

OrthoKeratology for Corneal Refractive Therapy

Orthokeratology (Ortho-K) is a safe and FDA-approved treatment that uses specially designed contact lenses worn overnight to gently reshape the front surface of the eye.

When worn overnight, these lenses allow you to see clearly throughout the day without additional correction from glasses or contacts.

Benefits of Ortho-K include:

- Non-surgical vision correction.
- Effects are completely reversible once lens wear is discontinued.
- Designed and safe for children and teens.
- Helps slow the progression of myopia (nearsightedness) in children aged 6-14 years.

Who is a good candidate?

Most people with mild to moderate myopia (up to -6.00D) (with or without astigmatism) are the best candidates for Ortho-K. A thorough examination before treatment will be required to determine if you are a suitable candidate.

Ortho-K is a great option for children and young adults who do not want to wear spectacles, are poor candidates for refractive surgery, play contact sports, or have progressing myopia.

Ortho-K may **not** be recommended if

- Poor hygiene or compliance concerns
- Certain corneal conditions
- Unrealistic expectations

Why treat Myopia early?

Myopia (nearsightedness) is more than just a refractive error that requires wearing glasses- it is a progressive condition that can increase the risk of serious eye disease later in life. Myopia is caused by progressive axial elongation of the eye.

Higher levels of myopia are associated with conditions like

- Retinal detachments
- Myopic oracular degeneration
- Glaucoma

Studies have shown Ortho-K can help slow myopic progression by 40-60% when appropriately fit in kids aged 6-14 years old. The rigid contact lens will remold the center of the cornea, temporarily flattening it, while strengthening the focusing power in the peripheral retina, creating a "peripheral myopic defocus". This signals the eye to decelerate its axial growth, thus slowing myopia progression.

OrthoKeratology Treatment-Information and Consent

TREATMENT COSTS:

Ortho-K treatment – \$1700

There may be an additional fee for higher amounts of astigmatism

Does not include any lost or damaged lenses

Please note there is a \$50 fee for missed contact lens fitting appointments.

We offer CARE CREDIT as a payment option.

A 50% deposit is required before your Ortho-K treatment lenses can be designed and ordered. The remaining balance is required to be paid at the time your Ortho-K lenses are fitted and delivered. These lenses are nonrefundable.

Ortho-K Package Includes:

- OrthoKeratology fitting examination and required measurements, separate from your annual exam(cycloplegic refraction, corneal topography, and axial length measurement).
- Customized Ortho-K treatment contact lenses.
- An Ortho-K starter pack of cleaning solution, contact lens case, and removal suction cup
- Replacement Ortho-K treatment contact lenses if alterations to the lens parameters are required to achieve treatment goals.

Does not include:

- Further supply of cleaning products beyond your Ortho-K starter pack.
- Lost or damaged Ortho-K contact lenses during or after the 6-month initial treatment period.
- Medical visit for red or painful eye.

RECOMMENDED TREATMENT SCHEDULE:

Visit 1: Initial comprehensive eye examination (not included in Ortho-K package price).

Ortho-Keratology assessment & lens design. (Lenses usually take 2-3 weeks to arrive after ordering)

Visit 2: Delivery of your custom-made Ortho-K treatment contact lenses & training session (one hour) on how to use the lenses & take care of your eyes.

Visit 3: next day follow-up after first night of lens wear

Visit 4: 1-week follow-up appointment.

Visit 5: 1-month follow-up appointment

Visit 6: 3-month follow-up appointment

Note: extra appointments beyond those outlined above may be required to ensure optimal lens performance. The appointments detailed above are a minimum of what to expect in terms of time commitment.

Please bring your Ortho-K lenses with you to all your routine appointments.

If you have been unable to sleep in your lenses the night prior to your routine review appointment for any reason, please reschedule your appointment.

TREATMENT SATISFACTION GUARANTEE:

Like all medical treatments, individual results can vary. If, within 6 months of commencing treatment, you are not satisfied with the results, or if you are required to stop this treatment due to undesirable ocular responses, partial fitting fees are **non-refundable**. In the case that lens fitting needs to be cancelled based on the provider's recommendations or due to other circumstances, all prescribed ortho-k lenses will need to be returned.

TREATMENT LIMITATIONS:

Out-of-range prescriptions - the optometrist will advise whether your prescription is suitable.

