



After Surgery

The Cole Eye Institute ophthalmologist who performs your laser surgery will work to assure that you receive the highest quality postoperative care. To help you achieve maximum visual results, plan on scheduling a minimum of three follow-up appointments after your surgery. These will need to occur 1 day after surgery, 1 week after surgery and 3 months after surgery. A visit at 6 months or 1 year after surgery will be an optional follow-up. The cost of these visits is included in your surgical fee.

What to expect after surgery

- Your vision may be blurry and hazy for the first day. Plan to have someone drive you home after your procedure.
- You may experience some discomfort or sensitivity to light for the first several hours after LASIK and the first several days after PRK.
- Your vision may fluctuate between clear and blurry for the first few weeks.
- You may need to wear glasses for night driving or reading until your vision stabilizes. The Pearle Vision in the Cole Eye Institute can put low-cost lenses in your old frames for you to use in the short term.
- Your eyes will be dry even if they do not feel that way. Your vision may improve after using drops prescribed by the ophthalmologist. These drops may burn or cause temporary blurring of vision. Do not use any drops not approved by your ophthalmologist.

Are there any restrictions after surgery?

It generally takes about two to four weeks for the eye to stabilize following surgery. Some special precautions to prevent injury or infection should be taken during the initial postoperative period, including:

- Do not rub your eyes for the first week. Wear the eye shield/goggles that you receive in your postoperative kit when you are sleeping for the first 3 nights.
- Do not let tap water get in your eyes for a week.
- Do not go swimming for 10 days.
- Do not wear eye makeup for 1 week. Do not get your hair colored or permed for 10 days.
- Do not exercise for 2 days. Once you have resumed sports activities, wear eye protection for the first month.
- Do not take a shower or wash your hair until the next day.
- Avoid getting soap in the eye when bathing and washing your hair for 1 week. Also, avoid getting products such as hair spray and shaving lotion in your eyes during this early healing period.
- Wear sunglasses when you go out on a sunny day to protect your eyes from UV exposure for the first several months, especially if you had PRK.

If you have any questions after your surgery or if you experience pain, sudden decrease in vision, red eye or discharge, contact us immediately at 216.445.8585.

Above all, enjoy your new freedom. The freedom to read your alarm clock without fumbling for your glasses. The freedom to exercise without worrying about your contact lenses. And the freedom to see clearly all day, every day.

To Schedule A Free Consultation
Or For More Information, Call:

216.445.8585 or toll free 800.223.2273,
ext. 58585

Or visit one of the following Cleveland Clinic
Regional Ophthalmology offices:

Beachwood 216.831.0120

Strongsville 440.878.2500



Treatment Options

Which laser vision correction procedure is right for you?

After your initial consultation, your surgeon will make treatment recommendations based on the type and severity of your refractive error and the health of your eye. LASIK and PRK are the two most common types of laser vision correction being performed today.

LASIK with IntraLase:

In laser in-situ keratomileusis (LASIK) with IntraLase, a thin flap is created in the top layer of the cornea and the underlying tissue is reshaped by the laser. The flap is then replaced and serves as a buffer to protect the newly treated tissue from irritants, such as your blinking eyelid. Visual recovery and healing are more rapid than in most other procedures. This new generation of LASIK, not yet widely offered, is the most advanced equipment available today. Its greater accuracy and control lead to better outcomes and has led Cole Eye Institute experts to solely use this blade-less technique on all patients seeking LASIK laser vision correction.

PRK:

The next most common refractive procedure is photorefractive keratectomy, or PRK. This procedure also utilizes an excimer laser to reshape the cornea, but instead of lifting a small flap to reach the sub-layer of the cornea, the outer layer is removed completely. This skin layer regrows in about 3 to 5 days; your surgeon may have you wear a “bandage contact lens” for a few days to shield the newly treated surface from irritants such as your blinking eyelid.

With PRK, good vision does not return as quickly as it does with LASIK and patients experience slightly more discomfort while healing. However, our surgeons do recommend some patients undergo PRK instead of LASIK because it ultimately leads to better long-term results in some types of eyes.



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Why is My Vision Poor?

Clear vision depends on how light rays are focused, or “refracted,” inside the eye. The shape of the cornea, the power of the lens and the length of the eyeball all determine how well the eye refracts light.

In a normal eye, the light is focused sharply on the retina and a clear image is seen at all distances. In people with refractive disorders, a disproportionally shaped eye causes the light to focus in front of or behind the retina, making objects appear blurred.

There are four common types of refractive disorders:

Nearsightedness

Nearsightedness (myopia) occurs when the cornea is too steep or the eyeball is too long, allowing light rays to focus in front of the retina instead of directly on it. Images of distant objects are blurred, but close objects may be clear.

Farsightedness

Farsightedness (hyperopia) results when the cornea is too flat or the eyeball is too short so that light rays focus directly behind the retina, causing near objects to appear blurred. Farsighted people cannot focus on distant or near objects.

Astigmatism

Astigmatism occurs when the curvature of the cornea is uneven and is shaped more like the back of a spoon than a normal round eyeball. This irregularity creates multiple focal points in the eye and makes it difficult to clearly focus on an object.

