BOSTON FOUNDATION *for* SIGHT

BostonSight® PROSE Treatment Information for Patients and Doctors

"**PRIOR TO GETTING MY** PROSE devices, life was hard. Everything that I loved to do was slipping away...That all changed the day I got PROSE."

— **PROSE patient**



BostonSight PROSE Treatment

PROSE (prosthetic replacement of the ocular surface ecosystem) is a treatment pioneered by Boston Foundation for Sight that restores vision, supports healing, reduces symptoms and improves quality of life for patients suffering with complex corneal disease. BostonSight® PROSE uses FDA approved (1994) custom designed and fabricated prosthetic devices to replace or support impaired ocular surface system functions.

BostonSight PROSE treatment is available at top-ranked academic medical centers and clinics across the U.S.

Benefits

BostonSight® PROSE can:

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

For many of the thousands of patients suffering with complex corneal disease, PROSE may be the ideal, and sometimes only, treatment capable of restoring vision and dramatically reducing eye pain and light sensitivity.



Indications

Ocular Surface Disease

DRY EYE SYNDROME / K SICCA
- Ocular chronic GVHD
- Sjögren's syndrome
- History of refractive surgery (LASIK/ PKP)
- Rheumatoid arthritis
- Post-radiation

LIMBAL STEM CELL DEFICIENCY
- Stevens Johnson syndrome
- Aniridia
- Ocular cicatricial pemphigoid
- Chemical / thermal injury
- Persistent epithelial defect (PED)

EPIDERMAL OCULAR DISORDERS
- Goldenhar syndrome
- Ectodermal dysplasia
- Atopy
- Epidermolysis bullosa

NEUROTROPHIC KERATITIS
- Herpes zoster (shingles)
- Herpes simplex (ocular herpes)
- Familial dysautonomia
- Moebius syndrome
- Trigeminal nerve dysfunction
- Post-surgical
- Trigeminal Ganglionectomy

CORNEAL EXPOSURE/ LAGOPHTHALMOS
- Anatomic
- Paralytic
  – Acoustic neuroma

Corneal Ectasia / Irregular Astigmatism

CORNEAL DEGENERATIONS
- Keratoconus
- Keratoglobus
- Pellucid marginal degeneration
- Terrien's marginal degeneration
- Salzmann's nodular degeneration
- Elhers-Danlos syndrome

CORNEAL DYSTROPHIES
- Cogan's dystrophy (map–dot–fingerprint)
- Bowman's dystrophy (Reis–Bucklers)
- Granular corneal dystrophy
- Lattice corneal dystrophy
- Meesmann's corneal dystrophy

POST OPERATIVE ASTIGMATISM
- Cornea transplant (PK, PKP)
- Radial keratotomy (RK)
- Photorefractive keratectomy (PRK)
- Phototherapeutic keratectomy (PTK)
- Epikeratophakia
- LASIK
- Open globe injury

CORNEAL SCARRING
- After trauma
- After infection



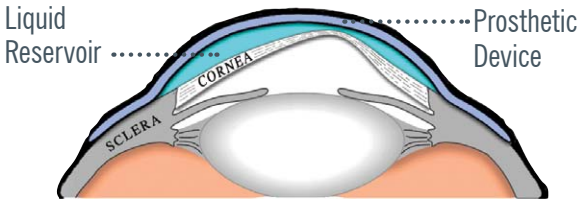
© Copyright 2014 - All rights reserved.

PROSTHETIC DEVICES USED IN PROSE

The prosthetic devices used in BostonSight® PROSE treatment are transparent domes, about the size of a nickel, made of gas-permeable plastic that allows oxygen to reach the ocular surface. PROSE 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 removable prosthetic devices are filled with saline at the time of application, creating a reservoir of fluid that continuously bathes the eye in oxygenated artificial tears.

PROSE creates:

- A new transparent, smooth optical surface over the irregular, damaged or diseased cornea
- An expanded artificial tear reservoir that provides constant lubrication while maintaining necessary oxygen supply



TREATMENT PROCESS

PROSE treatment teams include cornea specialist ophthalmologists and optometrists who have completed an intensive BostonSight® PROSE Clinical Fellowship.

