



**SURGICAL
SOLUTIONS
FOR
ENHANCING
YOUR
VISION**

www.SilversteinEyeCenters.com

Introduction

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Introduction

If you depend on glasses or contacts to read, work, drive, and go about your normal life, you've probably felt envious of people with perfect (or near-perfect) vision.

While your corrective lenses have certainly helped you out over the years, wouldn't it be nice if you didn't need them?

Imagine rolling out of bed in the morning without fumbling for your glasses. Think of how nice it would be to close your eyes after a long day without worrying that you'll fall asleep with your contacts in. How nice would it be not to squint or change your glasses whenever you have to read a sign that's far away or focus on small text in a legal document?





As you probably already know, several surgical options exist that can restore and enhance your vision.

Are you a candidate for LASIK, PRK, or lens implants? In this ebook, we'll explain to you the basic procedures and purposes of each of these options to give you a better idea of which might be right for you.

Types and Causes of Vision Impairment

In this section, we'll discuss the different types of vision impairment that can be treated with surgery. We'll give overviews of their causes and how they affect your vision and your daily life to give you a better understanding of your vision and the proper procedure for your case.



Myopia, Hyperopia, and Astigmatism

Most people who need glasses or contacts have some kind of refractive error in their corneas. When you use your eyes, light reflects off of the objects in front of you, passes through your cornea, and is focused on your retina. The retina then transmits that focused image to the optic nerve, which sends a coded message to the brain, which then interprets the image.


If you have blurred or distorted vision at certain distances, it is probably due to refractive errors, which causes light passing through the cornea to be improperly focused when it hits the retina. We can categorize these imperfections into three groups: myopia (nearsightedness), hyperopia (farsightedness), and astigmatism.

Myopia and hyperopia are issues with the overall curve of the cornea and its distance from the retina. If you have myopia, you will have trouble focusing on objects at longer distances. If you have hyperopia, you'll have trouble focusing at closer distances. Astigmatism is an irregularity or distortion in the shape of the cornea, and it is not uncommon to have a combination of astigmatism with myopia or hyperopia.

If your vision is impaired due to refractive errors and can be treated with corrective lenses, then you may be a candidate for either LASIK or PRK surgery. Both of these procedures work by reshaping the cornea until light can properly focus on the retina without assistance (or with minimal assistance).

Cataracts

Cataracts are a clouding or yellowing of the lens. They are typically associated with age, but cataracts can begin to form at any time in your life. When a cataract first begins to form, you may not notice much difference in your vision. Over time, though, as the cataract becomes thicker and cloudier, your vision will be blurred and cloudy.



Trying to see through a cataract is much like trying to take a picture through a foggy or smudged camera lens.

No matter how much you focus, you will not get a clear picture. This is why corrective lenses do not work as treatment for cataracts.

Once cataracts have been diagnosed, your ophthalmologist will monitor their progress until the point at which they need to be removed. Otherwise, the result will be severely impaired vision and potential blindness.

While PRK and LASIK are not effective for cataract removal, fortunately, lens implant surgery is very effective, takes little time, and requires very little time for recovery as well.

Laser Surgery for Refractive Errors

LASIK or PRK – Which Is Right for You?

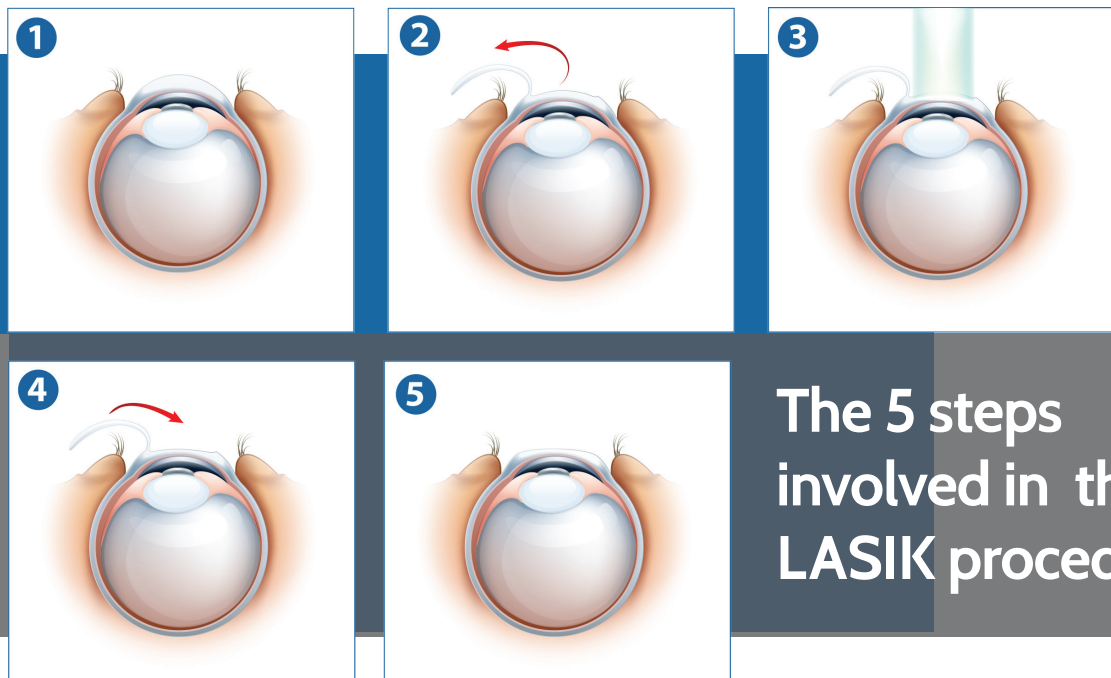
Because it was the first surgery of this type to gain popularity, LASIK is the better known of the two most common vision enhancement procedures. In fact, because of this, LASIK has become synonymous with vision enhancement in most people's minds. They don't say, "I'm thinking about laser surgery for my eyes." They say, "I'm thinking about LASIK."

