



Keratoconus: How PROSE Treatment Can Help

Keratoconus and Ectasia in Perspective

Corneal ectasia is an umbrella term for a group of conditions that cause a progressive thinning and distortion of the corneal shape. According to the National Eye Institute, approximately one out of every 2,000 people in the United States develops keratoconus, the most common corneal ectasia, in which the cornea bulges outward, forming a cone shape.





This abnormal curvature changes the cornea's refractive power, producing moderate to severe distortion (astigmatism) and blurriness (nearsightedness) of vision. Corneal ectasia may also cause swelling, sight-impairing scarring of the tissue, light sensitivity and pain.

For some people with this condition, glasses or contact lenses will adequately and comfortably correct vision. Others struggle for years searching for contact lenses that fit well as their eyes continue to change. And, for 10-20%, the disease progresses to the point that surgery, including cornea transplants or Intacs, is considered.

Currently, there is no cure for keratoconus — **but there is a better treatment option.**

HELP FOR CORNEAL ECTASIA

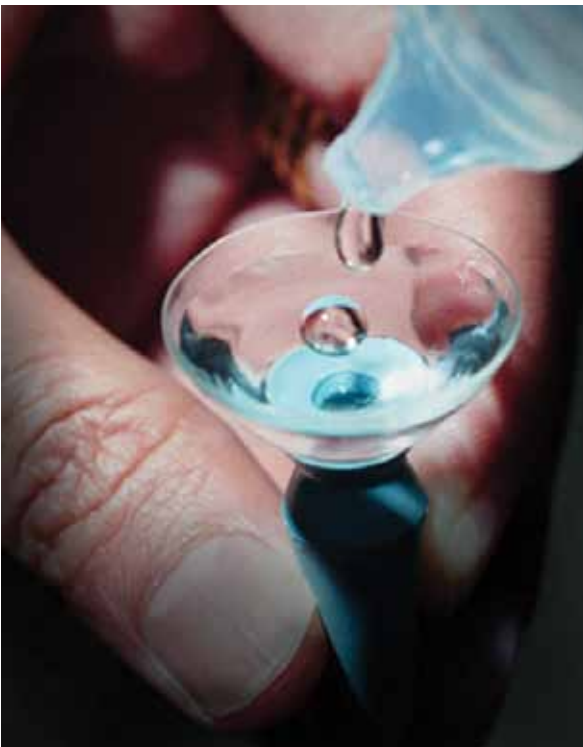
“Thanks to PROSE, I was able to put off corneal transplant surgery, which at age 41... was a true blessing from God.”

— **Keratoconus patient**

Hundreds of patients with keratoconus and corneal ectasia - just like you - have had their vision restored and quality of life transformed with our innovative treatment: prosthetic replacement of the ocular surface ecosystem (PROSE). Pioneered by Boston Foundation for Sight and also available at fifteen top-ranked medical centers across the globe, PROSE uses FDA-approved custom made prosthetic devices to replace or support impaired ocular surface system functions that protect and enable vision.

PROSE treatment can improve vision and alleviate symptoms in patients with corneal ectasia caused by a number of conditions, including:

- Keratoconus
- Keratoglobus
- Pellucid marginal degeneration
- Terrien's marginal degeneration
- Post-LASIK, post-RK, post-PRK
- Post-cornea transplant

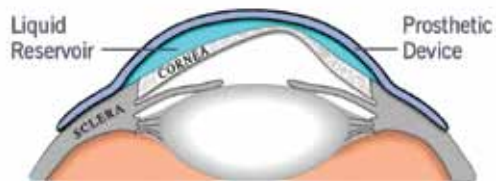




PROSE TREATMENT

The prosthetic devices created during PROSE are transparent domes, about the size of a nickel, made of gas-permeable plastic that allows oxygen to reach the ocular surface.

Devices fit under the eyelids and rest on the sclera (the relatively insensitive white tissue of the eye), vaulting the damaged cornea and creating a new smooth optical surface that protects the eye from the environment and blink trauma. The devices are filled with saline at the time of insertion, creating a reservoir of fluid that continuously bathes the eye in oxygenated artificial tears while being worn during waking hours.



