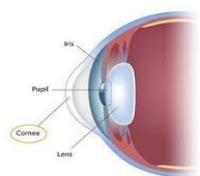


## Background:



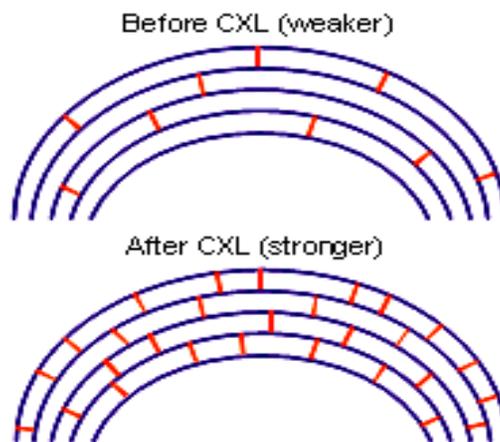
The cornea is the transparent front part of the eye and can become warped in diseases like Keratoconus, Pellucid and post-

LASIK Ectasia.

Corneal collagen cross-linking is a non-invasive treatment for keratoconus. CXL involves applying a **photosensitizing** solution. This solution consists of **Riboflavin** (vitamin B12).

After the application of the Riboflavin, the cornea is then exposed to a low dose of **ultraviolet light**. The riboflavin reacts with the ultraviolet light to create new **collagen bonds (cross-links)** throughout the cornea.

Structural integrity is the ability of something to hold together under a load, including its own weight, without deforming excessively.



In corneas with **Keratoconus** there are too few **collagen bonds** to maintain **structural integrity** (See "Before CXL" above). This causes the cone-like shape that the cornea assumes.

The weakened bonds lead to corneal bulging, steepening, and irregularity—all of which significantly affect vision.

By creating new collagen bonds, CXL strengthens and adds resilience to corneas weakened by keratoconus (See "After CXL" above).

## When is CXL needed?

- 1) In cases of Keratoconus- A condition in which the clear tissue on the front of the eye (cornea) bulges outward.
- 2) In rare cases, after refractive surgery such as LASIK, or other laser vision correction.
- 3) Some severe corneal infections may benefit from CXL.
- 4) Change in refraction (eye-glass prescription) including high astigmatism.
- 5) Corneal shape changes in topography.

## Follow-Up Care:

After the procedure, you will have to return for three post-operative appointments:

1-week follow-up

6-month follow-up

1-year follow-up

*Please note, certain cases may require additional appointments.*

## FAQ's:

### How is the treatment done?

CXL is a safe procedure performed in a treatment room under topical anesthesia. Riboflavin drops, and ultraviolet light are applied for a period of 30 minutes. Some techniques allow us to treat both eyes the same day.

### When will I notice change in my vision?

Within 1-2 days, vision returns to preoperative levels and you can wear contact lenses again. The most dramatic improvement tends to occur during the first 3 months and then, gradually, over a period of a year, the cornea continues to stiffen and stabilize.

### Is CXL covered by insurance?

Since the treatment was recently approved by the FDA in 2016, most insurance companies are not yet covering the cost at this time. However, the treatment is eligible under Health Savings Accounts and we offer interest-free financing through Care Credit.



## Mid-Atlantic Cornea Consultants

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### Locations:

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## Corneal Cross-Linking

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