

IS *ORTHOK* RIGHT FOR YOU?

- Do you wear glasses or contact lenses for nearsightedness or astigmatism?
- Are you interested in LASIK but not quite ready?
- Do the recent reports about LASIK complications make you worried?
- Are you unable to wear contacts due to allergies or other sensitivities?
- Are you tired of getting debris getting under gas permeable lenses?
- Do you feel contacts inhibit your ability to enjoy sports, working out, hiking, swimming or skiing?
- Do you want to wake up in the night and SEE?
- Does your child need contacts but has trouble wearing or caring for them?
- Is there anything you dislike about your contacts?

**If you answered YES to any of these questions,
schedule an exam,
let us give you the details.**

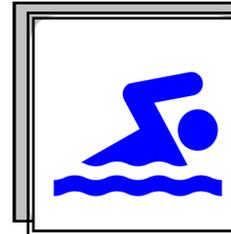
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VISION CORRECTION *WITHOUT SURGERY* Ask Us About

ORTHOKERATOLOGY



**IMAGINE SEEING CLEARLY
AT A DISTANCE
WITHOUT
WEARING GLASSES
OR CONTACT LENSES!**

YOU CAN

This non-surgical, reversible process uses a unique therapeutic mold lens to reshape the cornea while you sleep.

The Center for Custom Contact Lenses at *Vision Solutions*

**Caroline Guerrero Cauchi, OD, FIAOMC*
Jamie Starr Peters, OD
FDA Certified CRT Corneal Therapists**

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FREQUENTLY ASKED QUESTIONS ABOUT ORTHOKERATOLOGY

(AKA: CORNEAL MOLDING, ORTHOK, NIGHT LENSES, GENTLE VISION SHAPING, CORNEAL REFRACTIVE THERAPY-CRT)

THE PROCESS

WHAT IS THE CONCEPT BEHIND THE ORTHOK PROCESS?

Think of the retainer you might wear to correct the alignment of your teeth. **OrthoK** utilizes a patented corrective mold that improves your vision by gently reshaping the cornea and shortening the length of the eye WHILE YOU SLEEP. You just put the specially fitted lens in at bedtime and when you awake, you will have clear, sharp, comfortable vision for your waking hours.

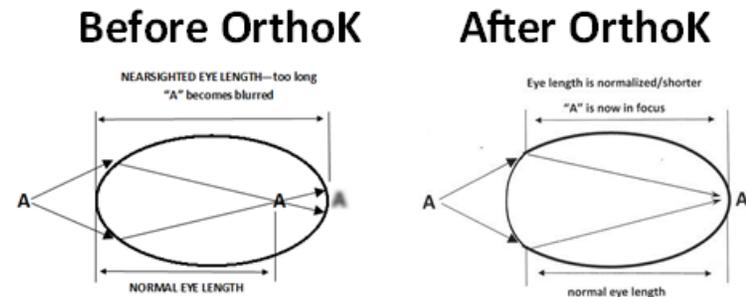
When you are farsighted, nearsighted or astigmatic, the images are focused just short of or behind the retina, making distant objects appear blurry. When eyeglasses or contacts are worn, the light is re-focused on the retina so that you can see clearly. (see below for a nearsighted example). Laser surgery is one way to correct this problem. It permanently alters the shape of the cornea so that images can then reach the retina producing clear vision. However, surgery is not right for everyone. If you are under 28 your eye has not finished developing and the process would have to be repeated several times until your eye stabilized. Or, you just might not want a surgical option.

Today, *OrthoK* provides a new option for patients. These orthoK molds correct your vision by gently reshaping the cornea while you sleep. When the molds are removed in the morning, images are now focused directly on the cornea. The result is clear, natural vision for all or most of your waking hours.

HOW DO THE MOLDS RESHAPE THE CORNEA?

The cornea is the clear outer covering of the eye, the window through which you see. This state-of-the-art therapeutic mold re-sculpts the corneal cells creating a new and unique shape.

The corneal reshaping mold has several specialized curves that sculpt the shape of your cornea. The hydraulic forces created by the tear film beneath the therapeutic mold flow across the corneal surface. This continuous action redistributes the corneal cells remodeling the surface curvature. The corneal curve is either flattened or steepened depending on your prescription. This resculpted shape can easily focus light directly on the retina. **Below is an example of myopic orthoK mechanism:**



FINANCIAL CONSIDERATIONS

WILL MY INSURANCE COVER THESE MOLDS?

This is an elective procedure and typically not covered by benefit programs. If your vision plan contributes towards regular contact lenses then, they may contribute toward *OrthoK*. Our *OrthoK* coordinator will assist you with insurance questions.

IS FINANCING AVAILABLE?

- If you chose to pay the entire balance by cash or check, we will extend to you a 5% discount. This cannot be combined with any insurance discount.
- Many patients choose to finance this through their employment flexible spending (pre-tax) plan.
- Finally, we offer a three, six or 12 month interest free-payment option through **Care Credit®**. Please ask for details.

WHAT DOES THE FEE INCLUDE?

