

Q: What is Laser Vision Correction?

A: Laser vision correction is a surgical alternative to glasses and or contact lenses. It is an outpatient procedure that uses a cool beam of light to gently reshape the surface of the eye, the cornea, thereby altering the power of the eye. The light gently pulses to remove microscopic amounts of tissue, changing the curvature of the cornea, allowing images to be more sharply focused on the retina. LASIK, Laser in-situ Keratomileusis, is the most commonly performed laser vision correction procedure. Laser vision correction has been FDA approved for treating nearsightedness, farsightedness, and astigmatism. This approval means that the FDA has recognized that laser vision correction is a safe and effective procedure. The goal of laser vision correction is to reduce your dependence on glasses and/or contact lenses.

Q: Which procedure is better for my particular needs, LASIK or PRK?

A: Both procedures are very effective in correcting nearsightedness, farsightedness and astigmatism. There are several factors however that should be considered prior to making any decisions as to which procedure best fits your needs.

Our office will be happy to discuss all aspects of each procedure during your visit. We will then be able to choose the procedure that is most appropriate for you.

Q: What is the difference between "IntraLASIK" and "Traditional LASIK?"

A: LASIK surgery is actually a 2-step process. First, a flap of corneal tissue must be created and then folded back. The cornea is the transparent dome-like structure that covers the iris and pupil of your eye. By creating a flap in the cornea, the surgeon is able to perform the laser vision correction treatment to the inner layer of the cornea, which practically eliminates any patient discomfort and allows for a more rapid visual recovery.

Traditionally, the surgeon created the corneal flap with a hand-held mechanical instrument that houses a metal blade. This method has worked well over the years; however, the performance of these devices can be unpredictable. And although LASIK complications are rare, this mechanical blade is frequently the source for many of the reported complications.

With IntraLASIK, the surgeon uses the precision of an IntraLase laser to create the corneal flap. The accuracy of the laser is unparalleled by any other technology in vision correction surgery. This advanced technology puts unprecedented control in the hands of the surgeon, and even allows him to customize the corneal flap for each individual patient. Because of its consistent accuracy, IntraLASIK now makes it possible to treat many patients who were dismissed as candidates for laser vision correction due to thin corneas.

Q: Is IntraLASIK safer?

A: Yes! IntraLase is a safer approach to vision correction surgery because of its precision. This precision was well documented in studies for the FDA, where the accuracy of flap thickness was demonstrated on the order of +/- 15 microns. Precise flap thickness is critical to a successful LASIK outcome, and IntraLase created flaps feature consistent thickness from edge to edge. Again, this degree of accuracy is unprecedented in flap creation technology to date.

Additionally, greater flap stability was also demonstrated with IntraLase flaps in studies for the FDA. Although, the incidence of flap slippage is rare in traditional LASIK, the consequences can be quite problematic. The assurance that the IntraLase created flap will be securely re-positioned provides added peace of mind for many patients.

With IntraLase, we feel we can further reduce the risk of complications and give our patients a new level of confidence in vision correction surgery.

Q: What is Custom/Wavefront-Guided LASIK?

A: Using WaveScan-based digital technology, we can now identify, measure, and correct imperfections in an individual's eyes more precisely than with standard methods used for glasses and contact lenses. This information is transferred to the laser, providing a new level of precision and accuracy. The WaveScan results will be reviewed and the doctor will determine the best treatment for each individual based on all data collected. Not every patient will benefit from custom LASIK.

Q: Is laser vision correction permanent?

A: Yes, laser vision correction results in a permanent change to the shape of the cornea. However, laser vision correction will not prevent age related conditions such as presbyopia (the need for reading glasses) or cataracts. These conditions would still be treated in their normal manner.

Q: What kind of laser(s) will be used during my procedure?

A: We utilize the latest generation VISX Star S4 ActiveTrak with Iris Registration excimer laser system. This laser utilizes the latest active eye-tracking system and variable spot scanning technology, in addition to numerous other advancements that enable the surgeon to deliver the best outcome possible. The eye tracker compensates for small eye movements by guiding the laser beam to keep it centered precisely over the treatment area, allowing for an improved level of precision, comfort and safety the other lasers do not provide. The variable spot scanning technology allows for treatment of patients with a larger pupil size.

We also utilize the IntraLase laser for flap creation. The IntraLase Laser provides maximum control and accuracy during the creation of the corneal flap. With its computer-controlled software, this all-laser (blade-free) approach provides our patients with a safer alternative to traditional LASIK.

Q: What if additional surgery is needed?

A: In general, the few patients will require an enhancement procedure and will do so within the first year following the procedure rather than years later.

Q: What are the long-term effects of laser vision correction?

A: Laser vision correction has been performed since 1987. The FDA has approved the use of the excimer laser and recognized laser vision correction as being safe and effective for the treatment of nearsightedness, farsightedness and astigmatism in eligible patients. In the United States alone, over fourteen million procedures have been performed.

