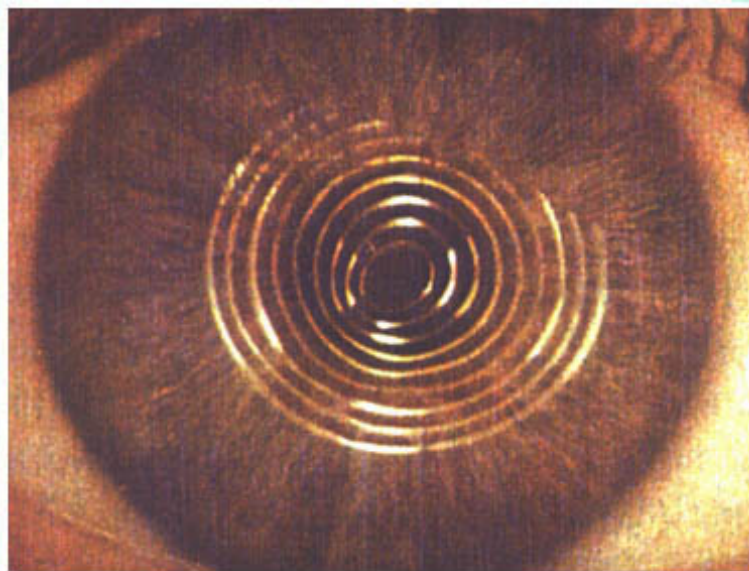


(Fig. 1) Patient J.F.: Severe Distortion



(Fig. 2) Patient J.F.: Distortion Improved.

Studies of Two Exceptional Keratoconus Cases

by Jeffrey Eger, O.D., F.I.O.S.

CASE 1: "Nipple" Keratoconus

Patient: J.F.

A 15-year-old male, was referred to us by a corporate optometrist, for contact refit and keratoconus rehabilitation. There was a good 3-point fit with dense central stippling and 3-9 staining. The only complaint was that the patient could not see well when he was bowling. After his new refit, this patient went on to become the #1 in the state for 15-18 year olds.

Original readings:

K Readings: 52.00 + distortion

Visual Acuity with Contacts: 20/40

Observation: - The contact lens specifications were not obtained. The subjective refraction could not be obtained because of distortion and dense corneal staining.

New Contact Lens Readings:

Lens Type: Formcon
Base Curve: 7.00
Power: -7.25

Diameter: 9.2
Center Thickness: .12
Optical Zone: 6.5
Blend: 10.50 heavy
Peripheral Curve: 12.25/4

Observation: - Every time the cornea changed, a new lens with a diameter reduction of .1mm, peripheral curve reentered, heavy blended and re-edged.

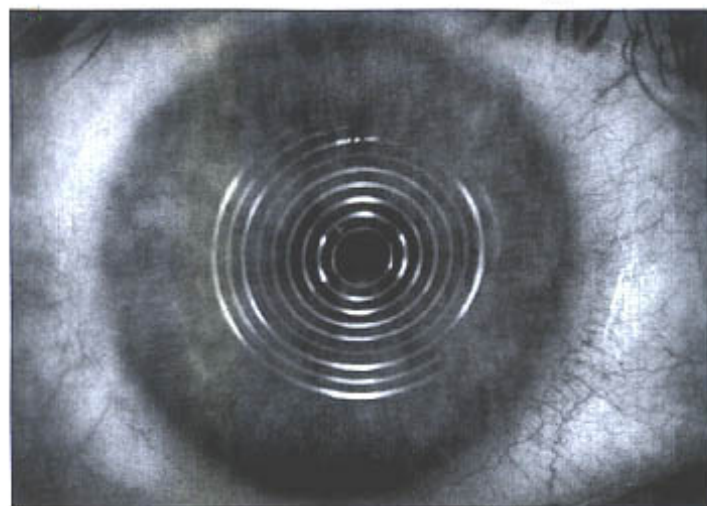
Final Lens Readings:

Lens Type: Boston Equalens
Base Curve: 6.00
Power: -15.25

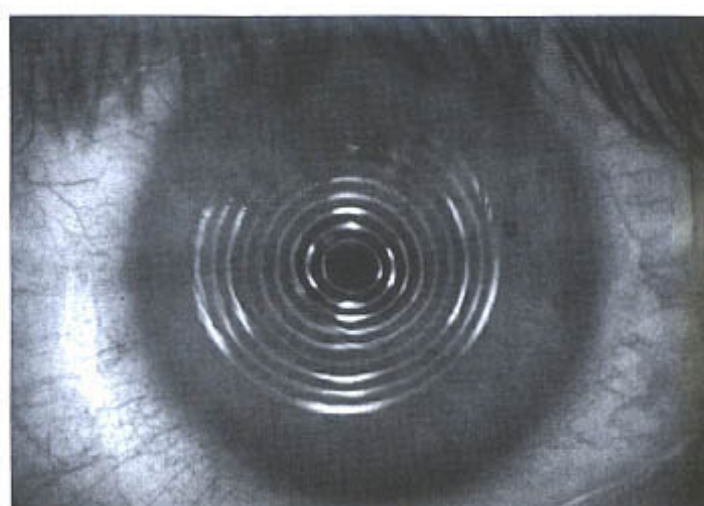
Diameter: 8.4
Center Thickness: .12
Asphericity: 1.20
Blend: 10.50 Heavy
Peripheral Curve: 11.00/2