However, while LASIK is a very effective procedure and works to enhance many people's vision, it is not right for everyone. Fortunately for people who are not good candidates for LASIK, PRK (photorefractive keratectomy) surgery is also available. The two procedures are similar in that they both use the same laser technology to change the shape of the cornea and in their positive outcomes, but they differ in process.

The Basics of LASIK

During LASIK surgery, your ophthalmologist will give you numbing eye drops. Then, the outer layers of the cornea are pulled back in a hinged flap. The layers underneath that flap are reshaped with the excimer laser. At the end of the procedure, the flap is put back in place. This provides protection during the healing process and allows for a faster recovery time.

No general or local anesthesia is used beyond the numbing drops, so you won't have to deal with any needles. The actual procedure takes very little time, but you should expect to be in the office for about 2 hours the day of your LASIK surgery.



**The 5 steps
involved in the
LASIK procedure**

The Basics of PRK

There is one significant difference between LASIK and PRK. When PRK surgery is performed, no flap is created.

Instead, the excimer laser will work to reshape the cornea on its outer surface. Because there is no protective flap over the reshaped corneal after the procedure, there may be more discomfort, and recovery time may be slightly longer.

At first, this might sound like LASIK is the obvious choice. After all, it involves less discomfort and takes less time to heal. However, many patients who are not candidates for LASIK are perfectly suited for PRK. If you have a thin or steep cornea, for example, you may be turned away for LASIK surgery, as there is not enough material to work with. You might still be a perfect candidate for PRK.

Also, some patients have concerns about the potential for corneal flap displacement. If the outer flap of the cornea does not heal correctly or is somehow displaced due to trauma, your vision could be seriously affected. Many athletes choose PRK over LASIK because they have a greater risk of displacing their corneal flap, particularly if they engage in contact sports. For them, a slightly longer recovery time is worth the peace of mind knowing that their daily activities won't cause them vision problems in the future.

Both LASIK and PRK are safe and effective procedures. Your ophthalmologist can recommend the best option for you, your eyes, and your lifestyle.



Lens Implants


Some vision impairments cannot be repaired or enhanced with laser surgery.

For example, as mentioned earlier, if you have cataracts, reshaping your corneas will do nothing to alleviate the cloudiness in your vision. Also, people with severe myopia and/or serious astigmatism may not have enough corneal material to create the proper shape for their cornea to focus light on the retina.

Lens implant surgery is the answer for many of these vision impairments. Lens implant surgery may not entirely remove the need for corrective lenses; however, it can significantly enhance vision to the point that a light pair of reading glasses may be all the patient needs, whereas before they may have been legally blind.

How Lens Implants Work

Whether lens implant surgery is performed to remove cataracts or to correct a serious refractive error, the procedure is the same. The natural lens is removed, and a new lens replaces it.



Recovery from lens implant surgery takes just a few weeks, during which time you will need to keep your eyes lubricated with eye drops.

Until recently, this procedure involved choosing to be near- or farsighted after surgery. The lenses could correct for one or the other, but not both. For most patients, this was still a huge improvement. Without the surgery, cataract patients would slowly lose more and more vision until they became entirely visually impaired. With the surgery, patients may have required glasses for either near or far vision, but it was likely that the prescription would be light and manageable. The same improvement was true for patients with severe myopia or astigmatism.

Today, though, candidates for lens implants have new, premium lenses to choose from. You can still choose one of the old style lenses, but you can now choose bifocal lens implants that correct vision at both near and far distances. While not all patients regain 20/20 vision after the surgery, the improvement is massive, even in comparison to the traditional lens implants.

You'll want to avoid any strenuous activities while your eyes heal. After recovery, you'll be free to go about your normal activities, but with greatly enhanced vision.

Conclusion

You should now have a basic understanding of the different types of surgeries that can enhance your vision with little or no need for corrective lenses.

Different cases require different surgeries, which is why your ophthalmologist will need to perform a thorough eye exam and get your full medical history for your consultation. You may have your heart set on LASIK, but you may actually need PRK or lens implant surgery, depending on the cause(s) of your vision impairment.

We live in an exciting time. Not too long ago, refractive errors in your corneas meant that you'd have to wear glasses or contacts for the rest of your life. Worse yet, the development of cataracts meant eventual, inevitable blindness or at least severely impaired vision.

Today, while it's still important to go to the eye doctor regularly, advancements in vision enhancement surgeries have allowed us to not only avoid degenerating vision but also to have better vision than we were born with, all without the aid of corrective lenses.



For more information, contact Silverstein Eye Centers today and schedule a consultation with one of our doctors!

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