The fee includes:

- One or more corneal topographic maps, the evaluation of your prescription, corneal health and size to establish your candidacy for corneal reshaping
- In-office sleeping simulation to evaluate the cornea's response to overnight wear
- Training on how to insert, remove, sterilize, and care for your molds.
- A maintenance kit containing solutions, a case and lens remover.
- A pair of **corneal molds**
- Follow up fitting visits to refine the fit of the lens, assess the corneal shaping process and determine the final lens needed.
- A six month follow up visit to insure the health of your eyes, polish your molds and provide an intensive protein removal treatment with Progent®
- Phone or on-line care with the OrthoK coordinator to handle questions or concerns.
- Emergency access to Drs. Cauchi or Peters should you have a concern.

DO I PAY THE SAME FEE EACH YEAR?

No, after the initial fitting, you pay only for your yearly OrthoK comprehensive examination, replacement molds (if needed) and the semi-annual follow up/ deep cleaning. If your treatment needs adjustment, there will be a re-fitting fee.

HOW QUICKLY WILL MY VISION IMPROVE?

This depends on your prescription and age. In adults, the higher prescriptions can take two to four weeks to achieve good vision. Children's corneas are much more easily molded. Some achieve excellent vision after the first night.

WHAT SORT OF VISION CAN I EXPECT?

Studies show that 90% of OrthoK wearers enjoy 20/40 vision or better. This is the minimum requirement for the DMV. 60% achieve 20/20. The final outcome depends on your initial prescription. Dr. Cauchi or Dr. Peters will be able to give you a prediction about your final vision, after the exam is completed.

ARE THEY DIFFICULT TO INSERT AND REMOVE?

They are actually easier to insert and remove than most oxygen permeable lenses and much easier than a soft lens.

HOW OFTEN DO THE MOLDS NEED REPLACING?

We recommend replacing the molds yearly. However, some patients take such extremely good care of their molds, that they may last 1 1/2 years. Molds that have become warped will not produce consistent treatment. Molds that have deposits or build up will not allow proper oxygen to the cornea and may even lead to infection. At your yearly exam or mid year check, we will inspect your molds and tell you if they need to be replaced.

WHAT IF I LOSE A LENS?

OrthoK is different than wearing regular contact lenses. If you discontinue wear for one night, your vision may be impaired the next day. Immediate replacement of a lost mold is necessary. We recommend always having a spare pair of molds as a back up... just in case.

WHAT IF I SLEEP LESS THAN MOST PEOPLE?

Great results can be achieved in as little as five hours of sleep each night. Some corneas mold quickly and easily, others need 8 hours of treatment. If you sleep less than 5 hours per night, orthoK may not be for you.

MY DRIVER'S LICENSE IS MARKED THAT I NEED CORRECTIVE LENSES. WHAT HAPPENS AFTER I HAVE ORTHOK THERAPY?

You will be provided with a special card that you attach to your driver's license. It states that you are participating in a visual therapy program that eliminates the need for corrective lenses while driving. The document will have an expiration date, which must be updated yearly. This certificate is accepted by state authorities.

HAVEN'T I HEARD ABOUT THIS PROCESS IN THE PAST?

Yes, OrthoK has been used for 30 years. However, prior to the development of highly breathable, custom designed molds, the results were disappointing and often could not be sustained throughout the day. OrthoK was often used for short-term benefit, allowing vision-impaired people to pass an employer's requirement of uncorrected acuity (after which the patient would go back to using the usual correction). We did not promote OrthoK enthusiastically because great vision just could not be sustained throughout the day. The development of high tech molds has taken orthokeratology to a new level. The results last throughout the day and many patients who were not eligible due to a high prescription, are now great orthoK candidates.

FAQs

WHO IS A GOOD CANDIDATE?

This therapy can be effective for farsighted, nearsighted (myopic), astigmatic and presbyopic patients. .

If you have been unable to wear contact lenses for any reason (discomfort, allergies, inconvenience, dryness, etc.), you are also a great candidate because the mold is so easy to use and it's worn while you sleep. This greatly reduces any discomfort you may have experienced while using conventional contact lenses.

You are also a great candidate if you need excellent vision without the use of contacts or glasses. **OrthoK can help** pilots, police officers, military personnel and those with safety concerns such as, professional athletes, parents of small children, lifeguards and many others.

Finally, if you just don't want to be bothered with wearing glasses or contact lenses during a variety of activities such as hiking, playing sports, swimming, skiing, camping, off-road driving, biking, snorkeling, scuba and more, **OrthoK** is for you.

WHY ARE CHILDREN GOOD CANDIDATES? MYOPIA CONTROL

OrthoK can keep your children's nearsightedness from getting worse. Increasing nearsightedness is a risk factor for detached retina and glaucoma. This therapy **can protect their future sight**. *If you would like details about orthoK and myopia control, please ask.*

Children are especially good candidates because they have a tendency to lose or abuse their contact lenses or glasses. Glasses also interfere with their active life. And of course, kids with glasses often suffer social trauma (bullying, etc.).