K Readings: To high to record

Visual Acuity with Contacts: 20/20-2

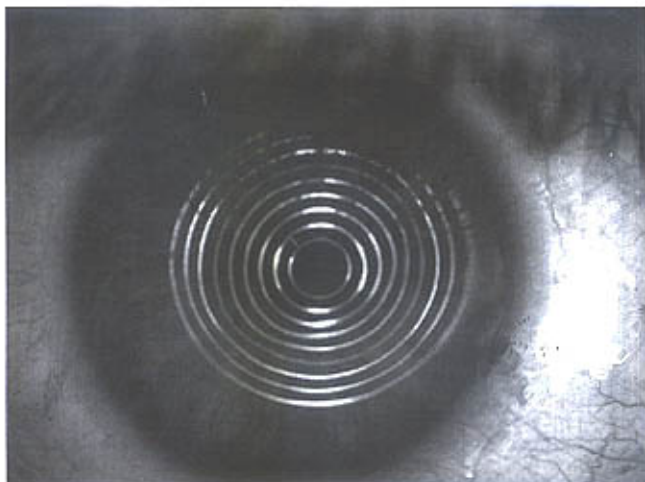


(Fig. 3) Patient J.R.: Initial O.D.

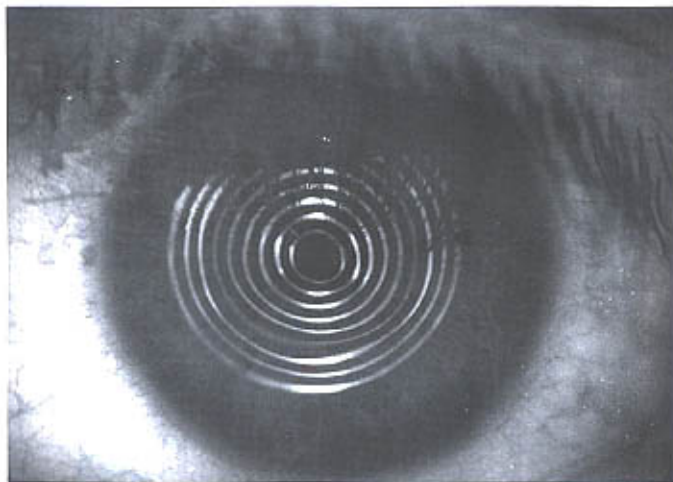


(Fig. 4) Patient J.R.: Initial O.S.

Note: This patient bowled a perfect 300 game shortly after this refit and got a bowling scholarship. His aided and unaided sight improved dramatically as well as comfort wearing his lenses all day. This proves you can't hit what you can't see. Champions See The Big Picture



(Fig. 5) Patient J.R.: After treatment O.D.



(Fig. 6) Patient J.R.: After treatment O.S.

Subjective: -6.50 -0.75 x 50 20/200 Visual acuity with glasses and prescription

Biomicroscopy: Very light central stippling O.D.: +25 -1.25 x 180 20/20-2
O.S.: -1.00 -1.75 x 165 20/30-2

CASE 2: Keratoconus

Patient: J.R.

A 41-year-old male who wore glasses but could not see well was diagnosed with keratoconus. He attempted to use soft toric lenses and quit because of poor sight. J.R. was not referred to us. In fact, he was a walk-in, after spotting our yellow pages advertisement.

Original Exam:

Corneal Readings:

O.D. 45.50 x 47.00 distorted
O.S. 47.50 x 51.00 distorted

Observation: - We refit J.R. with Aspheric 18 lenses by Contex, Inc. (Sherman Oaks, California), but after three months and five different base curves, we were not satisfied with the results of centering and corneal rehabilitation.

We refit J.R. with K-10 Aspheric lenses, again by Contex, Inc. It was my opinion that Aspheric 18 lenses are better suited for "nipple" cones (6-9 rings inside pupil) or very advanced cones with scarring.

For early keratoconus and manageable keratoconus the K-10 design is very effective. Notice the improvement in aided and unaided visual acuity. (Figs. 5 & 6)

The center ring is more circular and the patient can see sharper than in the past. He likes the idea of taking off his contacts for dinner and seeing about as well as with his contacts. His golf handicap has

improved from a +15 to an +8 which he credits to his improved sight and seeing the big picture.

Last Exam: 10-14-94

Corneal Readings:

O.D.: 44.00 x 44.75 Slight Distortion
O.S.: 45.25 x 48.50

Spectacle Reading +B.V.A.

O.D.: +50 -0.50 x 180 20/20
O.S.: -0.75 -0.50 x 170 20/25

Unaided Visual Acuity:

O.D.: 20/20
O.S.: 20/25

Aided Visual Acuity with Contacts

O.D.: 20/20
O.S.: 20/25+2

Contact Lens Fit:

	O.D.	O.S.
Base Curve:	7.85	7.80
O.A.D.:	10.0	9.8
Power:	+1.25	-0.25

K-10 Airperm supplied by:
Contex, Inc. ☐

Dr. Eger was featured in the June 1995 issue of Contacto, with his article, "Corneal Rehabilitation on Abnormally Shaped Corneas Including Keratoconus."

About the Author: Jeffrey J. Eger, O.D., F.I.O.S.



Dr. Eger is a 1975 graduate of Southern College of Optometry and is an independent practitioner in Tempe, Arizona. He was named Outstanding Young Man of Tempe in 1982 and is past president of the Tempe Jaycees. He is a Board Member of the Tempe Lions Club and is the personal O.D. of PGA golfer Phil Mickelson; official O.D. of the Arizona St. University Golf Team. Dr. Eger has been a member of the International Orthokeratology Section since 1984. His article, "Corneal Rehabilitation using Corneal Topography," was published in the July 1990 issue of Contact Lens Forum.