

Epikeratoplasty for advanced Keratoglobus

Ayman Nasr, MD, FRCS

Consultant ophthalmologist

Background

- Myopia or high myopia
- Irregular astigmatism
- Globular protrusion of the cornea
- Diffuse corneal thinning most severe peripherally
- Folds, breaks, or thickening of Descemet's membrane
- Spontaneous rupture/tear of Descemet's membrane
- Acute hydrops
- Scarring or neovascularization of the stroma

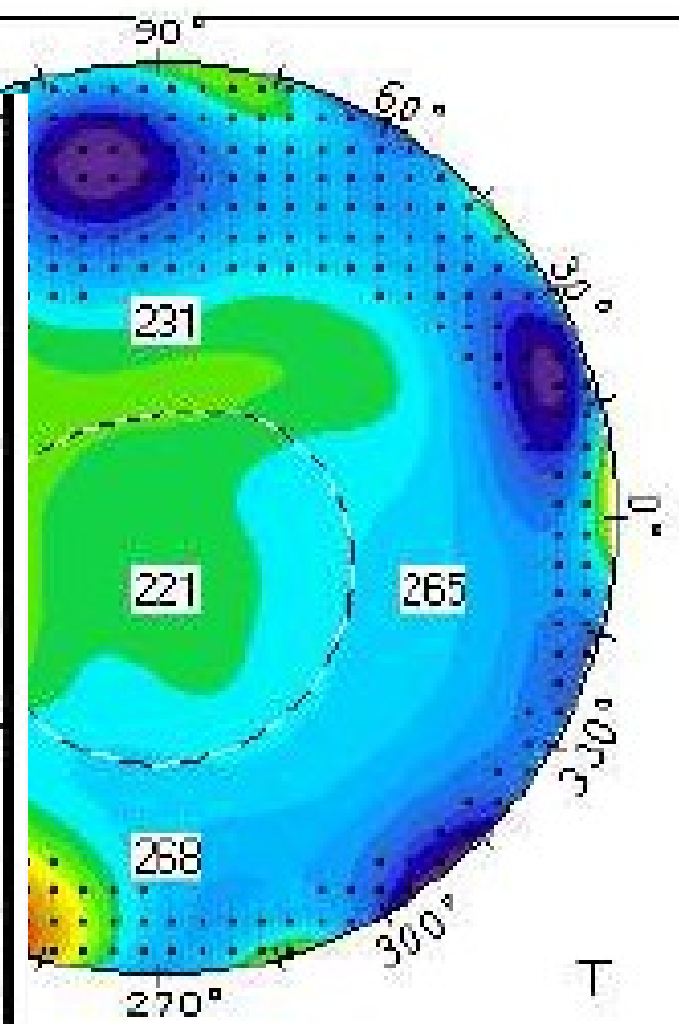




Corneal Thickness

		Pachy:	x[mm]	y[mm]
Pupil Center:	+	221 μ m	+0.07	-0.78
Pachy Apex:	●	227 μ m	0.00	0.00
Thinnest Locat.:	○	179 μ m	-1.98	-0.74
Max. (Front):	●	76.2 D	-0.28	+0.51

Cornea Volume:	19.3 mm ³	KPD:	+0.8 D
Chamber Volume:	261 mm ³	Angle:	45.9°
C. Depth (Int.):	4.36 mm	Pupil Dia:	4.11 mm

