

Corneal Re-shaping

What is Corneal Re-shaping?

Corneal re-shaping uses specifically designed vision retainers to gently and gradually reshape the front surface of the eye (the cornea) to eliminate or reduce nearsightedness (myopia) or astigmatism. The principal is similar to the use of a dental retainer used by an orthodontist to realign crooked teeth. The vision retainers are similar to contact lenses and are only worn at night while sleeping. They are then removed upon awakening to provide clear vision without using glasses or contact lenses! The retainers are comfortable and very easy to care for.

Why think about corneal re-shaping? Why not just wear glasses or contact lenses?

The main purpose of corneal re-shaping is to be free from both glasses and contact lenses during waking hours. While this is ideal for sports enthusiasts or those who work in dusty or dirty environments, for others corneal re-shaping offers the appeal of being free from corrective lenses during the day. Corneal re-shaping also offers relief from the problems sometimes associated with full time contact lens wear like drying or things getting on or under the lenses.

Does corneal re-shaping have any advantages over Laser Surgery?

There are several. Corneal reshaping is less than half the cost of Excimer Laser Surgery. It does not involve any postoperative pain. Also, the hazy post-operative vision that can be associated with laser surgery does not occur with corneal re-shaping. Both eyes can easily be done at the same time. Also, prescription changes are easy to deal with. There are no strong steroid or antibiotic drugs needed with corneal re-shaping as there are during the post-operative period for laser surgery. Lastly, and perhaps most importantly, corneal re-shaping is reversible. Laser surgery is not.

Is everyone suitable for corneal re-shaping and can any doctor perform it?

The answer to both questions is no. It does not work on every patient and needs to be performed in a very exact and meticulous manner. We have done special studies and have the necessary diagnostic equipment, computer software and expertise to perform corneal re-shaping.

The procedure works best on mild to moderate amounts of nearsightedness or astigmatism. More severe cases can have their vision improved, but will still need some vision correction. The procedure also does not work well on certain shaped corneas. Also, there are several unmeasurable factors for each patient, notably the cornea's rigidity. Thus, the speed of corneal re-shaping varies with each patient. Generally, but not always, less nearsighted patients respond faster than with more nearsighted ones. There are no age barriers for corneal re-shaping. It is safe for children and adults and is an excellent alternative for children who are just first becoming nearsighted as corneal re-shaping may help to prevent any further nearsightedness from occurring! Also, while success rates are very high, success cannot be guaranteed due to factors like the inability to wear the vision retainer for physiological reasons or other systemic health problems that may reduce wearing time.

What does the corneal re-shaping procedure involve?

A comprehensive eye health examination is performed first. Corneal topography is used to obtain a very precise computerized "map" of the cornea's shape. This information is placed into the computer software and a diagnostic retainer is fit in the office. If at that time it is determined that you are a good candidate for corneal re-shaping, your own vision retainers will be ordered. It takes about two weeks for the vision retainers to be made and delivered.

When you pick up your retainers, you will be instructed on how to use and care for them. If the retainer fits properly, you will wear them the first night. Your vision should be clear with the retainers on. We will see you the next morning. You should come into the office wearing your retainers. We will remove them for you. Of course, should you experience any problems while at home with your retainers, simply remove them.

Most of the visual changes occur rapidly over the first few days. As the cornea changes shape and vision improves, we will refit and reorder successive vision retainers (if needed). During this interim period, we will supply you with (no-charge) contact lenses to be worn during the day. These are usually only needed for the first few days.

The majority of patients achieve excellent vision in only a few days. Even after you are seeing well, we will continue to see you a while longer to ensure the cornea is adapting to the retainers. Most patients are done with their follow-up care in two months although some may take more or less time. When the treatment is completed, the last retainer will be worn on a nightly basis. Some patients are able to use the retainers every other night.

How much does corneal re-shaping cost?

The total fee for the corneal re-shaping program is \$1500.00. This includes all of the professional visits, retainer lenses needed to achieve optimal vision, and any needed interim soft contact lenses. Lost, broken or spare retainers are available at \$150.00 per lens. Payment is due on the day of your fitting.

What are the disadvantages of corneal re-shaping?

You must be prepared to allow 4-6 visits over a two month period. If you stop wearing the retainer lenses, your vision will return to its original state. While the degree of success is very high, it cannot be guaranteed. However, when the corneal topography and computer software indicate a patient will be successful, it is rare that patients don't do well with corneal re-shaping. Rates and amount of improvement vary from one person to the next.

I've never heard of corneal re-shaping. Is it new?

Attempts to re-shape the cornea have been tried since contact lenses were first fit. The process used to be called orthokeratology. This process would often take over a year to complete and the results were not nearly as favorable as corneal re-shaping. For this reason, many doctors and patients elected not to participate in orthokeratology. With the newer diagnostic technology used to measure the corneal shape and the newer materials being used for vision retainers, corneal re-shaping is now a viable alternative for many nearsighted or astigmatism patients.

CORNEAL RE-SHAPING AGREEMENT

We anticipate a period of active care of about two months. The actual time of treatment is based on your ability to adapt to your vision retaining contact lenses and the flexibility of your cornea. Missing appointments interferes with your progress and will prolong treatment time. Following the period of active corrective changes, vision retaining lenses will be worn to ensure stability.

Corneal re-shaping is charged as a total comprehensive fee. The fee is not dependent on the exact number of visits or vision retaining lenses used. Appointments will be made as often as necessary to accomplish our mutual goals of improving your vision. Lost, damaged or spare vision retaining lenses will be replaced for a charge of \$150.00 for each lens. It takes about two weeks to replace a retainer lens.

We will offer a discount on a spare pair of lenses if purchased before the last day of the sixth month of treatment. This discounted charge would be \$100.00 for each lens or \$200.00 for the pair.

If circumstances beyond your or our control prevent you from continuing the cornea re-shaping program within two weeks of dispensing your lenses, we will refund all but \$200.00 of the \$1,500.00 you have paid. The retained \$200.00 covers doctor time and initial materials.

I have read and understand the above and am in agreement with its' contents.

Patient signature

Date

Parent signature if patient is a minor