Most experts worldwide are confident that they will discover no long term problems with laser vision correction and the procedure has become the most commonly performed refractive surgery in the world.

Q: When can I return to work and normal activities?

A: Most patients notice dramatic improvement within the first few days following the procedure and are able to drive a car and return to work within one to three days. Most LASIK patients see quite well the next day. However, the speed of visual recovery ultimately depends on personal healing patterns. After laser vision correction the restriction on activities are minimal and these will be covered in detail prior to the procedure.

Q: What if I currently wear contact lenses?

A: Prior to laser vision correction it is important that the curvature of the corneas return to their natural shape. The only way to ensure this is for contact lens use to be discontinued. For most patients who wear soft contact lenses the cornea will return to its natural shape within 5 to 7 days prior to the procedure. At least thirty days without contact lenses is generally required to reach corneal stability for patients who wear rigid or gas permeable lenses.

Q: What can I expect my vision to be after laser vision correction?

A: As with any surgical procedure, results cannot be guaranteed. The results of laser vision correction have been overwhelmingly successful in eliminating or reducing the dependence on glasses or contact lenses. In a recent study, 98% of patients treated for nearsightedness and/or astigmatism achieved 20/40 vision after one or more treatments. This means they can drive legally, play sports, and join the police or fire departments without depending on corrective eyewear.

Ultimately, how well a person sees and how quickly their vision improves depends on the degree of their prescription and their particular healing pattern.

Q: Is laser vision correction painful?

A: There is little or no discomfort during the procedure. Eye drops are used to numb the eyes. No needles or injections are required. After LASIK post operative discomfort is minimal. However, it is common to have some eye irritation the first few hours. With PRK the irritation may last for several days following the procedure.

Q: What if I move my eye during my procedure?

A: We utilize the most technologically advanced lasers that offer eye-tracking capabilities to continually reposition the laser beam during your procedure. The laser detects and then compensates for small movements by guiding the beam to keep it precisely centered over the treatment area.

Q: Are both eyes treated the same day?

A: Almost all patients who undergo laser vision correction have the procedure on both eyes the same day; however, the procedure can be performed unilaterally as well.

Q: What are the risks of laser vision correction?

A: No surgical procedure is without risks. Long-term sight-threatening complications from PRK and LASIK are very uncommon. The chance of having a serious vision threatening complication is much less than 1% (this risk is further reduced with IntraLase). Understanding potential risks allows you to make an informed decision before undergoing laser vision correction. Our office will discuss potential risks in greater detail and answer any question you may have during your visit.

Q: How do I determine if I am a candidate for laser vision correction?

A: Schedule a complimentary laser vision correction screening with our office. This appointment will take approximately 45 minutes. During the consultation we will determine candidacy and which procedure would offer the greatest benefit for your particular needs.

Q: How long does it take to perform the procedure?

A: The actual laser time is typically less than two minutes per eye. You should expect to be in the laser suite only 15 minutes for the actual procedure. The total time spent at the laser center is generally one to two hours. Most people are on their way 20 to 30 minutes following the procedure.

Q: Can laser vision correction eliminate the need for reading glasses?

A: Yes and No. The need for reading glasses usually begins at age 40 to 45, and is caused by a loss of elasticity of the natural lens inside the eye. This loss of elasticity results in an inability to focus on small print or objects at near. This condition is called presbyopia.

Laser vision correction cannot restore the elasticity to the natural lens inside the eye. However, there is a technique that is used with contact lenses called monovision in which one eye is fit with a contact lens to see at a distance and the other eye is fit with a contact lens to see at near. This technique can also be used with laser vision correction. One eye would be treated to see at a distance and the other eye would be treated to see at near. Prior to using the laser for this technique it is recommended that contact lenses be tried first. If successful, then the same technique could be applied with the laser.

It has been our experience that monovision is helpful for near tasks such as reading a watch, menu or price tags, but not for reading fine print or prolonged computer work. It is important to understand that even with monovision almost everyone will still need reading glasses at some point. For people with active lifestyles; who play golf, tennis or drive a great deal at night, monovision is not recommended.

It is very important for people who are nearsighted, and who are over the age of 40, to understand that prior to laser vision correction it is possible to remove their glasses and see objects at near without corrective eyewear. However, after laser vision correction, if both eyes are treated for distance vision then more than likely reading glasses will become necessary in order to focus on near objects.

Q: Does insurance cover laser vision correction?

A: Laser vision correction is considered elective surgery and is typically not covered by many health insurance plans. However, some companies have begun to cover the procedure and it is recommended that you check with your insurance carrier to determine if laser vision correction is a covered benefit. Medical Savings or Flex Spending accounts are typically eligible for laser vision correction and are often used.

If you have any questions, please don't hesitate to call our office at (972) 393-8600.