IF I WEAR BIFOCALS, READING GLASSES OR PROGRESSIVE LENSES, AM I A CANDIDATE?

You have *presbyopia* and this can be corrected with orthoK. We will discuss the many options that will free you from multifocal glasses.

WHAT IF I AM A CURRENT CONTACT LENS WEARER?

You will need to discontinue lens wear temporarily. The length of time will depend on the type of lens you are currently wearing, the condition of your cornea and the number of years you have been wearing lenses.

I SUFFER FROM DRY EYES, AM I A CANDIDATE?

Dry eye sufferers are often excellent candidates for orthoK. While you sleep there is little tear evaporation in a closed eye, and the *molds* are only worn while you sleep. If your dry eyes are a problem while you sleep, supplementing your natural tears is a simple option. **OrthoK** provides a dry-eyed person with freedom from scratchy contact lenses previously worn all day long..

If you have dry eye disease due to severe arthritis or a collagen-vascular disease, you may not be a candidate. However, a comprehensive exam will give us a better idea of your chances for success.

IS AGE A FACTOR?

No. We can fit children as young as five provided they can care for their molds responsibly. And, there is no upper limit on age either.

I USED TO WEAR CONTACT LENSES, BUT STOPPED DUE TO DISCOMFORT. AM I A CANDIDATE?

The corneal reshaping molds are worn at night while you sleep. This greatly reduces any discomfort you may have experienced while wearing contact lenses during the day. This is a great possibility for you.

THE DETAILS OF ORTHOK

IS THE VISION IMPROVEMENT CREATED BY THE CORNEAL RESHAPING MOLDS PERMANENT?

OrthoK is not a permanent treatment. Patients who wear their molds as prescribed find that they have great vision well into the evening. Some patients are even able to wear their molds every other night and still maintain their enhanced vision. However, if you stop wearing your molds while sleeping, your vision will return to its original state in as little as 72 hours.

This is orthoK's advantage over LASIK. If you don't like the outcome after refractive surgery or your vision changes in a year or two, your option is more surgery/risk. If you don't like the outcome of orthoK, just stop and you return to your original Rx. If your vision changes, we simply change the mold.

HOW LONG WILL IT TAKE TO ACHIEVE GREAT VISION?

It usually takes 7-10 days to achieve excellent vision. However, with some people, we have seen this occur in as little as 1 day. The speed depends on your initial prescription and age.

CAN I SEE WHILE WEARING THE MOLDS?

Yes. Your molds allow you to read in bed or watch TV before falling asleep. It also provides safety should you need to get out of bed during the night.

WHAT DO I DO ABOUT MY VISION WHILE MY EYES ARE IN THE PROCESS OF

RE-SHAPING?

During the first few days of the *OrthoK therapy* process, you may find that your vision is quite good for a few hours, and then begins to diminish. We will fit you with a soft lens to wear that will improve your vision when it begins to fade. Often these are only worn in the afternoon and evening. We will reduce the strength of those temporary lenses as your vision improves until they are no longer needed.

HOW SUCCESSFUL ARE THE CORNEAL RESHAPING MOLDS?

The rate of success is very high, but it depends on your original prescription. During your evaluation you will receive full information about your potential outcome.

DO SOME PEOPLE DISCONTINUE WEARING THEIR MOLDS?

This is rare because the results are so exciting. However, some patients drop out because they find they enjoy the convenience of completely "device-free" vision. They are no longer happy to even bother with molds while they sleep. They then turn to laser vision correction. *OrthoK* can be a test drive for LASIK for some patients.

HOW SAFE ARE THE MOLDS?

They are very safe. However, there is a small risk of infection or abnormal blood vessel growth involved when any contact lens is worn. This risk is minimized by adhering to rigorous disinfection and care procedures, by wearing your molds only as instructed and by coming in for regular progress checks. At all progress checks your molds will be treated with a special solution which removes surface buildup and cleans the pores of the lens increasing the breathability of your molds. In addition, we will check to be sure the lens is free of chips or warpage.

IS THIS A LENS THAT HAS BEEN PROVEN SAFE FOR OVERNIGHT WEAR?

The FDA approved **Paragon CRT**® lens for overnight use on 6/13/2002. This issuance of approval was the culmination of the most extensive clinical study to date to establish the safety and efficacy of corneal reshaping molds in overnight use. Today molds made by most manufacturers are FDA approved. However, some of the custom designs cannot be approved due to their custom nature. They are completely safe for overnight use when worn and cared for according to our instructions.

OrthoK molds are made from a material that allows twice as much oxygen to enter the cornea as a standard extended wear oxygen permeable lens. This significantly minimizes complications due to a lack of oxygen. Again, meticulous care and careful wear make a huge difference to safety.

DO THE MOLDS HURT?

No. Initially, when you place the mold on your eye, you may feel as if you have something in your eye. That sensation diminishes as you continue to wear this therapeutic mold. But remember, you insert the lens just before you go to sleep. When your eyes are closed, the lens produces very little sensation. You will not feel your eyes being reshaped.