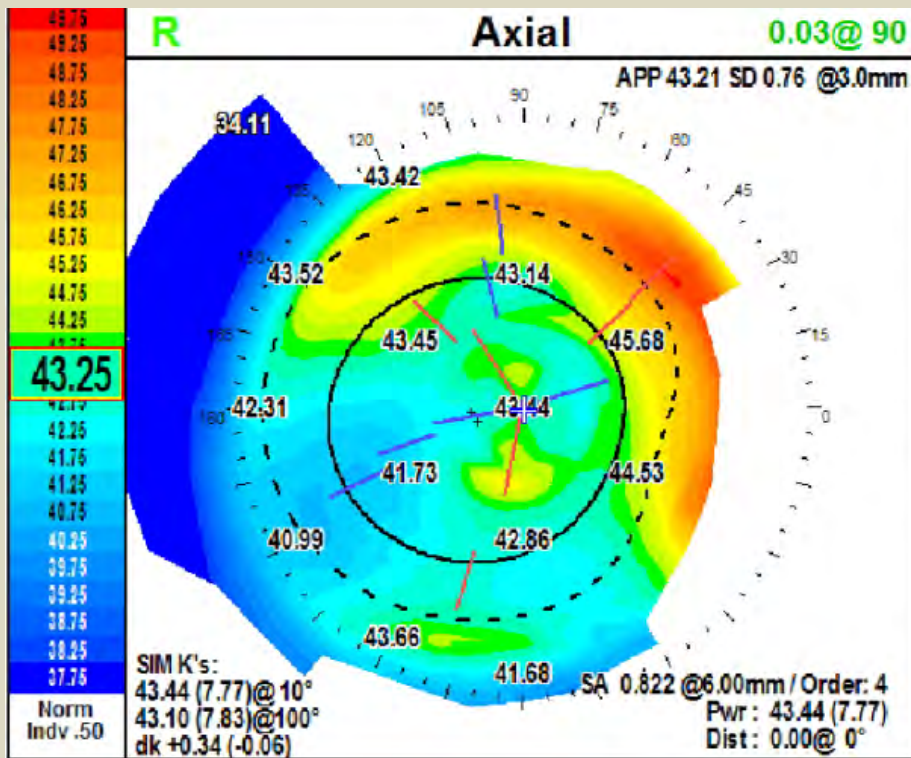
Is DALK Adjustable in early post-op
period?

Case 4: 18yo Keratoconus 5 wks aft DALK





2 wks after running suture adjustment:
Uncorrected VA 20/40 +0.5+0.75x78 20/30

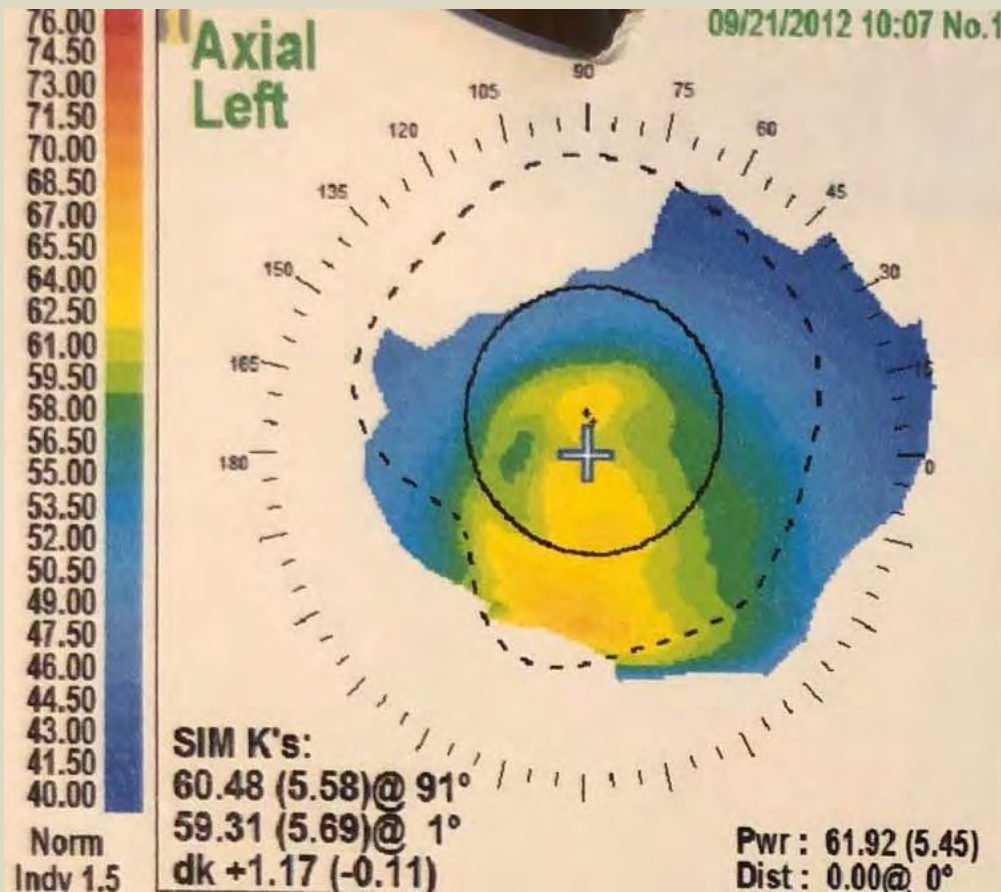


Keratoconus/Dalk/Long term stability?

Left Eye

CASE 5

Dec. 2012 23yo male Keratoconus -19.0+6.25x93 20/300 DALK 9.5mm pre-descemets dissection



