

Case # 1: Bilateral Keratoconus

Patient: 44 year old male

Diagnosis: Bilateral keratoconus

Occupation: MOD, frequently outdoors, shift work 12hrs + 2hrs travel time

Current Status

Unaided: Visual acuity RE: 1.075LogMAR, LE: 0.42LogMAR

Spectacles: Does not tolerate well and prefers unaided (RE: 0.36LogMAR, LE: 0.12LogMAR)

RGP corneal lenses: Fit well and give good visual acuity (RE: 0.00LogMAR, LE: 0.00LogMAR) but are poorly tolerated; maximum WT 4hrs, so unable to wear for work. Symptoms of “scratchiness” is the main problem, as well as particles trapped behind the lens (most likely related to working environment).

Mean corneal curvature (from topography): RE: 6.79mm, LE: 7.20mm

Fitting Sequence ROSE K2 Soft (RE)

TRIAL LENS	FITTING CHARACTERISTICS
8.00 : 14.80	Minimal movement after settling, uncomfortable
8.20 : 14.80	Movement 1mm after settling, comfortable, stable vertical laser mark
8.40 : 14.80	Movement 1mm after settling, comfortable, unstable rotated laser mark

Comments: The patient was so impressed with the reduction in visual distortion with the trial lens (0.80LogMAR) that the trial lens was issued whilst the final lens was ordered.

Final lens RE: 8.20 : 14.80 : Plano/-4.50x60, visual acuity 0.10LogMAR

Fitting Sequence ROSE K2 Soft (LE)

TRIAL LENS	FITTING CHARACTERISTICS
8.60 : 14.80	Movement 1mm after settling, comfortable, vision better immediately after blink
8.80 : 14.80	Excessive movement, slightly less comfortable, slightly unstable laser mark but vision more consistent
8.80 : 14.80 Edge lift reduced 1 step	Movement 1mm after settling, comfortable, stable vision

Comments: No cylindrical power was required on over refraction.

Final lens LE: 8.80 : 14.80 : +2.00, visual acuity 0.00LogMAR

Summary

Patient S presented with poor tolerance of spectacles due to distortion and of corneal RGP lenses because of his working environment. ROSE K2 Soft lenses were fitted successfully to both eyes. The patient is able to achieve a wearing time of 13 hours which allows him to wear them for critical visual tasks at work. He finds the lenses extremely comfortable and the improvement in his visual quality is dramatic.

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The author has no financial interest in the products described in this case study.



Case #2: Left Keratoconus

Patient: 36 year old male

Diagnosis: Left keratoconus

Current Status

Unaided: Visual acuity RE: 0.20LogMAR, LE: 0.72LogMAR

Spectacles: Unable to tolerate and experiences distortion and glare, especially at night
LE: +5.00 / -7.00 x 100, visual acuity 0.20LogMAR

RGP corneal lenses: Unable to tolerate RGP corneal lenses at all

Mean corneal curvature (from topography): LE: 7.29mm

Other: Increase in frontal headaches over the last 12 months

Fitting Sequence ROSE K2 Soft (LE)

TRIAL LENS	FITTING CHARACTERISTICS
8.40 : 14.80	Movement 1.5mm after settling, slight fluting of inferior edge
8.20 : 14.80	Movement 1mm after settling, comfortable, stable vertical laser mark

Comments: The patient commented on an immediate reduction in distortion compared to spectacle corrected vision. There was also a significant masking of the refractive astigmatism with Rose K2 Soft in situ.

Final lens: 8.20 : 14.80 : plano / -3.00 x 130, visual acuity 0.10LogMAR

Summary

Patient J presented with poor tolerance of spectacles due to anisometropia and complaining of visual difficulties especially at night, as well as a recent increase in frontal headaches. ROSE K2 Soft was fitted successfully to the left eye. In two weeks there has been complete resolution of his headaches and his night vision is much improved.

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