Presbyopia

Presbyopia occurs in middle age when the lens inside the eye loses elasticity and is no longer able to focus on near objects. The majority of people over age 40 will need reading glasses to read small print or to see small, poorly lit objects. Refractive surgery does not affect the natural progression of presbyopia.

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Frequently Asked Questions

Q: Can I drive myself home after surgery?

A: No. Your vision may be blurry and hazy for a few days, which could make it difficult for you to drive safely. Some people are able to drive the next day to their follow-up appointment, however. Use your own judgment.

Q: How many follow-up appointments will I have?

A: You will have follow-up appointments at 1 day after surgery, 1 week after surgery, 1 or 3 months after surgery, and occasionally 6 months after surgery. The cost of these visits is included in your surgical fee.

Q: How long does the surgery actually take?

A: The actual procedure takes less than 20 minutes. Depending on your prescription and the amount of correction your eyes require, the laser itself is only on each eye for less than a minute, but plan on being in the refractive suite for 2-3 hours.

Q: Can I fly on an airplane after LASIK?

A: It is safe to fly after surgery but your eyes may be more dry than normal and require frequent use of artificial tears.

Q: Does the procedure hurt?

A: Most people have mild irritation for a few hours after LASIK. Some people compare it to wearing dirty contact lenses. Tylenol may help. Also, the eyedrops your surgeon will recommend will be helpful too. We suggest patients go home and relax with their eyes closed for a few hours after surgery. Taking a nap is a good way to do this. Do not rub your eyes. If you experience excessive redness or severe pain, call our office. With PRK, patients will experience slightly more discomfort with healing.

Q: Will I have to have the procedure again later in life?

A: It is unlikely that you will need to have any additional laser vision correction once your vision is stable several months after your procedure.

Q: I have an astigmatism. Can you treat me?

A: We can correct nearsightedness, farsightedness and astigmatism in most patients.

Q: Do you usually treat both eyes at once?

A: Yes. When laser vision correction was new, many surgeons chose to treat your eyes on different days as a safety precaution. However, now the technology is so advanced that most patients prefer to minimize the time off work and reduce the amount of healing time they experience after laser vision correction, so they have both eyes done at the same visit. Also, many patients reported headaches, disorientation and other discomforts from having one eye corrected and the other one not. So, if there are no problems when we treat your first eye, we feel comfortable treating the second one right away.

Q: Is it true there is a burning smell during the procedure?

A: Some patients notice a smell similar to burned hair during the time the laser is treating the eye. It is normal and passes quickly.

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Frequently Asked Questions

Q: Can my spouse watch the surgery being performed?

A: Observers are not allowed in the procedure room. They can wait in our waiting area.

Q: Will you validate my parking?

A: Yes, bring your parking ticket in with you and we will validate it.

Q: Can you do the procedure if I am sick the day it is scheduled?

A: Maybe. Call us to discuss how you are feeling and we will make the decision then.

Q: What should I do with my old glasses after I no longer need them?

A: You can leave them in a basket in our office and we will donate them to a vision charity.

Q: How do I get started?

A: Call our office at 216.445.8585 to schedule a free consultation with our team of laser vision correction experts.

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Our Surgeons



Ronald R. Krueger, M.D.
 Dr. Ronald R. Krueger has been Medical Director of the Department of Refractive Surgery at the Cleveland Clinic's Cole Eye Institute since 1998. He received his medical degree from the University of Medicine and Dentistry of New Jersey

in 1987. He completed his ophthalmology residency at Columbia-Presbyterian Medical Center of New York and completed fellowships in cornea and refractive surgery at the University of Oklahoma and the University of Southern California, Los Angeles. Prior to joining The Cole Eye Institute, he was associate professor of ophthalmology at the Saint Louis University Eye Institute.

He is a co-editor of the first book on Wavefront Customized LASIK surgery, entitled "Customized Cornea Ablation," and is a founding organizer of the first conference on Wavefront Customized LASIK surgery, which is held annually around the world. He is also an associate editor for the Journal of Refractive Surgery.

Dr. Krueger has performed thousands of refractive surgery procedures, including laser in-situ keratomileusis (LASIK), photorefractive keratectomy (PRK), astigmatic keratotomy (AK) and advanced corneal transplant surgery.



Steven E. Wilson, M.D.
 After five years as professor and chair of ophthalmology and the holder of the Grace E. Hill Chair in Vision Research at the University of Washington in Seattle, Steven E. Wilson, M.D., returned to The Cole Eye Institute as director of corneal research

in September 2003. He previously was a member of the Eye Institute's staff from 1995 to 1998.

In addition to his research duties, Dr. Wilson performs a wide range of laser vision correction procedures and treat patients with corneal and external diseases.

Dr. Wilson received his masters degree in molecular biology and biochemistry from the University of California, Irvine, and his medical degree from the University of California, San Diego. He served his residency at the Mayo Clinic, Rochester, MN, and his fellowship in cornea, external disease and refractive surgery at the Louisiana State University Eye Center, New Orleans. He then joined the Department of Ophthalmology at the University of Texas Southwestern Medical Center in Dallas.