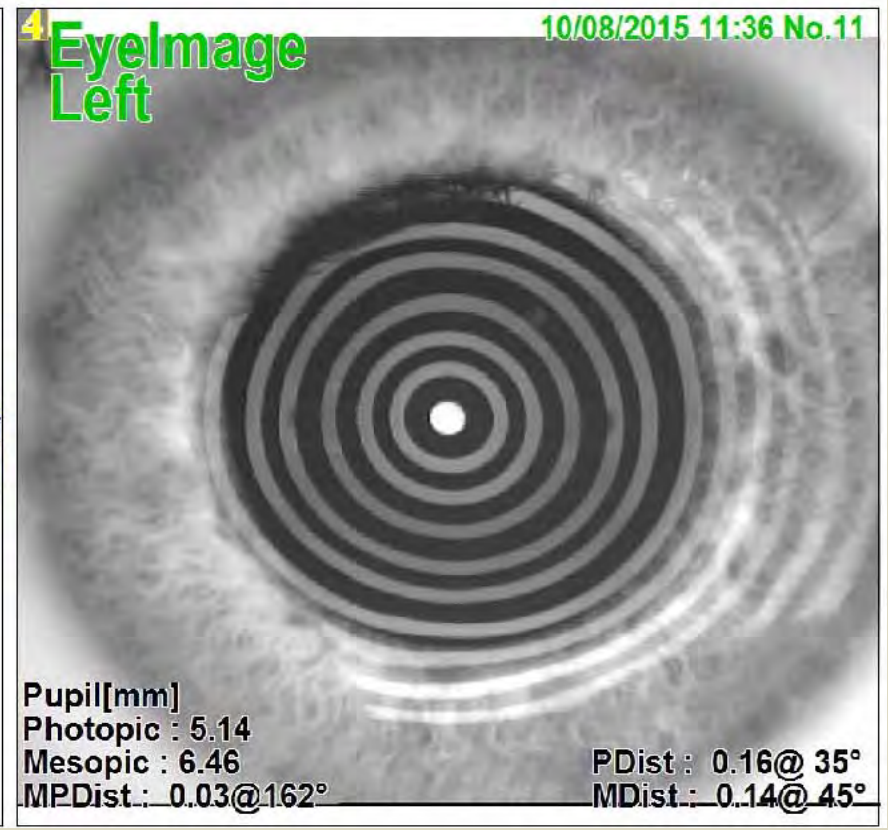
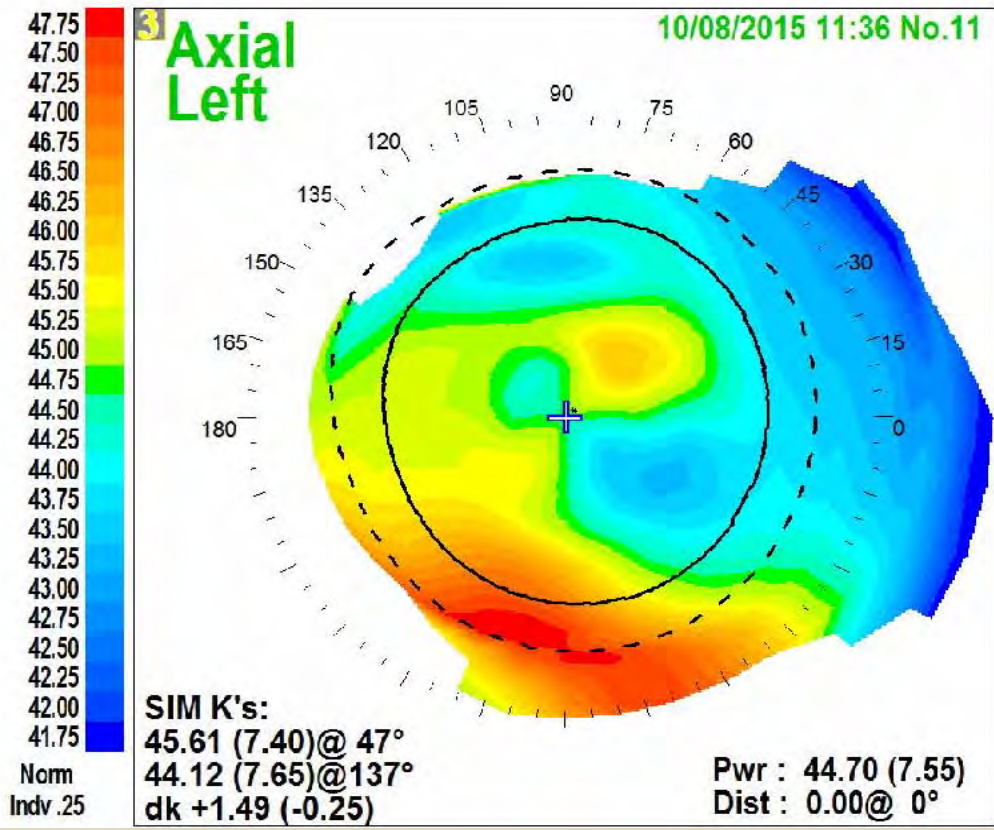
Case 5

Left Eye

Aug 2015 (2.7yrs aft DALK)

Rx: -2.75+1.0x53 20/25

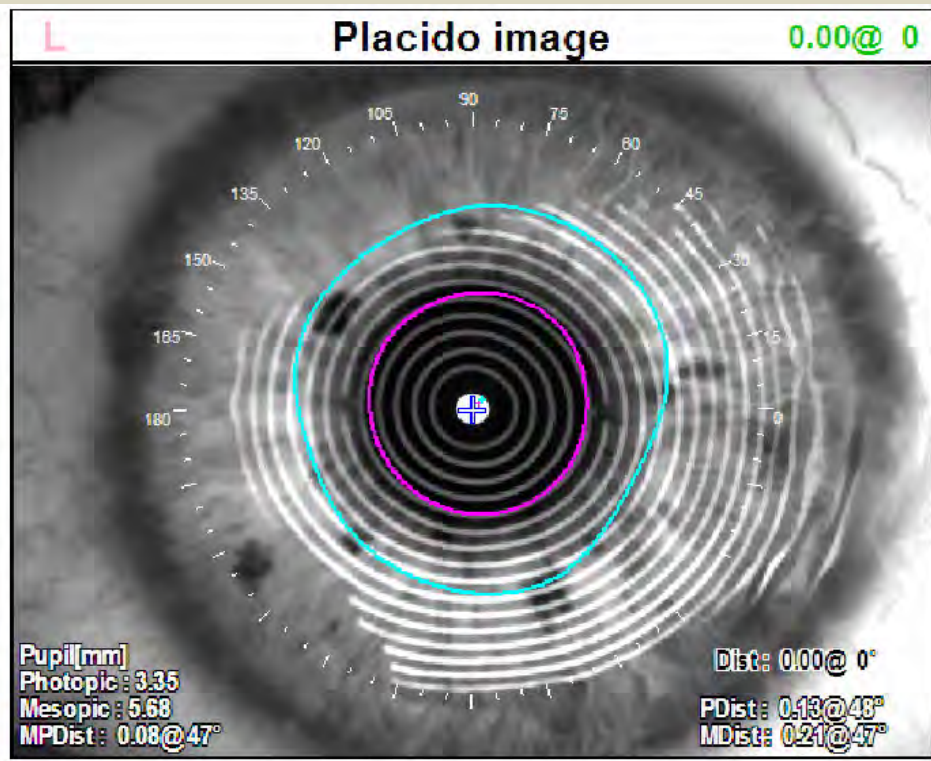
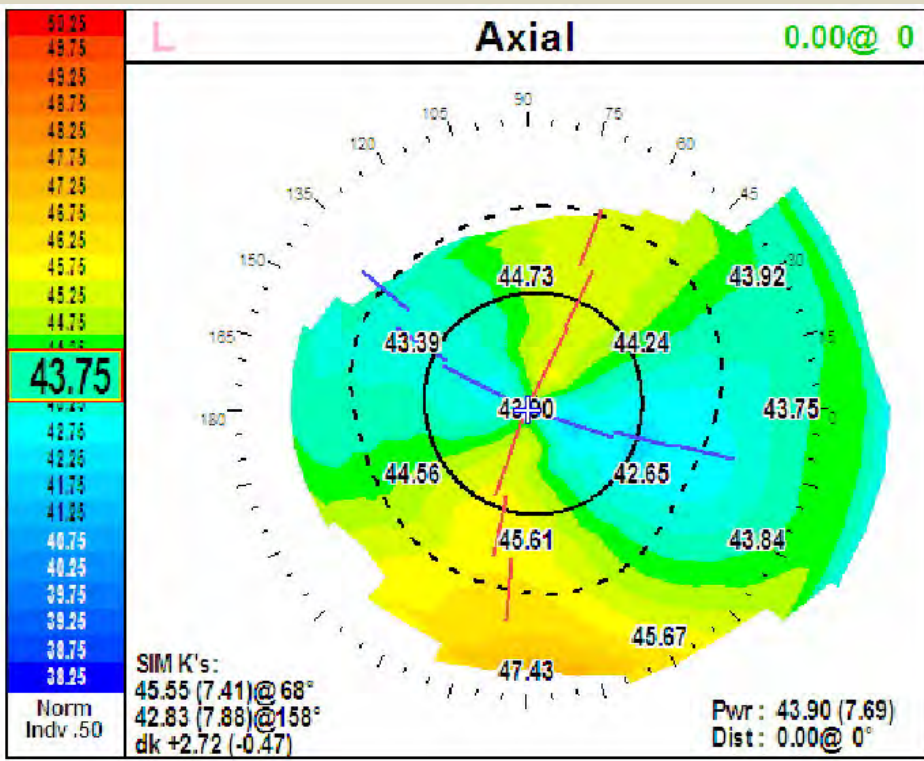
removed running corneal suture