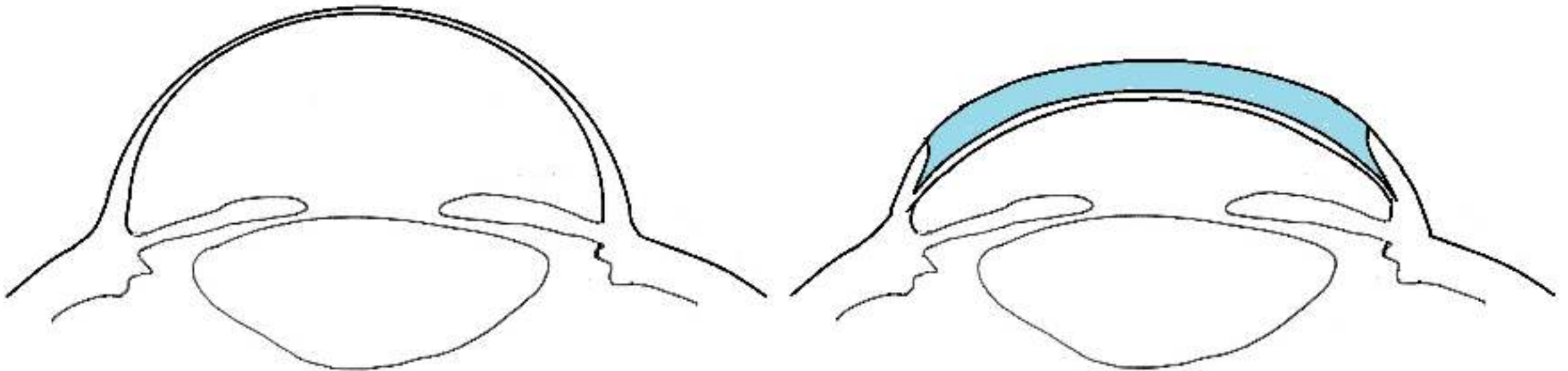


Background

- Poor CDVA
- Poor tolerability and fitting for Hard CL
- Vulnerability to serious injury

Epi-keratoplasty - Aim

- Strengthening of the Cornea
- Improve corneal profile to improve CDVA



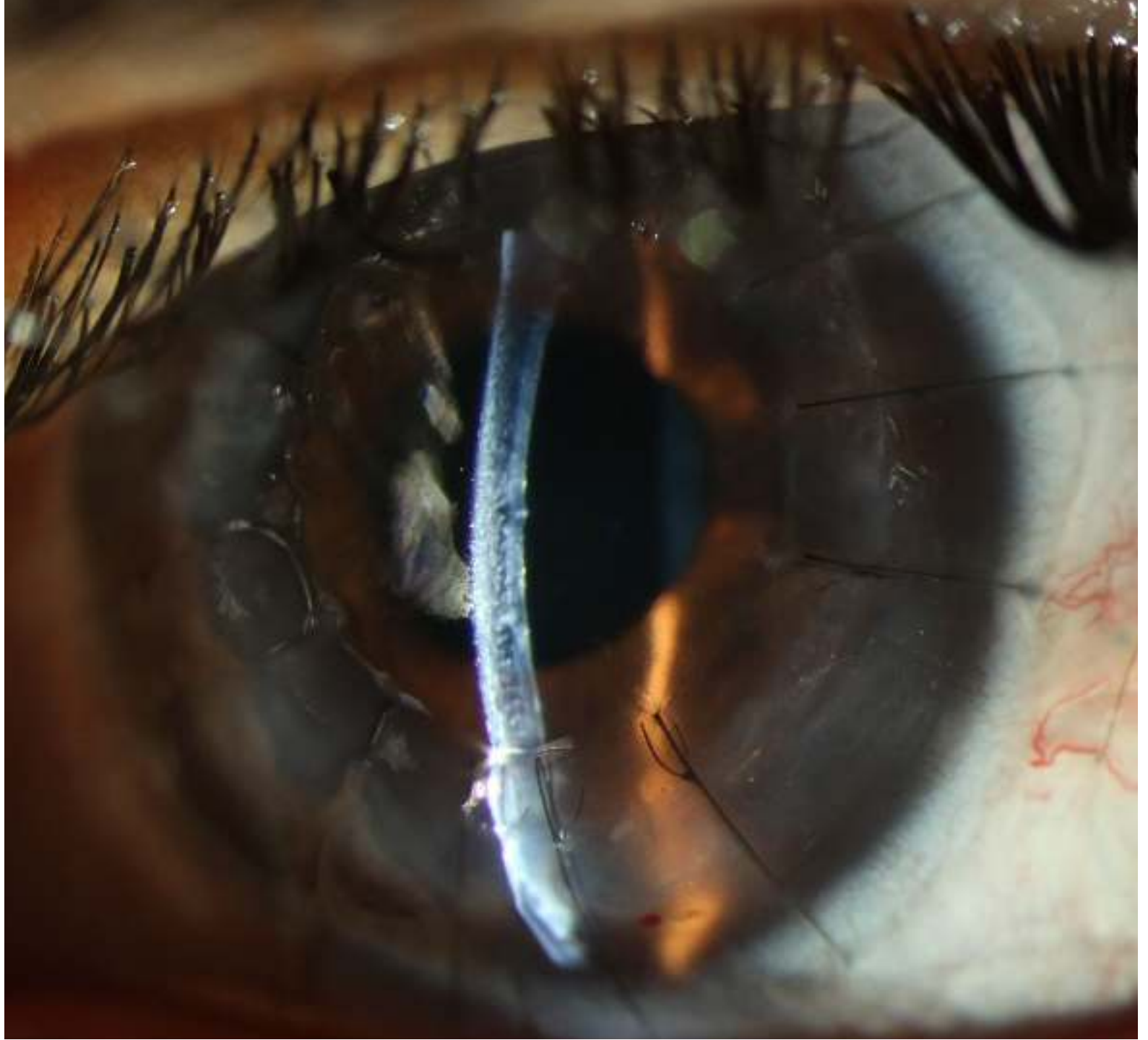
Epikeratoplasty...when?

