FAQ—Overnight Corneal Reshaping (OCR)

1. What is Overnight Corneal Reshaping?"

Overnight Corneal Reshaping uses specially designed vision retainers to gently and gradually reshape the front surface of the eye (the cornea) to eliminate or reduce nearsightedness (myopia) and/or astigmatism. The principle 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 lens care is very easy.

2. Why think about Overnight Corneal Reshaping? Why not just wear eyeglasses or contact lenses?

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

Additionally, ongoing research is showing that for most patients, the progression of nearsightedness can be significantly slowed down or even stopped by using OCR retainers. This makes it a great alternative for children, particularly those with nearsighted parents. Neither eyeglasses nor conventional contact lenses have been shown to have as strong a tendency towards controlling myopia as OCR.

3. Does OCR have any advantages over Laser Surgery?

There are several. OCR costs less than Refractive Laser Surgery (LASIK). It does not involve any post-operative pain. Also, the hazy post-operative vision that can be associated with laser surgery does not occur with OCR. Both eyes can easily be done at the same time with OCR. Also, prescription changes are easy to deal with using OCR. There are no strong steroid or antibiotic drugs needed with OCR as there are during the post-operative period for laser surgery. Lastly, and perhaps most importantly, OCR is reversible. Laser surgery is not.

4. Is everyone suitable for OCR 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 received special training and have the necessary diagnostic equipment, computer software and expertise to perform OCR.

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 incalculable factors for each patient - most notably the cornea’s rigidity. Thus, the speed of OCR varies with each patient. Generally, but not always, less nearsighted patients respond faster than more nearsighted ones.

There are no age barriers for OCR. It is safe for children and adults and is an excellent alternative for children who are just first becoming nearsighted, because as mentioned above, OCR can slow or in some cases prevent any further nearsightedness from occurring!

It also keeps parents in control, since the retainers are only worn overnight. It eliminates the concerns of parents over whether their child is actually keeping their eyeglasses on, or not properly caring for their contact lenses when the child is away from home. 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.

5. What does the OCR procedure involve?

A comprehensive eye health examination is performed first. Then, a corneal topographer is used to obtain a very precise computerized “map” of the cornea’s shape. This information is placed into the OCR 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 OCR, your own vision retainers will be ordered. It takes about one week for the retainers to be made and delivered.

When you pick up your retainers, you will be instructed on how to use and care for them. The maintenance is very easy and involves only one bottle of solution. If the retainers fit properly, you will wear them that first night. Your vision should be clear with the retainers on.

We will see you the next morning. You should come to the office wearing your vision 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 supply you with any needed contact lenses to be worn during these 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 your cornea is adapting to the retainers. Most patients are done with their follow up care in one month although some may take more or less time. When the treatment is completed, the retainer will continue to be used on a nightly basis. Some patients are able to use the retainers every other night.

6. How much does OCR cost?

The fee for the entire OCR program starts at $1280. The exact fee depends on the complexity of your case, and will be discussed during the consultation. We offer no-interest financing through CareCredit. A 10% discount is given for patients paying the fee in full before beginning OCR. No discount is given if CareCredit is used.

7. What does the fee include?

The fee for OCR includes:
- One or more topographic maps, the evaluation of your prescription, corneal health and size to establish your candidacy for OCR.
- Training on how to insert, remove, and care for your vision retainers.
- A maintenance kit containing solution, a case, and a lens remover.
- A pair of vision retainers.
- Follow-up visits (as many as necessary) to refine the fit of the vision retainers, assess the corneal reshaping process, and determine the final lens needed.
- A six month follow-up visit to check the health of your eyes, polish your retainers, and provide an intensive protein removal treatment with Progent®.
- Phone or online care with the OCR coordinator or doctor to handle questions or concerns.
- Emergency access to Dr. Mannheimer should you have a concern.

8. Do I pay the same fee each year?

No. After the initial fitting, you pay only for your comprehensive examination, OCR evaluation and review (including topography), replacement retainers (if needed), and the semi-annual follow-up/deep cleaning. If your treatment needs adjustment, then there will be a refitting fee.

9. What are the disadvantages of OCR?

You must be prepared to allow 3-4 visits over about a one month period. Should you stop wearing your retainers, 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 OCR. Rates and amount of improvement vary from one person to the next.

10. I’ve never heard of OCR. Is it new?

Orthokeratology, which is the scientific name for OCR, has been in existence for over forty years. Just as refractive surgery has advanced from being performed with a scalpel (Radial keratotomy) to being performed with computer-controlled instruments (LASIK), so has Orthokeratology. Our system, OCR, uses the latest computer driven technology in two ways. The corneal maps that we make of your eyes let us analyze your corneas to determine whether or not you are a candidate for OCR. After treatment begins, the maps are the best way to assess your progress.

In addition, all of the vision retainers that we use are created using special software on computer-controlled lathes. This gives all of our OCR patients custom retainers that will give them optimal results.