Case 5

Apr. 2017 (4.5yrs aft DALK, 1.5yrs aft suture removal)

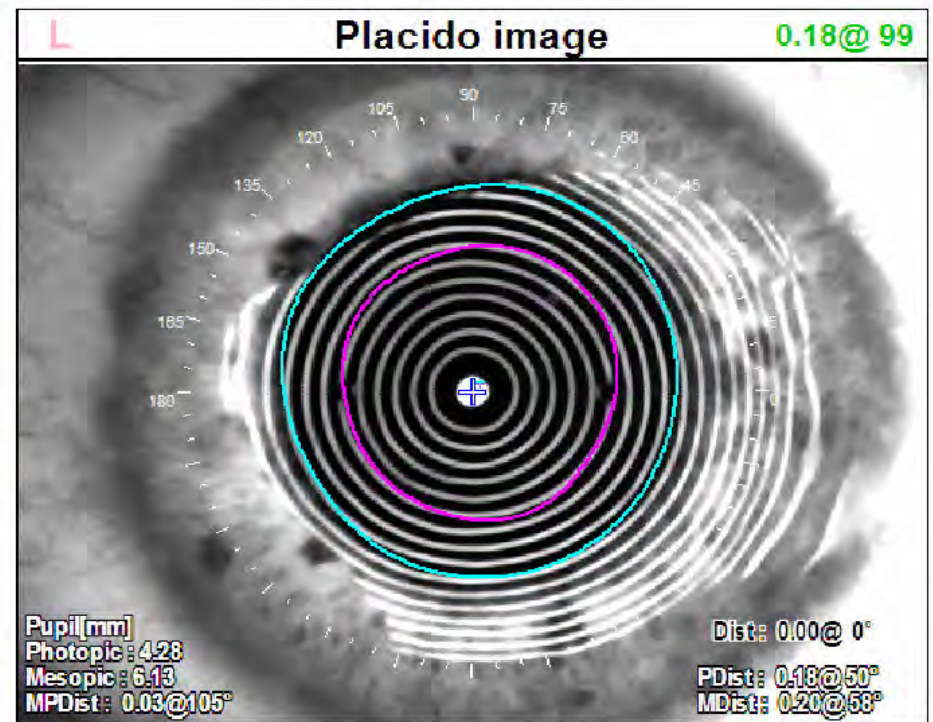
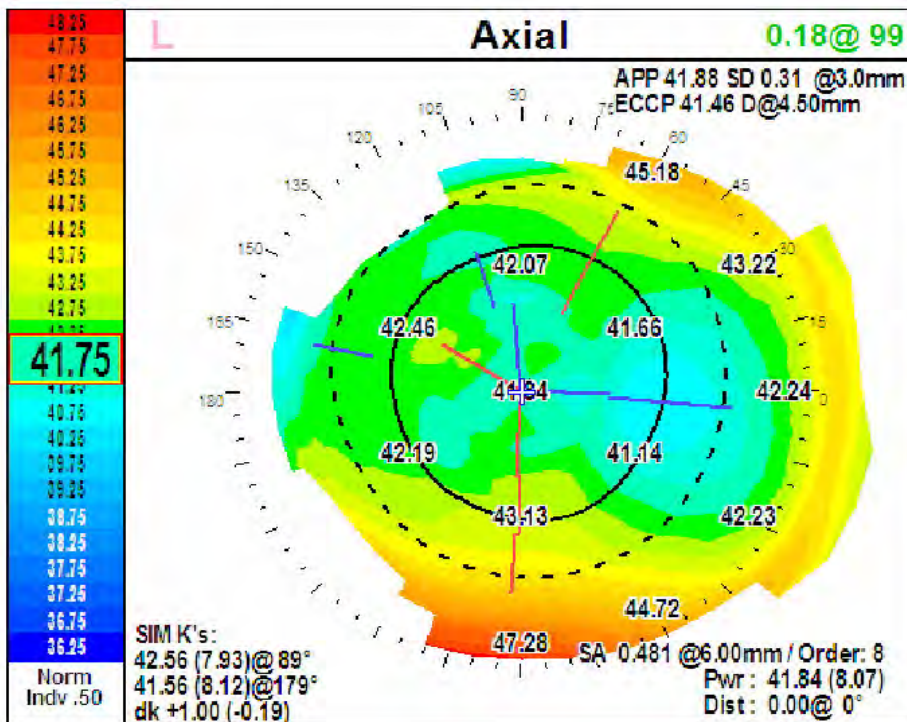
Rx: -3.75+2.5x67 20/20



Case 5

May 2017 LASIK (4.5yrs aft DALK)

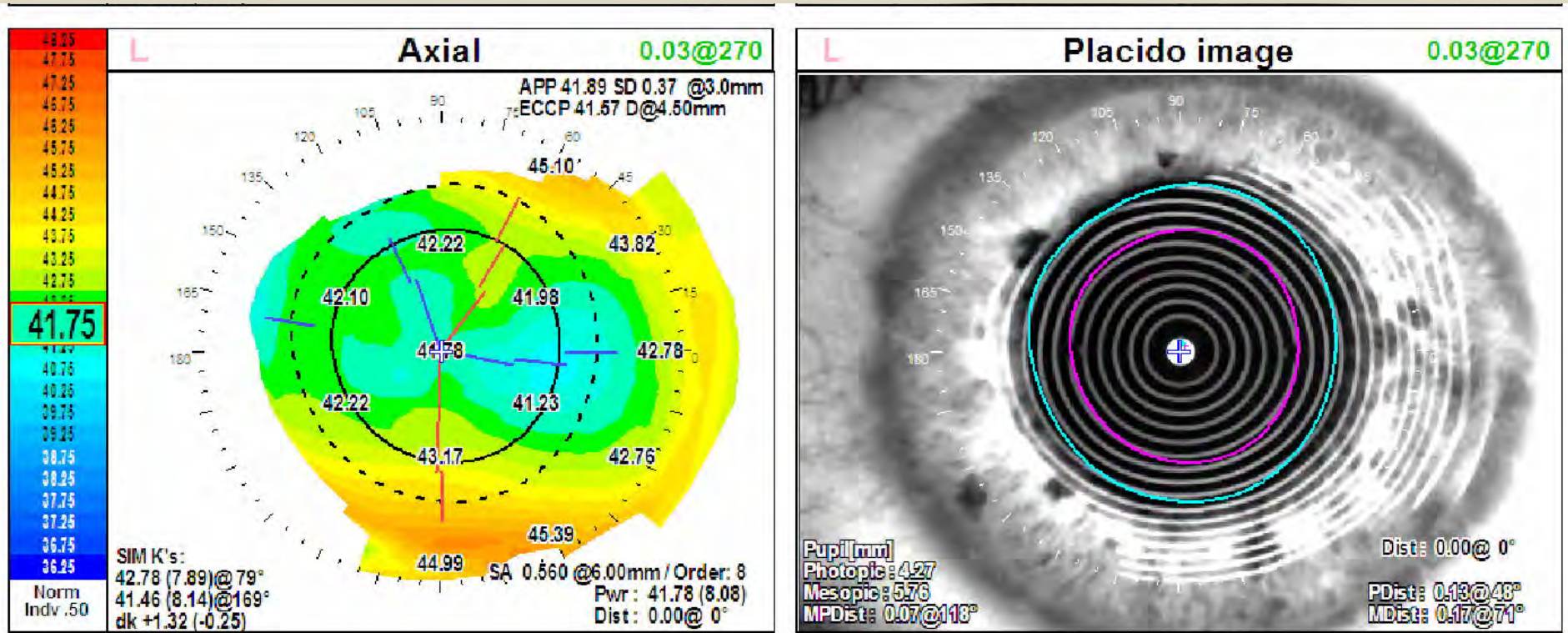
June 2017 Rx: -0.5+0.5x150 20/30 (2wks aft LASIK)