BENEFITS OF PROSE

- Reestablishes a healthy and stable ocular surface environment that supports healing and reduces symptoms
- Improves blurry vision by masking surface corneal irregularities and transmitting a sharp image to the back of the eye
- Prevents further damage by protecting and shielding the cornea against the environment and eyelids

PROSE treatment “yielded significant increase in visual function...with high tolerance (wearing failure 8%) at 6 months. 93.1% of eyes achieved visual acuity of 20/40 or better.”

— **Poster Presentation, World Cornea Congress VI, April 2010**

KERATOCONUS SYMPTOMS

In 2010, Boston Foundation for Sight conducted an online survey of more than 1,000 people with corneal disease. For the 201 survey respondents diagnosed with keratoconus, keratoglobus or pellucid marginal degeneration, including 121 PROSE patients:

- 78% had moderate or severe difficulty driving at night
- 77% had difficulty reading regular print newspapers, magazines or websites
- 73% had difficulty with work or hobbies that require seeing up close
- 69% had light sensitivity
- 59% had eye pain or discomfort

TREATMENT SUCCESS

We also asked respondents about their success with a variety of treatments. Here is what they had to say about the five most common:

- 1% had significant success with soft contact lenses
- 7% with hybrid contact lenses
- 22% with rigid gas-permeable contact lenses
- 45% with scleral lenses

86% had significant success with PROSE





Restoring Sight — Reclaiming Lives

Boston Foundation for Sight is an internationally renowned nonprofit eye healthcare organization with a mission to improve the quality of life for patients and their families by transforming the understanding, treatment and care of complex corneal disease. Since our founding in 1992, we have restored vision to thousands of patients.

We enjoy partnerships with the acclaimed Massachusetts Eye and Ear and New England College of Optometry; each year Cornea Fellows and Optometry Residents come to BFS to be educated in the latest treatments for corneal disease, and join our medical staff in clinical research on cutting-edge tools in the fight against insidious diseases of the ocular surface system.

PATIENT SERVICES AND AMENITIES

Compassionate care is at the heart of our approach to patients and their families. We strive to make the entire treatment experience as supportive and healing as possible.

Our 13,000 square foot facility includes a state-of-the-art manufacturing lab, a Medical Institute with 13 exam and training rooms, and a Clinical Research Center. Our Patient and Community Support Center resources include facilitated one-to-one and group conversations; community networking, outreach and educational events; and our Connected Visions blog, PROSE Eye View e-bulletin, and Facebook community.

Visit www.bostonsight.org to learn more.



Complimentary breakfast and lunch are served in our community kitchen. Throughout the day between appointments, patients can be found relaxing in our low-light quiet room, catching up with work or family via wireless internet in our lounge, or watching a DVD and playing games in our media room. The BFS apartment, a short walk from our facility, is available to out-of-town patients for a small fee. We coordinate a private car service, and onsite parking is ample and free.

CALL US TODAY FOR A CONSULTATION!

Contact our New Patient Affairs department today at 781-726-7501 to learn more or set up a medical consultation.

FOR PHYSICIAN REFERRALS

For new patient referrals or inquiries from medical professionals please call our Physician Referral Hotline at 781-726-6033.

Fill out our Physician Referral Form online at www.bostonsight.org/doctors and fax it along with your last note to 781-726-7311.





Meet Our Doctors



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PROSE Providers

ALKEK EYE CENTER
Baylor College of Medicine, Houston, TX

BROOKE ARMY MEDICAL CENTER
San Antonio, TX

DOHENY EYE INSTITUTE
University of Southern California, Los Angeles, CA

ILLINOIS EYE AND EAR INFIRMARY
University of Illinois College of Medicine, Chicago, IL

KELLOGG EYE CENTER
University of Michigan, Ann Arbor, MI

MASSACHUSETTS EYE AND EAR
Boston, MA

NORTH SHORE — LIJ HEALTH SYSTEM
Great Neck, NY

PROCTOR FOUNDATION
at University of California, San Francisco, CA

WEILL CORNELL EYE ASSOCIATES
Weill Cornell Medical College, New York, NY

WILMER EYE INSTITUTE
at Johns Hopkins, Baltimore, MD

Each PROSE provider is independently operated, managing its' own scheduling and insurance and provides ongoing care.

www.bostonsight.org/providers for the most current list, including PROSE clinics in India, Iran and Japan.