

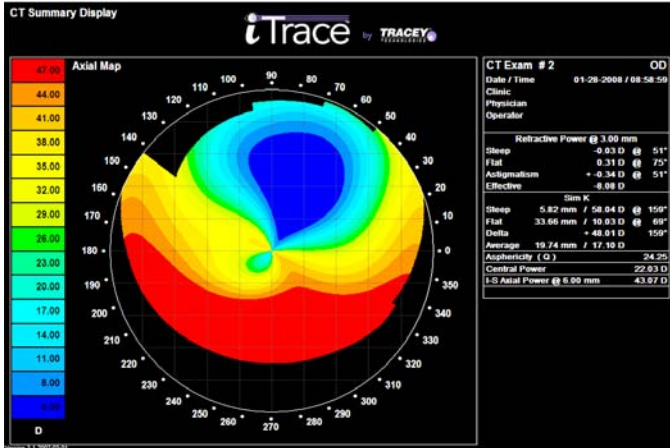
# CASE STUDY: Severe Post RK Ectasia

This case study illustrates how Global Refractive Solutions™ Biometric Scleral Lenses addressed a specific patient's vision problems following RK surgery.

This patient had bilateral RK surgery approximately 15 years ago.

- Experienced slow progressive hyperopia and severe astigmatism
- Visual acuity with best spectacle correction: 20/200 OD and 20/400 OS

## Topography OD



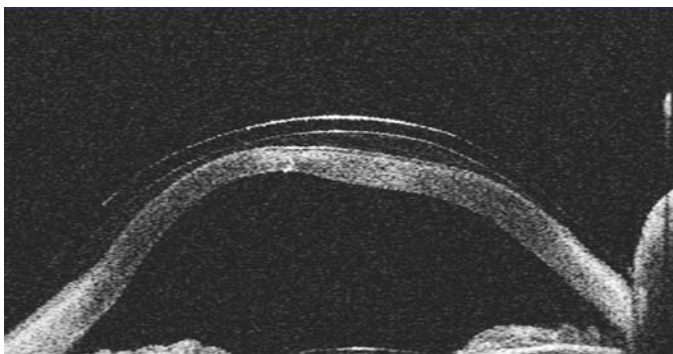
The large areas of corneal steepening inferiorly and flattening superiorly are dramatically seen in this topography of the right eye. The left eye is similar.

## Retinal Spot Diagram OD



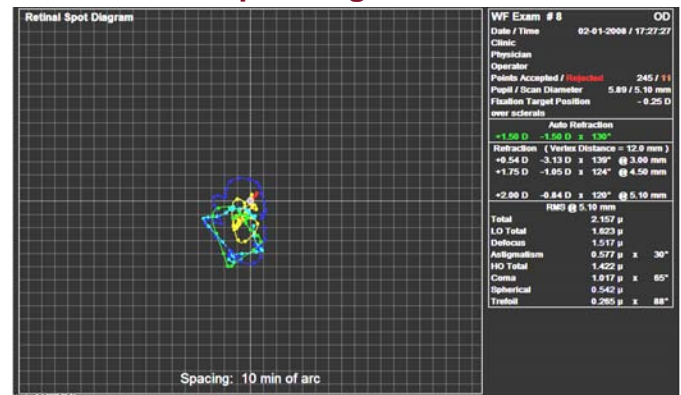
The highly linear retinal light scatter indicates a severe amount of astigmatism of more than 10 diopters. Total higher order aberrations (HO Total) is 1.911 microns, a very high number.

## From 20/200 to 20/30 with Biometric Lens



The finished lens can be seen on the eye in this scan. This lens improved the patient's visual acuity to 20/30. From this point forward, the patient was able to drive an automobile.

## Retinal Spot Diagram with Lens



Total higher order aberrations were reduced only modestly, but the severe astigmatism was reduced dramatically. Work is continuing on reducing the aberrations further using wavefront optics.

## Global Refractive Solutions

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