Case 5

Left Eye

Oct. 2018 (6yrs. aft DALK, 1.5yrs aft LASIK)
Uncorrected VA 20/20-1 -1+0.5x135 20/20



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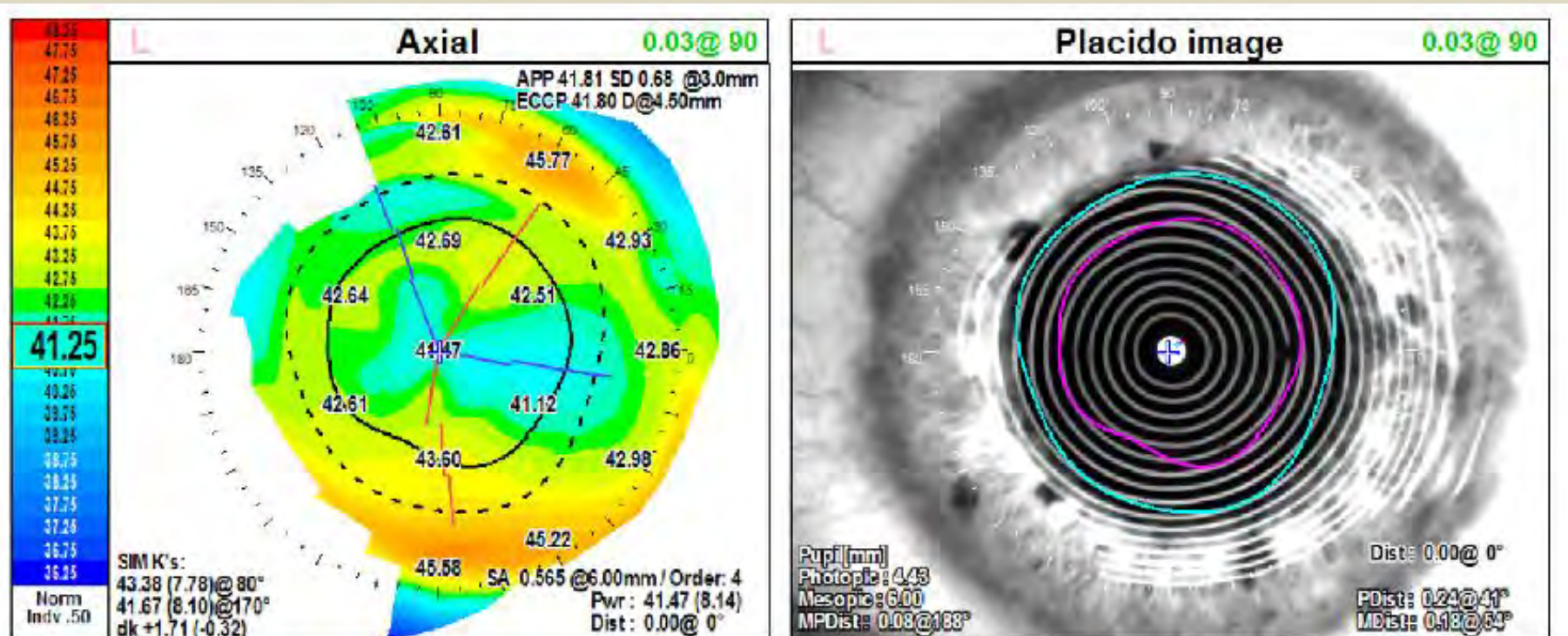
Case 5

Left Eye

Now age 33

March 2023 (10yrs. aft DALK, 6yrs aft LASIK)

Uncorrected VA 20/25 -1+0.5x135 20/20



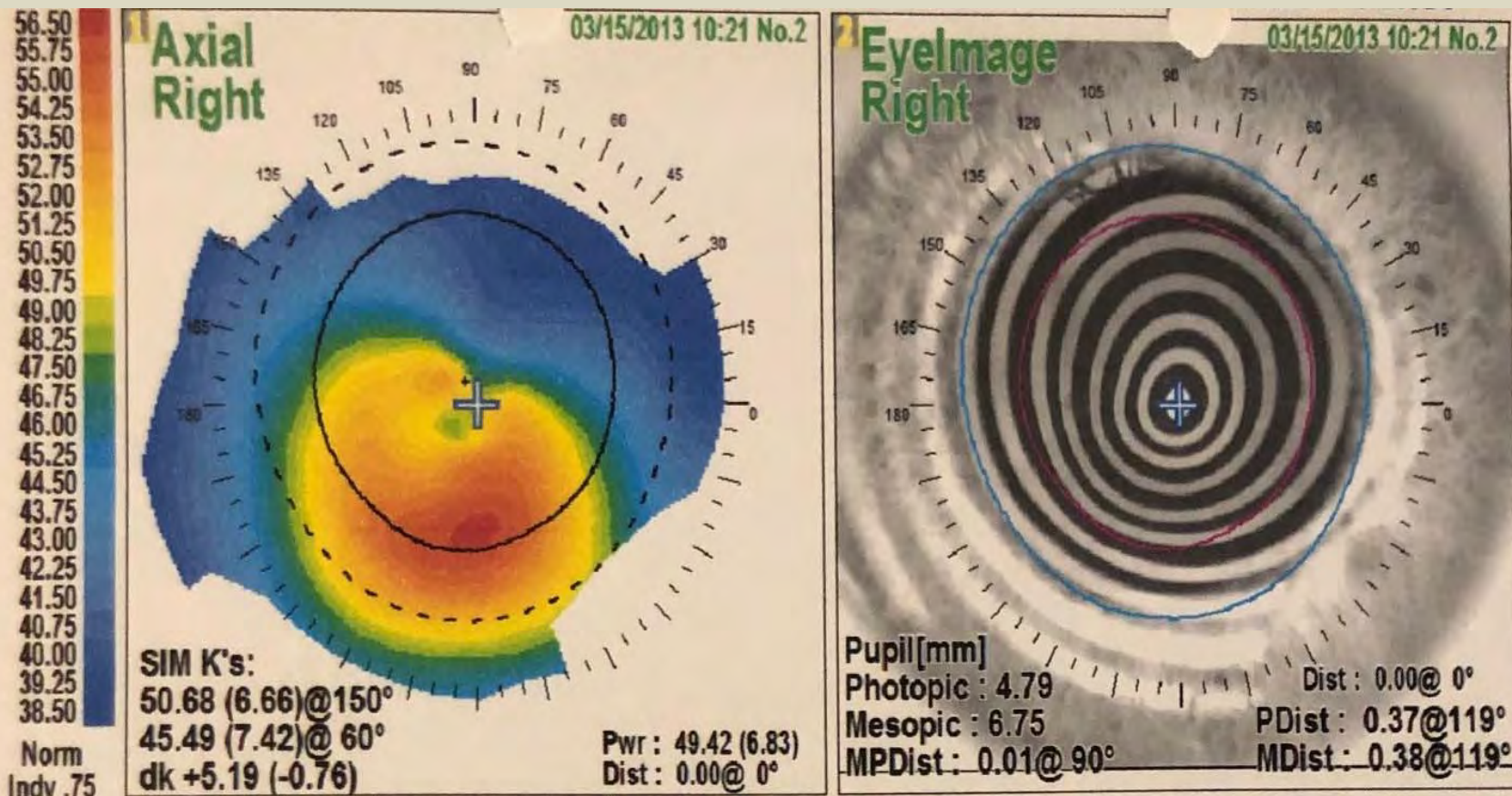
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What about his right eye?