Clinical Fellows use a proprietary DTF™ CAD/CAM system to customize each prosthetic device to precisely fit the patient's unique eye shape and maximize ocular surface system function. All PROSE devices are manufactured at Boston Foundation for Sight's state-of-the-art lab.

TREATMENT STEPS

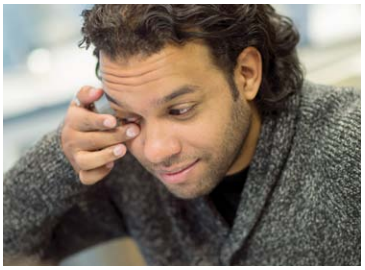
- Referral from primary eye care provider, medical doctor or cornea specialist
- Initial medical review by PROSE doctors
- 2 to 3 hour medical consultation
- Insurance coverage determination and potential eligibility for financial assistance (2 to 6 weeks)
- PROSE treatment (4 to 12 day-long visits)
- Periodic follow up visits as required
- Annual evaluation by the PROSE team

PROSE doctors work with each patient, his/her support system and other medical providers to understand their specific needs and reach treatment goals together.

Patients continue to be followed by their primary eye care provider during and after treatment; ongoing care is managed with their primary provider and PROSE treatment team.

INSURANCE COVERAGE

Many major insurance carriers cover BostonSight® PROSE treatment and services. Financial assistance may be available for those who qualify. Check with your local PROSE Provider.





© Copyright 2014 - All rights reserved.

Symptoms and Treatment Success

A Boston Foundation for Sight report based on a survey of over 1,000 people with corneal disease, including 378 BostonSight® PROSE patients, found that:

- 80% had moderate or severe eye pain
- 72% had light sensitivity
- 72% had difficulty driving at night
- 69% had difficulty reading regular print newspapers, magazines or websites
- 65% had difficulty with work or hobbies that require seeing up close

The survey also asked respondents about their success with a variety of treatments. Of the most common:

- 5% had significant success with oral antibiotics, fish oil or flaxseed oil
- 6% with punctal plugs
- 6% with topical immunosuppressant medications (cyclosporine / Restasis)
- 10% with artificial tears, lubricant gel or lubricant ointment
- 10% with topical steroids

80% had significant success with BostonSight® PROSE

95% had moderate or significant success

Peer-Reviewed Research

BostonSight® PROSE treatment:

"...significantly improved visual acuity and visual functioning in patients with corneal ectasia, irregular astigmatism and ocular surface disease..."

— **American Journal of Ophthalmology 2010; 149: 54-61**

"...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**

BostonSight PROSE Providers have published more than 25 peer-reviewed publications and 50 papers and presentations on PROSE treatment. Visit www.bostonsight.org/research.



© Copyright 2014 - All rights reserved.

About Boston Foundation for Sight

Boston Foundation for Sight is a world renowned nonprofit eye health care 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.

The Needham, MA Center of Excellence includes a Medical Institute, a BostonSight® PROSE Device Manufacturing Lab, a Clinical Research Center and a Patient & Community Support Center.



Through educational partnerships with the acclaimed Massachusetts Eye and Ear and New England College of Optometry, Cornea Fellows and Optometry Residents are educated in the latest treatments and join doctors in cutting edge clinical research.

Clinical collaborations with top-ranked academic medical centers continue to expand access to BostonSight PROSE treatment, restoring sight to thousands of patients worldwide.

www.bostonsight.org

Compassionate Care

Compassionate care is at the heart of our approach to patients and their families. From welcoming caregivers into the treatment process to providing group training opportunities that allow patients to learn from one another, we strive to make the entire experience as supportive and healing as possible.

Our community kitchen offers complimentary breakfast, lunch and snacks. Throughout the day between appointments, patients can be found relaxing in the 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.



© Copyright 2014 - All rights reserved.

Meet Our Doctors



Deborah S. Jacobs, MD
MEDICAL DIRECTOR



Amy Parminder, MD



Karen G. Carrasquillo
OD, PHD, FAAO
DIRECTOR OF CLINICAL CARE



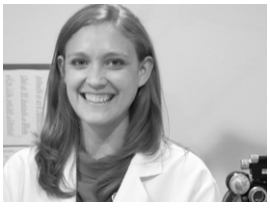
Rutvi Doshi, OD, FAAO



Alan Kwok, OD, FAAO



Chirag Patel, OD, FAAO



Crystal D. Remington
OD, FAAO

Schedule a Consultation

CALL US TODAY FOR A CONSULTATION!

