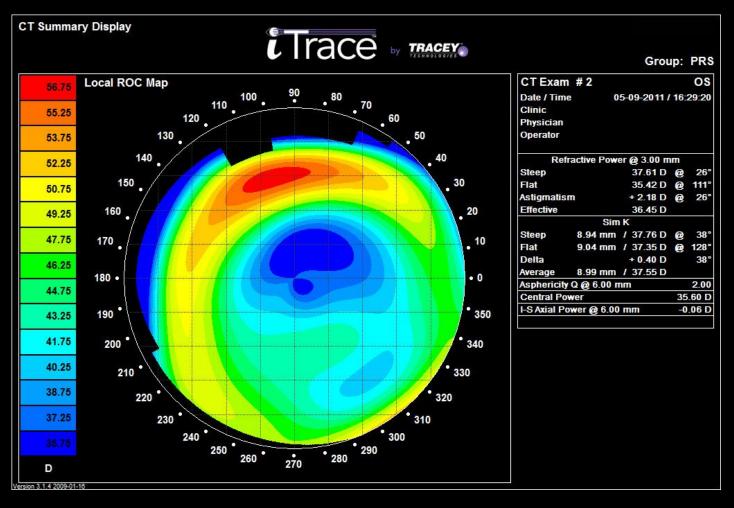
ANATOMY OF AN EYE WITH SUPRA-VISION (20/8)

Background

A 22 year/old female with very large pupils underwent bilateral LASIK with disastrous visual consequences in terms of higher order aberrations. The left eye subsequently developed diffuse lamellar keratitis, which created a very high amount of hyperopic astigmatism. Her unaided visual acuity in the left eye was 20/200. Spectacles were not very helpful. At the time I saw her, she was wearing a rigid gas-permeable semi-scleral lens in the left eye, with a visual acuity of 20/30. Aberrations were still unacceptably high even with the lens.

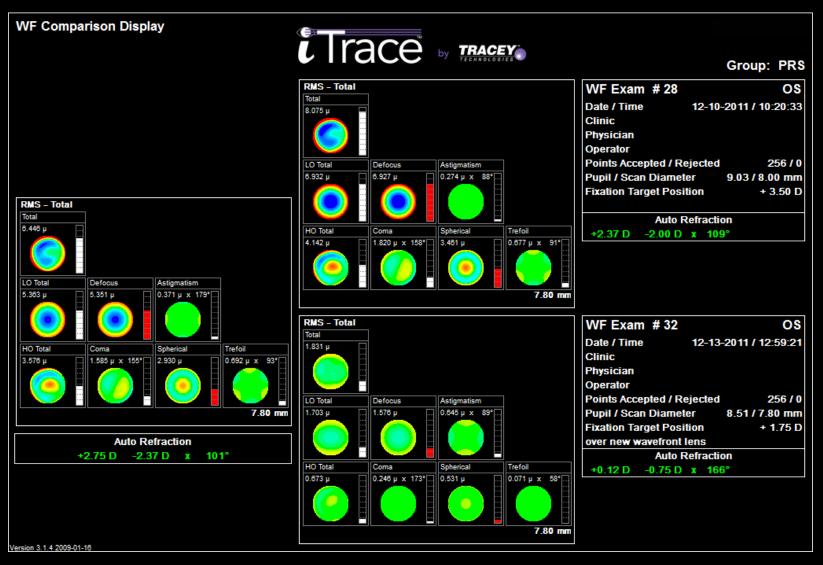
OS Corneal Topography

Note gradations in 1.50 D increments



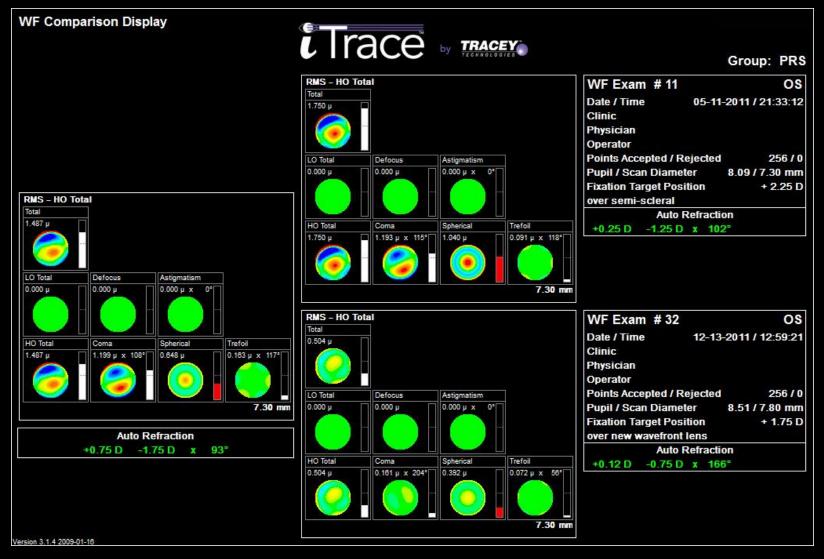
[©] Greg Gemoules, O.D.

Comparison of unaided OS with wavefront guided lens = 84% improvement in HOA total RMS and VA of 20/8



[©] Greg Gemoules, O.D.

Comparison of spherical semi-scleral lens to wavefront guided Laserfit lens = 71% improvement in HOA total RMS + gain of 4.5 lines of Snellen visual acuity (20/30 to 20/8)



Epilogue

This patient had extremely large pupils and should never have had LASIK. Happily, she achieved total resolution of all symptoms with custom wavefront Laserfit wavefront guided mini-scleral type lenses. She no longer sees halos or starbursts at night, except when her allergies are active. There is only one moon instead of multiple moons. She also experiences supra-normal visual acuity and can detect a person's iris color at approximately 20 feet.