Case 5

Right Eye

March 2013 24 yo male Keratoconus -6.0+3.75x133 20/40



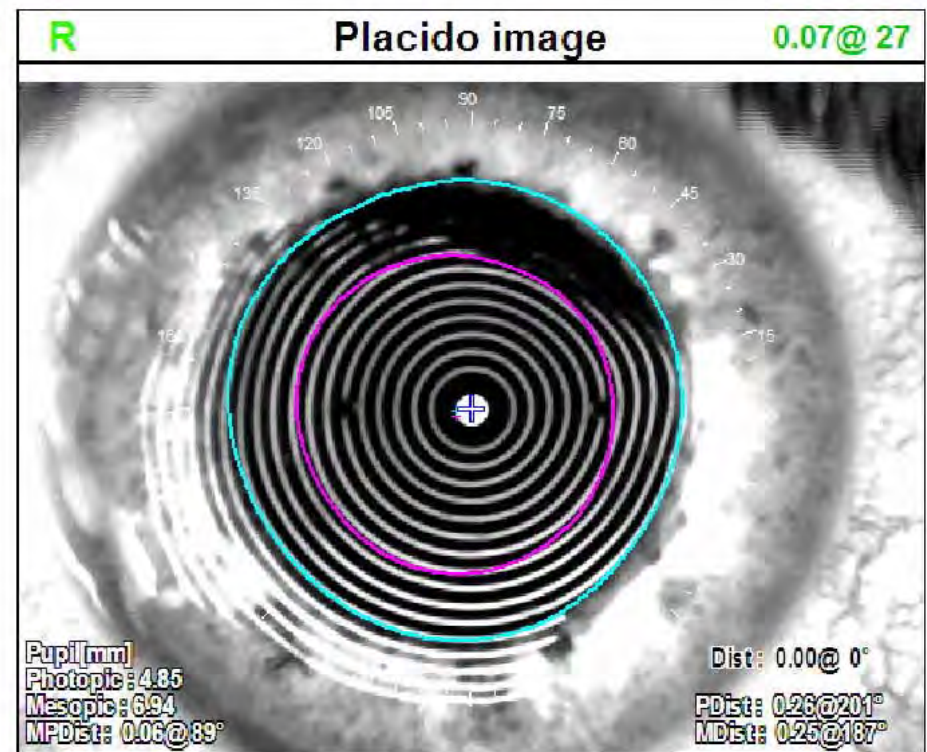
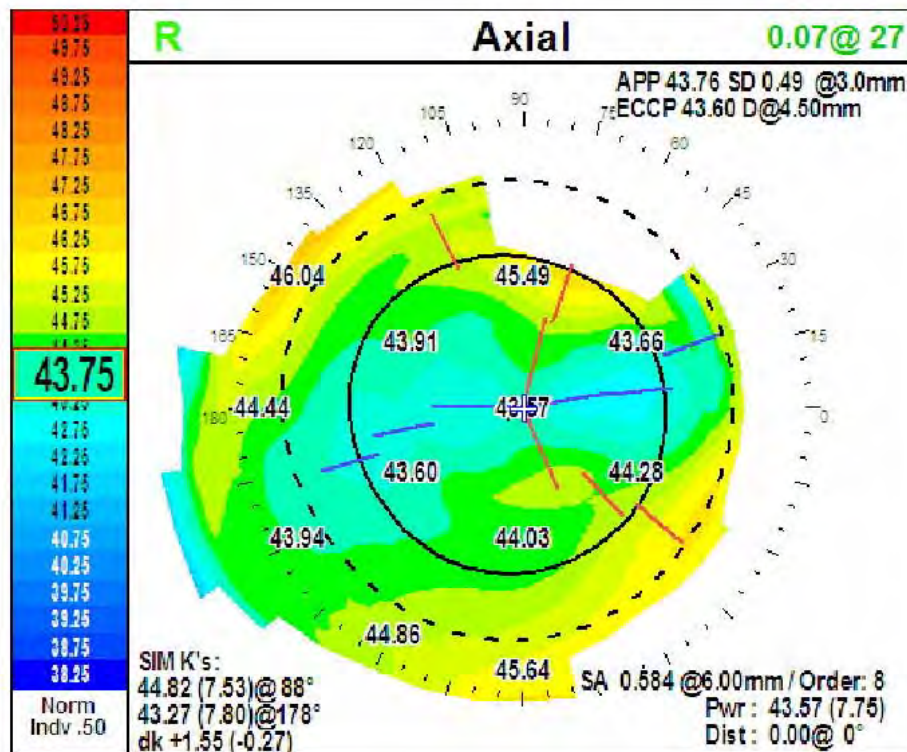
Case 5

