

ORTHOKERATOLOGY

Most Frequently Asked Questions

What is orthokeratology?

Orthokeratology (also referred to as Corneal Refractive Therapy) is a sophisticated non-surgical process using specially designed rigid gas permeable (RGP) contact lenses to gently reshape the cornea (the front layer of the eye) while you sleep. When you wake up, you remove the lenses and are able to go throughout the day without the use of glasses or contact lenses. Dr. Melanie Macbeth is a certified fitter of Paragon CRT[®] orthokeratology lenses.

How does orthokeratology work?

The orthokeratology lens redistributes the superficial cells of the corneal epithelium to flatten the central corneal shape, allowing light that once focused in front of retina to now focus on the retina. The lenses are worn at night during sleep, and are removed upon awakening.

Is orthokeratology permanent?

No. It's temporary. If you stop wearing the lenses regularly while you sleep, your vision will return to its original state in as little as 72 hours.

Am I a good candidate for orthokeratology?

Orthokeratology is designed for people with low to moderate amounts of nearsightedness. It is FDA approved for patients with refractive errors up to -6.00, and with regular astigmatism up to -1.75. It works best in people who have refractive errors between -1.00 and -4.00. However, results vary from person to person. Patients who have corneal diseases or irregular corneal shape, or who have amblyopia, lazy eye, or vision only in one eye, are not good candidates for this procedure.

How do I know if I am a good candidate?

The first step is a comprehensive eye exam to determine whether or not you are a good candidate. This will include a full visual work-up, ocular health exam, and corneal shape evaluation. If you are a good candidate, lenses will be either trial fitted or ordered based on data obtained at the initial exam. You will then return for a dispensing visit during which the lens fit is evaluated and you will be taught how to insert and remove the lenses, and how to clean and disinfect the lenses.

Do you have to be a certain age?

Unlike laser refractive surgery, there are no age restrictions for orthokeratology. Orthokeratology can be a great option for adolescents and teenagers who want to see well and have the freedom to not wear glasses and contact lenses during the day. Orthokeratology is ideal for people who have active lifestyles or play sports.

How many follow up visits should I expect?

After the initial dispensing visit, you will return for several follow-up visits to monitor progress. A typical follow up schedule is 1 day, 1 week, 2 weeks, 1 month, 3 months, and 6 months. In many cases, lens designs are modified to improve the visual effect. If this is necessary, you will have to come back for a few more visits. After your vision has stabilized and you have passed the initial 6 month follow-up without any problems, you will be seen back each year for a full eye exam and contact lens check.

How long does it take for orthokeratology to work?

Most patients have rapid improvement in the first few days of treatment and achieve nearly their optimum vision in 10 to 14 days. However, the length of time for orthokeratology to work depends on your initial refractive error, corneal shape, and corneal tissue. Stable vision throughout the day is usually achieved after 1-2 months. After stable vision is achieved, some patients are even able to skip a day between lens wearings. However, it is not a permanent change, so if you stop wearing the lenses, your eyes will go back to their original shape and refractive error. So, you will have to continue to wear the lenses as long as you wish to maintain the effect.

What do I do to see adequately in the period of time between when I start orthokeratology and when I achieve full treatment?

During the initial adjustment period, disposable soft contact lenses can be worn during the day to provide adequate vision while your vision is changing. Your prescription will be monitored during the follow-up visits and appropriate lenses will be dispensed at that time.

Can I see with my orthokeratology lenses in?

Since the orthokeratology lenses are custom made for each patient, patients will be able to see while wearing the orthokeratology lenses. So, if you get up in the middle of the night, you will be able to see clearly.

Are there any risks involved with orthokeratology?

Risks of orthokeratology are minimal, and are similar to those of regular RGP lens wear – corneal distortion, dry eye, mild abrasions, etc. All potential complications are minimized with strict adherence to proper wearing schedules and lens maintenance. There were no serious adverse events reported in the Paragon CRT FDA study.

Will I experience glare or blurred vision?

Most patients notice some amount of glare around lights in dark conditions like at night. This is usually most pronounced early in the procedure and generally diminishes with time, though not always completely. Most patients experience vision that varies slightly from day to day, depending on how well the lenses positioned overnight. If the lenses are off-center, subsequent vision will be slightly blurred.

I have “dry eyes.” Am I a candidate for orthokeratology?

Many patients with slightly dry eyes do well with orthokeratology. Lens dryness can be experienced during orthokeratology. Using lens lubricants before and after wearing the lenses usually minimize this problem. Since orthokeratology lenses are worn at night while you are sleeping, this greatly reduces any discomfort normally experienced while wearing contact lenses during the day. In patients who already have dry eye before the procedure, punctal plugs can be inserted to minimize dryness. This can be evaluated during your eye examination to determine if you would be a good candidate.

Will my health insurance pay for this?

Insurance plans vary widely. Some vision insurance plans will cover some contact lens fees and others do not. The best strategy is to call your insurance company to find the details of your specific plan. Some people choose to set aside pre-tax dollars at the beginning of the year through their flex-spending or health care expenditure accounts at work.

How long do orthokeratology lenses last?

If you take care of your lenses as prescribed, the lenses can last 2 to 3 years. However, if the lenses are not maintained properly or your prescription changes, you may have to replace them more frequently. A back-up pair of lenses is included upon completion of the initial lens fitting. If you lose or damage a lens, a replacement can be purchased.