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

INSURANCE COVERAGE

In 2011, almost 80% of our patients were covered by insurance and/or financial assistance. Our staff works with each patient and his/her health insurance provider to obtain prior authorizations when necessary and are happy to help with financial assistance applications.

FOR PHYSICIAN REFERRALS

For new patient referrals or inquiries from medical professionals, please call our Physician Referral Hotline at 781-726-7501 or email doctorinquiries@bostonsight.org.

You can also complete our Physician Referral Form online at www.bostonsight.org/doctors and fax it along with your last note to 781-726-7311; or email the form and your note to doctorinquiries@bostonsight.org.

Boston Foundation for Sight
464 Hillside Avenue | Suite 205
Needham, MA 02494
781-726-7337
www.bostonsight.org

© Copyright 2014 - All rights reserved.

BostonSight® Network

ALKEK EYE CENTER
Baylor College of Medicine, Houston, TX

BASCOM PALMER EYE INSTITUTE
University of Miami, Plantation, FL

BOSTON FOUNDATION FOR SIGHT
Needham, MA

BROOKE ARMY MEDICAL CENTER
San Antonio, TX

FLAUM EYE INSTITUTE
University of Rochester, Rochester, NY

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

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

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

WILMER EYE INSTITUTE
at Johns Hopkins, Baltimore, MD

The BostonSight Network is always expanding.
Visit www.bostonsight.org/providers.

Community Resources

PROSE Eye View e-bulletin
WWW.BOSTONSIGHT.ORG/EBULLETIN

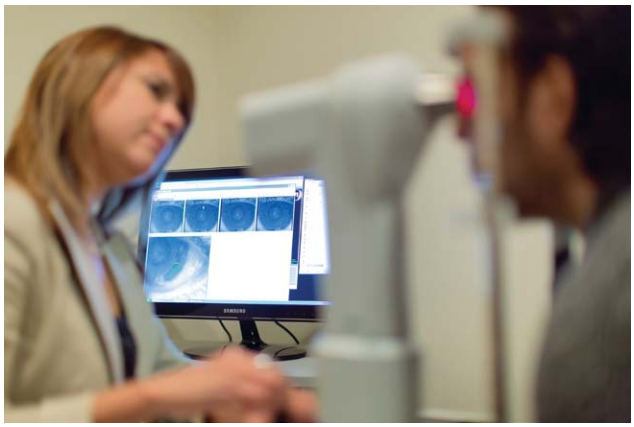
Financial, travel and lodging resources
WWW.BOSTONSIGHT.ORG/PATIENT-RESOURCES

Patient support organizations
WWW.BOSTONSIGHT.ORG/SUPPORT-ORGS

Connected Visions blog
BLOG.BOSTONSIGHT.ORG

Facebook
WWW.FACEBOOK.COM/BOSTONSIGHT

YouTube
WWW.YOUTUBE.COM/BOSTONSIGHT



© Copyright 2014 - All rights reserved.

Directions



Boston Foundation for Sight
464 Hillside Ave.
Suite 205
Needham, MA
781-726-7337

Our facility is eight miles west of Boston and easily accessible by car or public transportation.

Access online at www.bostonsight.org/directions.

By car: From the east or west (including Logan Airport): take Route I-90 West (Massachusetts Turnpike) to Route 95/128 South and then follow north/south direction below.

From the north or south: take Route 95/128 to exit 19B – Highland Ave., Needham. Follow Highland Ave. for 1.0 miles. Turn right at the traffic light onto West St. Drive across the railroad tracks and take a left onto Hillside Ave. #464 is a two-story brick building on your left.

By public transportation from Boston – MBTA:
Board an outbound Needham line commuter rail (purple) train at either South Station or Back Bay. Take the train to the last stop - Needham Heights. The cost is currently $6.25 each way.

Exit the train and walk to your right towards West St. Take a right on West St. towards Hillside Ave. Turn left on Hillside Ave. and walk to #464 on left. The total walking distance is 0.3 miles.

From Logan Airport, take Silver Line Bus #S1 to South Station and follow directions above.

© Copyright 2014 - All rights reserved.