Dec. 2013 DALK 9.5mm - big bubble

Right Eye

Feb. 2016 (2yrs aft DALK) : remove running cornea suture

Mar. 2016 (6wks aft suture removal) : -2.0+1.5x85 20/20



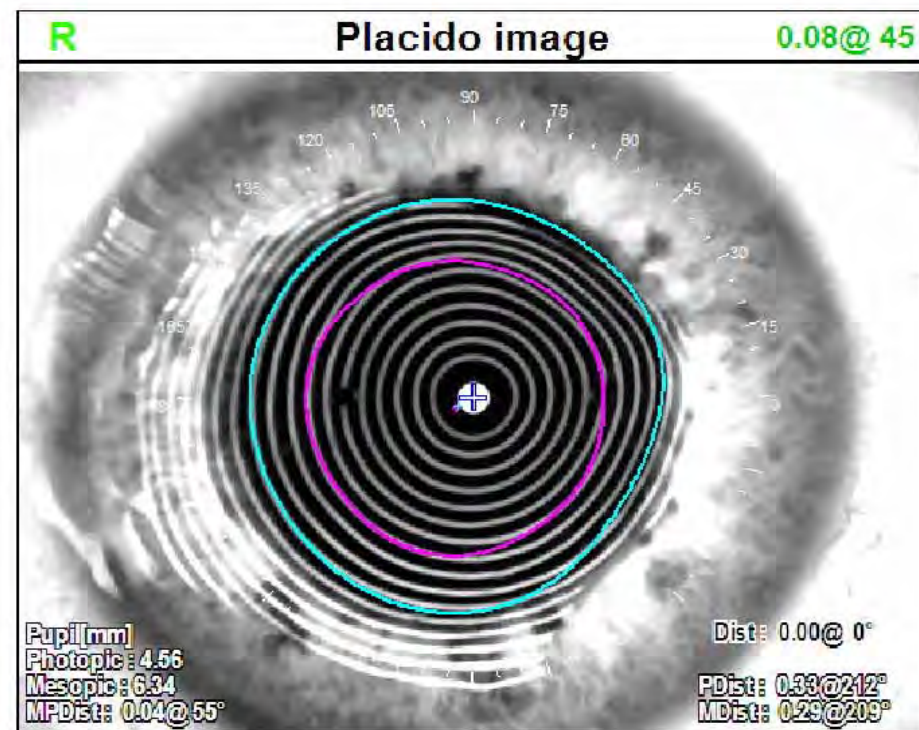
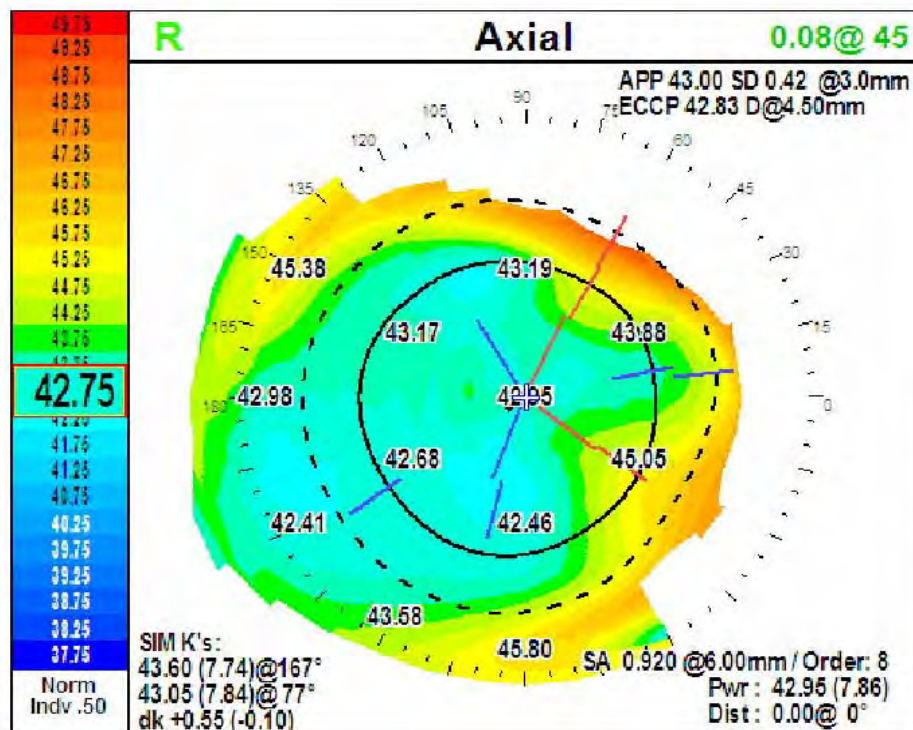
Case 5

Right Eye

Oct 2018 29yo (5yrs aft DALK/1yr aft LASIK)

Uncorrected VA 20/25

-0.75 20/20



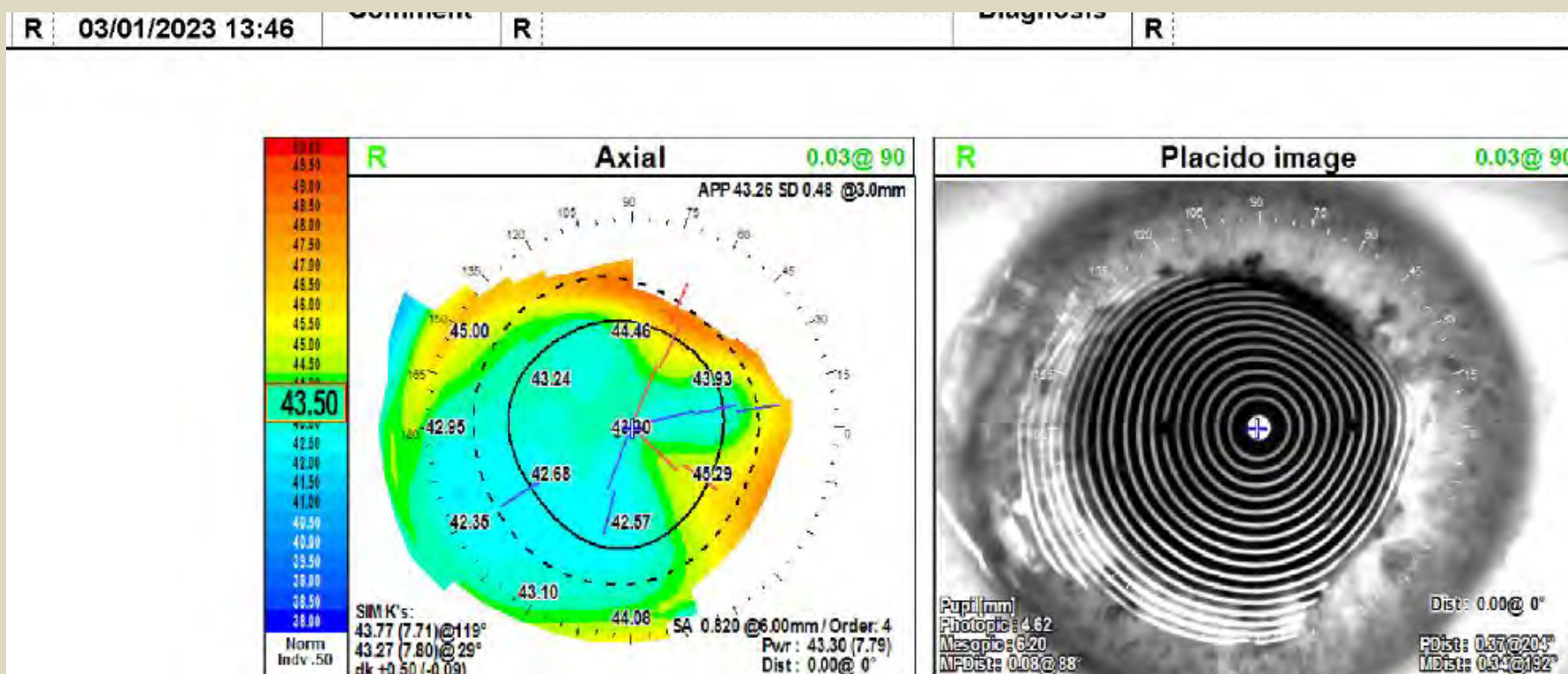
Case 5

Right Eye

March 2023 now 33yo (9.5yrs aft DALK/5yrs aft LASIK,)

