

# **BRAVERMAN EYE CENTER CORNEAL CROSS-LINKING INFORMED CONSENT**

## **Corneal cross-linking**

The cornea is the clear, outer layer of your eye. The middle or stromal layer is the thickest part of the cornea. It has mostly water and a protein called collagen. Collagen makes the cornea strong and flexible. It also helps the cornea keep its round, regular shape. This healthy cornea focuses light so you can see clearly.

Some diseases change the middle layer of the cornea. The cornea gets thinner and weaker. This thin cornea bulges into an irregular, cone shape. Your vision may be blurry, and your eyes may be bothered by bright lights. The cornea disease may get worse over time. The medical name for this is corneal ectasia, and there are two types. One type is keratoconus. Older children, teenagers, and young adults may get this. The other type starts after eye surgery such as LASIK (post-refractive ectasia).

**Corneal cross-linking (CXL) can help make the middle layer stronger.** CXL is an eye treatment that may be done in your ophthalmologist's (eye surgeon's) office. There are 3 steps. 1) Your ophthalmologist will numb your eye with drops and then gently remove part of the outer layer of your cornea. 2) The ophthalmologist will put special vitamin eye drops (riboflavin) in your eye many times over 30 minutes or more. 3) The ophthalmologist will shine a special ultra-violet (UV) light on your eye for another 30 minutes and keep adding drops. The vitamin eye drops and UV light work together to make the collagen stronger. The cornea becomes stiffer and usually stops bulging out. The cornea continues to progressively get more stiff for a year or more.

The goal of CXL is to stop the cornea from getting thinner, weaker, and more irregular in shape. But CXL cannot make your cornea normal again. CXL may keep your vision from getting worse. Sometimes, your vision may even improve. But you may still need to wear glasses or contact lenses for near or far vision. Your eye may start getting weak again. If it does, you may need another CXL treatment or another type of cornea surgery.

There are other ways to treat your weak cornea. Your ophthalmologist will talk to you about which treatment would work best for you. 1) You may be able to wear glasses and special contact lenses to see better. But they do not treat or stop your eye problem. So if the cornea keeps getting thinner and weaker, glasses or contact lenses may not be enough. 2) Your ophthalmologist could put a small, clear plastic insert inside your cornea (corneal ring segments). 3) Some people may need corneal transplant surgery.

**There are risks (problems) that can happen with CXL.** Here are some of the most common or serious:

- Pain. You will probably have pain and be sensitive to light for a few days. You will get prescriptions for medication to help with the pain.
- Infection. You could get an eye infection from the surgery. The infection might cause your cornea to scar and make your vision worse. You will get a prescription for eye drops to help prevent an infection. If you had an eye infection called HSV (herpes simplex virus) in the past, it could come back.
- Vision problems. Your vision will be poor for a few days or weeks. This poor vision may last longer if you have an infection or your eye does not heal well. Your vision may stay this way.
- Changes to your cornea. Your cornea might not heal well, or it might take a long time to heal. It could become cloudy instead of clear (corneal scarring).
- Your cornea may keep changing shape for many months. You may need to get new glasses or contact lenses while the shape is changing, and again after the shape stops changing.
- CXL may not help. You may need more than one CXL treatment. Your cornea could get weak and thin again, or more irregular. If it does, you may need another CXL treatment or another type of cornea surgery.

**Consent:** By signing below, you consent (agree) that:

- You read this consent form, or someone read it to you.
- You understand the information in this consent form.
- The ophthalmologist or staff offered you a copy of this consent form.
- The ophthalmologist or staff answered your questions about CXL.
- You agree to have CXL on \_\_\_\_\_ (choose one: the right eye, the left eye, both eyes).

\_\_\_\_\_  
Patient (or person authorized to sign for patient)

\_\_\_\_\_  
Date

8/17/2016