Resistant corneas – some eyes do not respond optimally to the treatment, and particular factors cannot be determined or predicted before beginning treatment.

Insufficient sleep/treatment time - you will need a minimum of **6 hours** of closed-eye time for the Ortho-K treatment each night

Ortho-K is not a permanent vision correction treatment. Its advantage is that it is fully reversible. But this also means if you stop the treatment, your vision will return to its pre-treatment state.

TREATMENT EXPECTATIONS:

Your vision will take several days to become clear without the addition of daytime contact lenses or glasses.

Your vision will be best immediately after removing the Ortho-K lenses and may regress over the day. This regression lessens with more nights of lens wear.

Your eyes may feel uncomfortable with the lenses inserted or after the lenses are removed.

You may experience visual halos or streakiness around lights at night. This will improve over time.

A pair of Ortho-K lenses will last, on average, 12-18 months before requiring replacement.

Regular 6-12 monthly eye examinations are necessary to ensure the health of your eyes and that your Ortho-K lenses are still performing optimally. It is important that you come for these regular check-ups even if you do not have any complaints.

POTENTIAL RISKS & COMPLICATIONS:

As with any medical treatment, there are possible risks that may arise. By closely following your optometrist's advice, you will limit the likelihood of risks and complications.

Infection: If your Ortho-K lenses are not cleaned and stored as instructed, a corneal infection may occur. This can be serious, and so prompt **(same day)** attention with your provider should be sought for any sore or red eye once the Ortho-K lens has been removed. Antibiotic eyedrops and temporarily ceasing treatment will be necessary. Temporarily ceasing lens wear if you are unwell with a cold/flu is advisable to help reduce the risk of eye infections.

Corneal abrasions: This is a more common occurrence and will leave the eye feeling quite sore. These typically recover quickly, but may require antibiotic cover. Prompt **(same-day)** attention should be sought for any sore or red eye once the Ortho-K lens has been removed.

Dry Eyes: Some people do not produce sufficient tears, which may complicate the treatment with Ortho-K lenses. Your optometrist will advise you before starting the program if your chances of success or the health of your eyes is likely to be compromised.

In the case of using Ortho-K treatment to slow down myopia (nearsightedness) progression, it is not guaranteed that Ortho-K will stop progression completely. Additional therapy may be indicated

If Ortho-k wear needs to be discontinued for whatever reason, simply stop contact lens wear; the cornea will revert to its original pre-treatment shape and refractive error. It may take 1- 4 weeks for full resolution.

Caring for Ortho-K lenses

Always wash your hands with soap and water before handling lenses

Clean lenses every morning using recommend solution- Bostons Simplus

Do NOT use regular Multipurpose Contact Lens Solution

Store lenses in a clean case daily. Clean the case regularly and allow it to air dry when lenses are in use.

Replace solution everyday

NEVER use tap water on lenses or the case.

CL wear instructions

Insert lenses right before bedtime

Wear lenses for at least 6-8 hours while sleeping.

Remove lenses in the morning using a contact lens removal suction cup or lid method.

Store contact lenses in case appropriately labeled right and left in solution (ie: Boston Simplus)

If lenses need to be stored for a long period of time, they can be stored dry without solution in a case once they are fully disinfected.

If the contact lens falls out or falls on the floor, thoroughly disinfect the lens with a disinfecting rigid contact lens solution (Boston Simplus) before re-inserting.

If a night of contact lens wear is missed, vision will be blurry the next day- the cornea will partially revert to the original refractive error. To correct, go back to the normal wear schedule the following night.

Remove the contact lens immediately and contact your provider if

- Eye pain
- Redness
- Light sensitivity
- Discharge
- Sudden blurry vision

Contact number

Northwest Eye Center (Elgin): 847-888-2020

INFORMED CONSENT:

Patient (or parent/guardian):

In signing this informed consent, I have read and understood the requirements of the visit schedule and will attend all appointments, make all necessary payments in a timely fashion and will listen intently to my optometrist to minimize the risk to my eyes and enhance the likelihood of success with my Ortho-Keratology treatment

Name: _____

Signature: _____ Date: _____

Ortho-K Optometrist:

In signing this informed consent as the optometrist, I confirm that I have gathered the correct measurements and have fully discussed the treatment plan, expectations, limitations, risks and alternative options with my patient. I am also available to them if they have any concerns for their treatment or for the health of their eyes.

Signature: _____ Date: _____