Uncorrected VA 20/20

-0.50 20/20



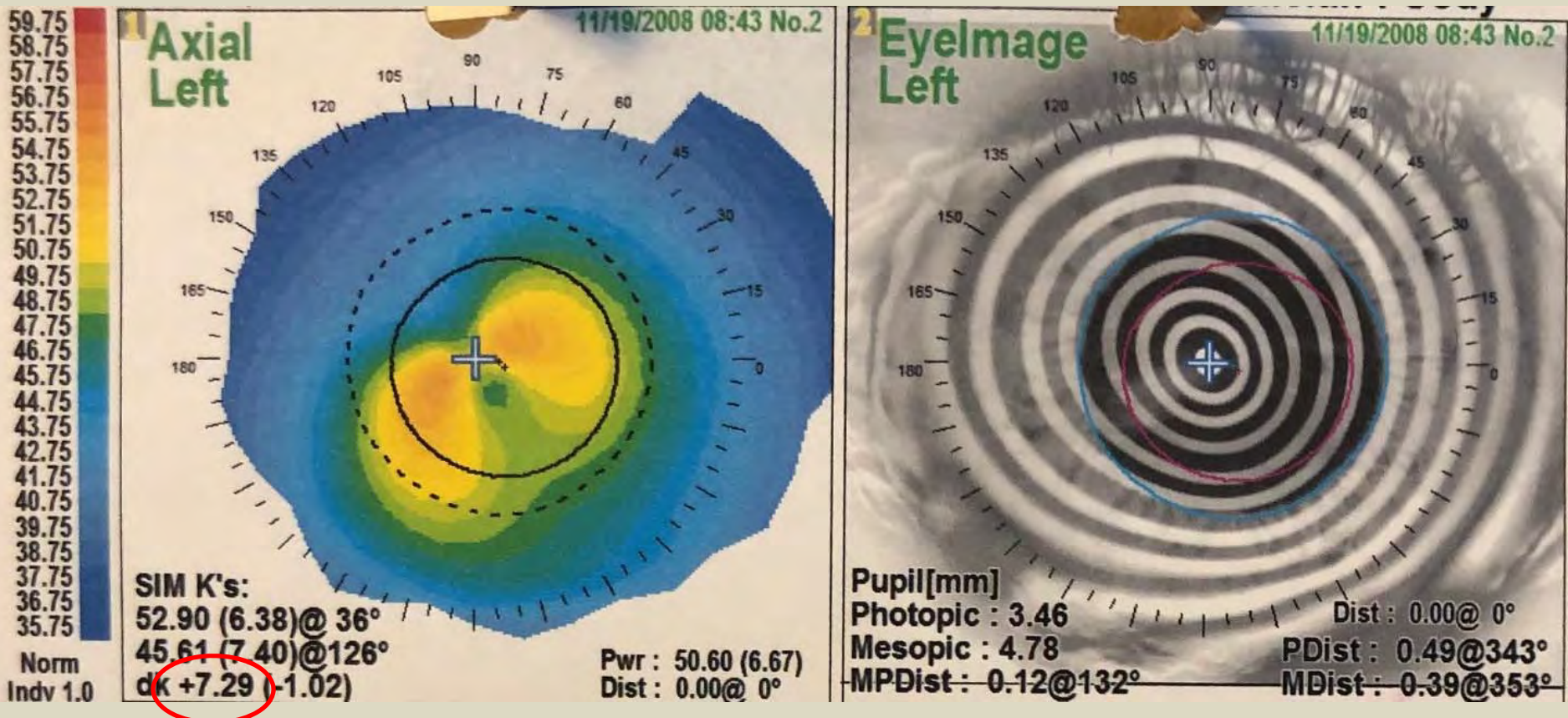
Case 6

Left Eye

64yo Keratoconus and Cataract

-4.75+4.50x4 20/60-

8/25/2009 DALK 8.5mm predescemets dissection

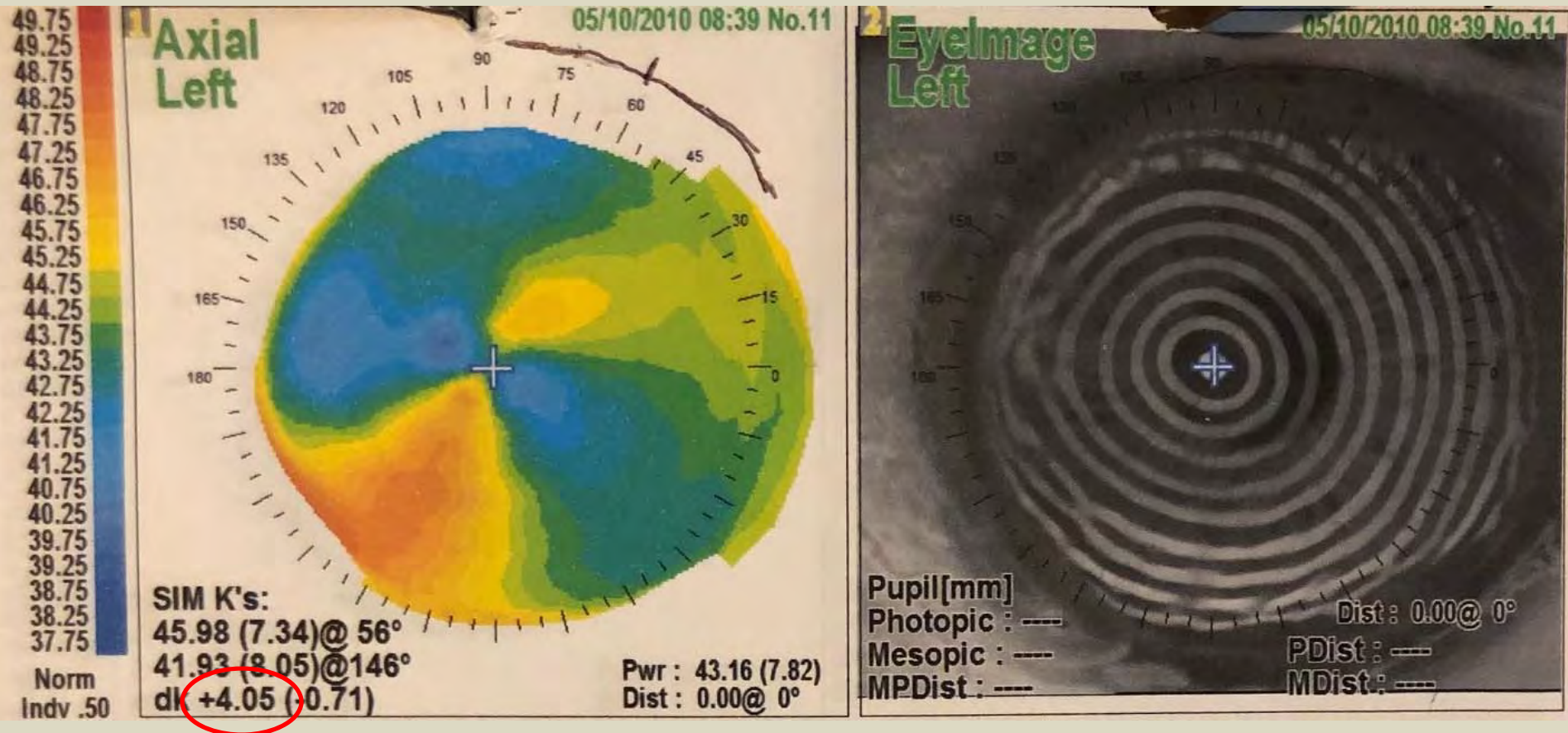


Case 6

Left Eye

Mar. 2010 (8mos aft DALK) Running Cornea Suture Out

May 2010 Cataract Extraction with long (7mm) Scleral tunnel incision x 60 (on steep axis) and Staar AQ2010V 18.5 IOL