- Uniformly very thin cornea
- Clear media ..no central dense scarring or folds

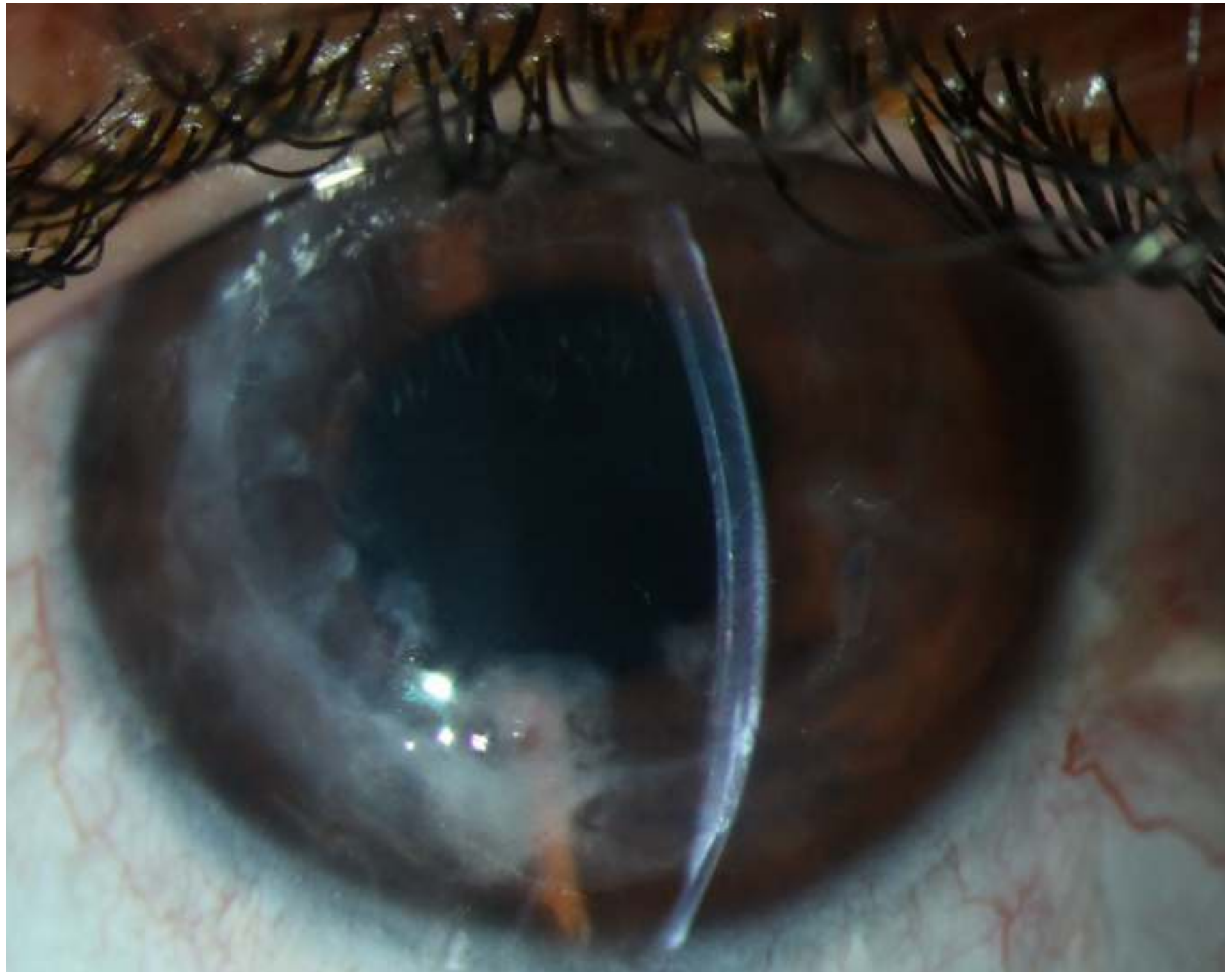


Dr Ayman Nasr - Epikeratoplasty

2 Months



18 Months



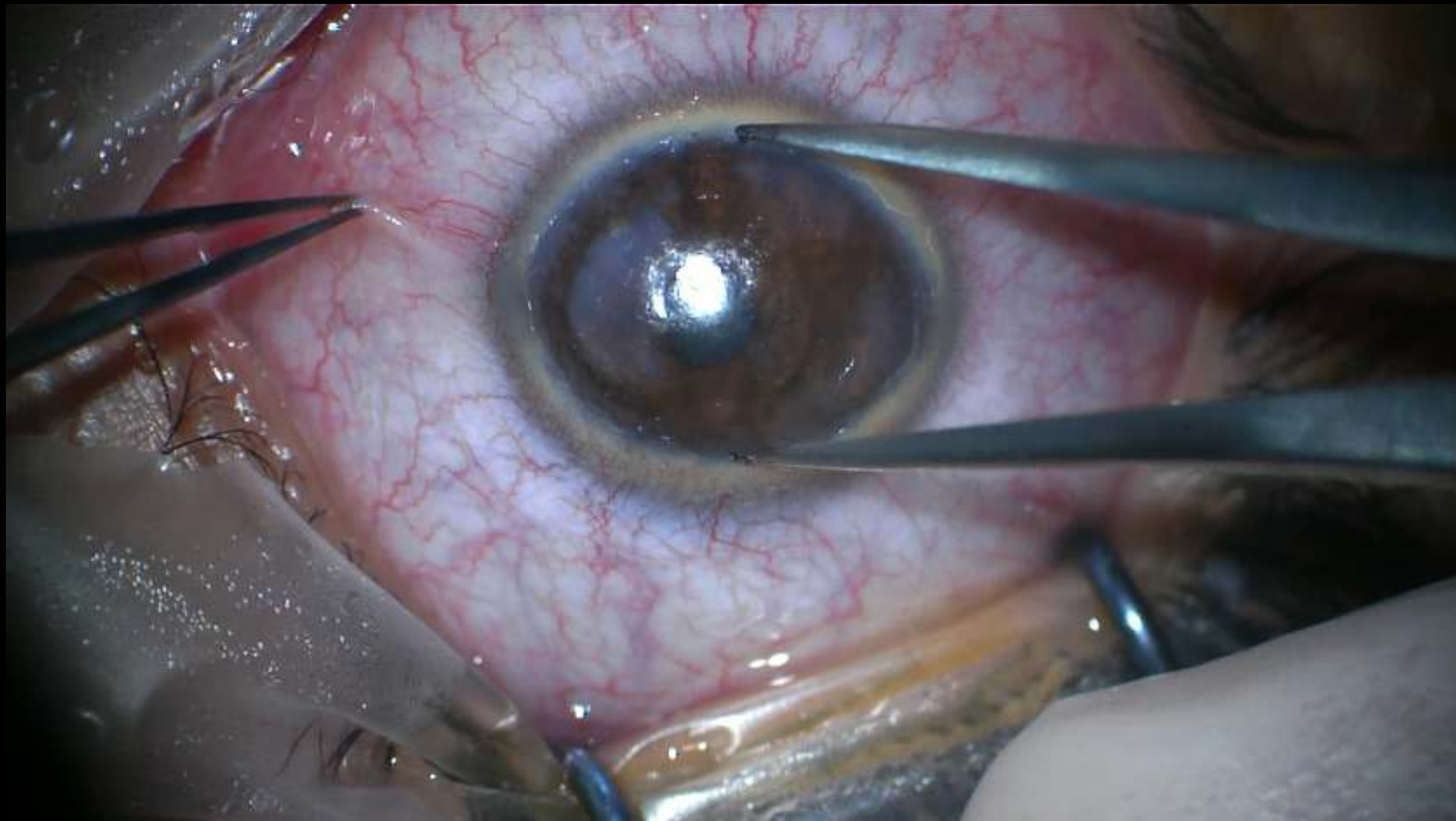
Results

	Before	After
UCDVA	CF 1M	20/100
CDVA	20/400	20/60
K max	68.00 D	48.00 D
K min	60.00 D	41.00 D

Subjective refraction: +2.00 – 4.75 x 65

DALK is an option.. **But!**

- Frequently presents with predescemetec scarring!
- High risk if converted to PK.
- No room for big bubble...predescemetec



Thank you for your attention