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The Incision



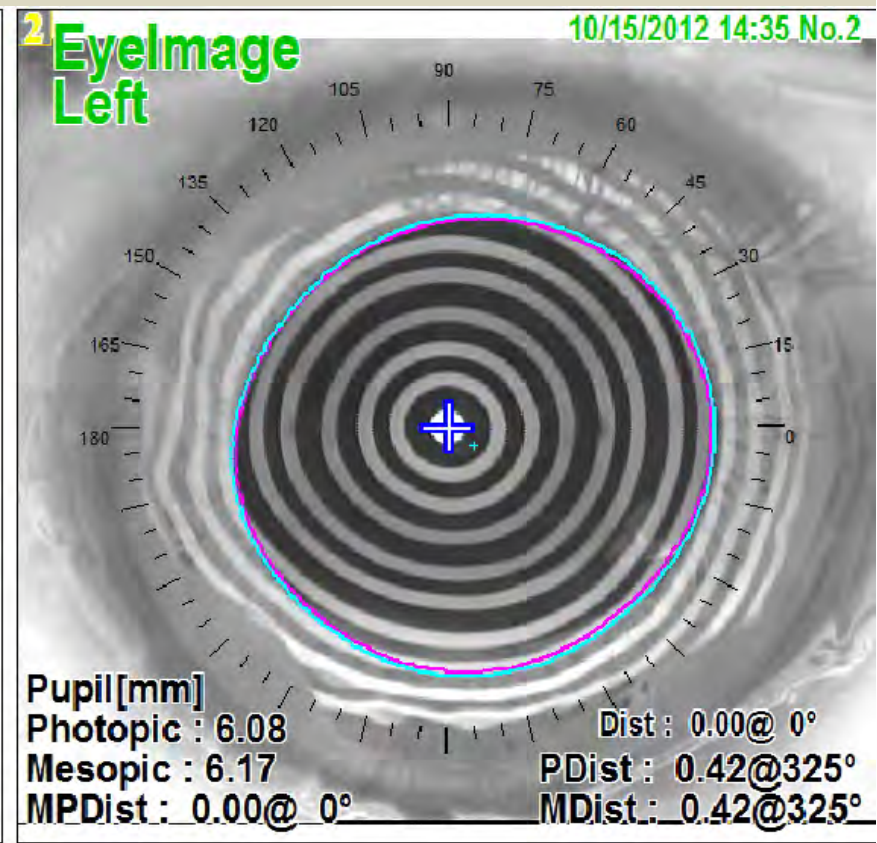
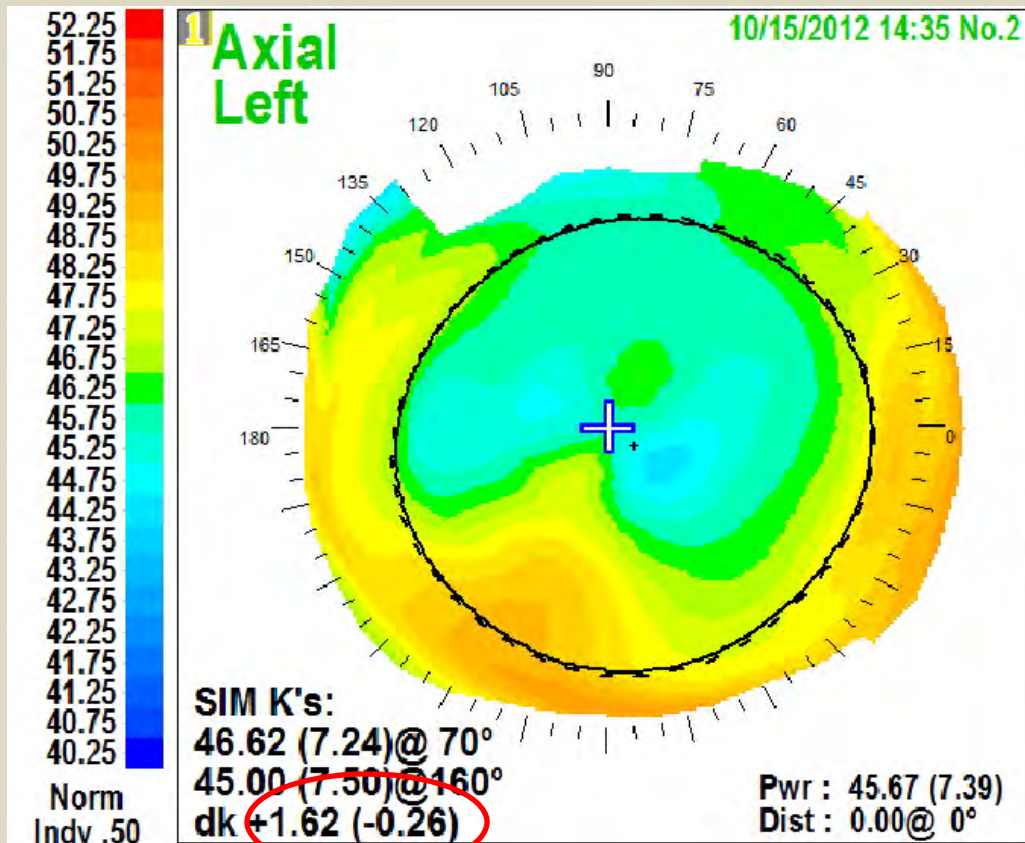
3-7. Shelf of the incision. The shelf portion of the incision holds the iris back and helps prevent iris prolapse.

Case 6

Left Eye

Oct. 2012

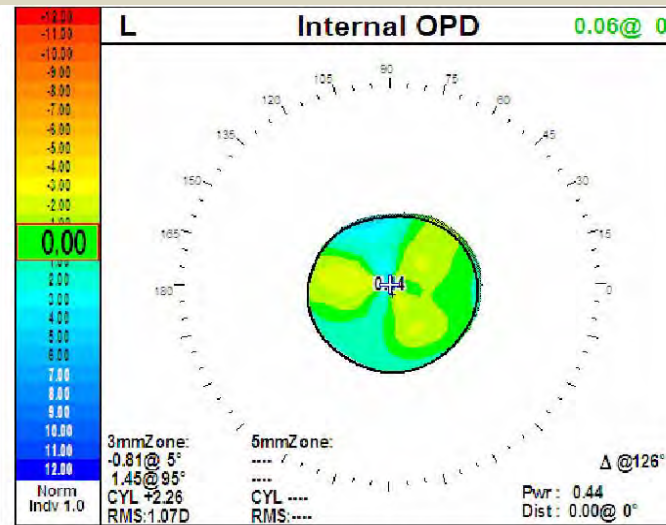
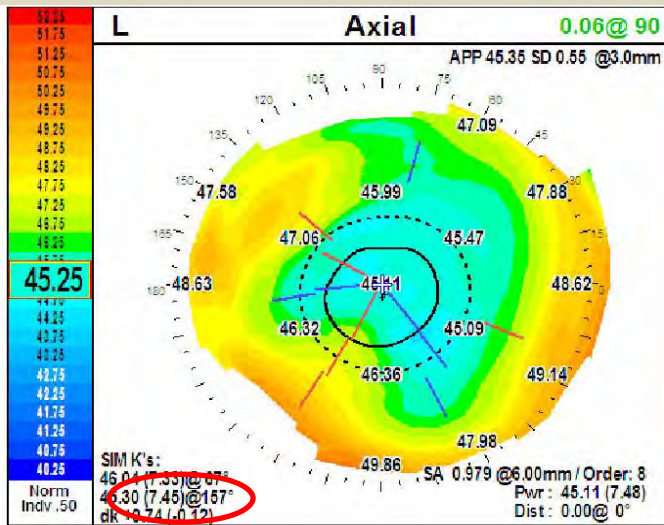
3yrs aft DALK, 2yrs aft Cat Ext monofocal IOL long scleral tunnel steep axis
-3.5+0.50 x 22 20/25-2 (note low topo cyl 1.62 – circled in red)



Case 6

Left Eye

Oct 2018 73 yo (9.5 yrs aft DALK, 8.5yrs aft Cat Ext monofocal IOL w long scleral tunnel on steep axis) -3.5+0.50 x 22 20/25-2
 (note: low topo cyl 0.74 – circled in red)



HOA [μm]: Cornea@6.00mm L

Total, Internal@3.80mm / Order = 3

	T.Sph	T.Coma	T.Tre	HO
Total:	0.000	0.107	0.660	0.668
Cornea:	0.000	0.647	1.204	1.367
Internal:	0.000	0.020	0.865	0.866

Refraction: VD = 13.75mm

	Sph	Cyl	Axis	RMS
REF	-3.75	+2.00	13	
WF@3.50	-3.75	+2.00	12	0.57D
Diff	0.00	0.00	-1	