Dr. Wilson is recognized as one of the world's leading cornea and refractive surgery specialists. He is a member of the Executive Board of the International Society of Refractive Surgery-American Academy of Ophthalmology.



William J. Dupps Jr., M.D., Ph.D.

Dr. William J. Dupps Jr., a refractive surgeon and corneal specialist, joined the staff of the Cole Eye Institute in July 2006.

Dr. Dupps earned his master's and doctoral degrees in biomedical engineering at

The Ohio State University in 1995 and 1998, respectively, followed by a medical degree in 2000 from the same institution. He completed a residency at the University of Iowa Department of Ophthalmology and Visual Sciences in 2004. He is the first fellow to complete a two-year Cornea, External Disease and Refractive Surgery Fellowship at the Cole Eye Institute.

He also completed a fellowship in ocular gene therapy at the National Eye Institute in 1996 and studied under a Medical Scientist Training Program Fellowship as a Presidential Fellow at The Ohio State University from 1997 to 2000.

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Our Surgeons

Dr. Dupps' memberships include the American Society of Cataract and Refractive Surgery, the American Academy of Ophthalmology, the Association for Research in Vision and Ophthalmology and the International Society of Optical Engineering.

In addition to seeing patients, Dr. Dupps, with the help of a National Institutes of Health career development grant, conducts multi-disciplinary research emphasizing application of engineering tools to the diagnosis and management of biomechanical disorders such as keratoconus and glaucoma. His work also focuses on developing diagnostic tools for optimizing corneal and refractive surgery.



Gregory S. Kosmorsky, D.O.

Dr. Gregory S. Kosmorsky rejoined The Cole Eye Institute staff in 2002 after spending two years in private practice. Previously, he was the director of the neuro-ophthalmology unit at The Cleveland Clinic for 14 years.

Dr. Kosmorsky earned his medical degree from The Philadelphia College of Osteopathic Medicine in Pennsylvania. He completed a residency in adult neurology at Temple University School of Medicine in Philadelphia and a residency in ophthalmology at The Cleveland Clinic Foundation. He completed a fellowship in neuro-ophthalmology at Washington University Medical Center in St. Louis.

His specialty interests are neuro-ophthalmology, cataracts, strabismus surgery and laser vision correction.



Michael Millstein, M.D.

Dr. Michael Millstein joined the Cleveland Clinic's Department of Ophthalmology in 1999. Prior to that, he was in private practice in the Cleveland area for 10 years. Dr. Millstein graduated from the University of Pennsylvania School of Medicine in 1986.

He served his residency in ophthalmology at the University of Cincinnati and an internship at Mount Sinai Hospital of Cleveland. He received a bachelor's degree in chemistry from Case Western Reserve University in 1982.

His specialty interests include cataracts, glaucoma and laser vision correction.



Allen S. Roth, M.D.

Dr. Allen S. Roth joined The Cleveland Clinic Department of Ophthalmology in 1999. Prior to that, he was in private practice in the Cleveland area for 12 years. Dr. Roth earned his medical degree from Case Western Reserve University School

of Medicine in 1983 and completed his ophthalmology residency training at Mt. Sinai Medical Center in Cleveland. He then did a fellowship in cornea surgery, anterior segment surgery and refractive surgery at Tulane University Medical Center in New Orleans. He earned a bachelor's degree in biology at Washington University in St. Louis.

Dr. Roth's specialty interests include corneal transplantation, laser vision correction and cataract surgery.

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Expectations

How well you see without glasses or contact lenses following laser vision correction depends in part on your vision before the procedure. In most cases, you will be able to obtain the same vision correction with laser surgery as you had with glasses or contact lenses.

People with mild prescriptions generally have the best success in obtaining normal vision after the procedure. People with more severe vision prescriptions may require glasses or contact lenses for some situations, such as night driving.

Success rates at The Cole Eye Institute are very high. Our surgeons have performed thousands of procedures and complication rates are less than 1 percent.

Most people who undergo a procedure for vision correction agree that it has had a positive impact on their quality of life.

Are You A Good Candidate?

Laser vision correction is right for many people, but it is not for everyone. If many or all of the following statements are true for you, you may be a good candidate and should call 216.445.8585 to schedule a free consultation with our team of experts.

- ⊕ You are at least 18 years old.
- ⊕ You have had stable vision for the past 12 months.
- ⊕ You do not have a history of corneal disorders or diseases.
- ⊕ You have no significant medical or ocular problems and are not pregnant or nursing.
- ⊕ You dislike your glasses and do not find contact lenses comfortable or convenient.
- ⊕ You are athletic and feel your activities would be enhanced if you did not depend on glasses or contact lenses.
- ⊕ You worry about your ability to help in an emergency situation if you could not quickly find your glasses or contact lenses.
- ⊕ You would be happy if laser vision correction improved your vision significantly even if you still had to wear corrective lenses for some specific activities, such as driving at night.
- ⊕ You prefer how you look without glasses.
- ⊕ You are tired of the ongoing expenses of buying replacement contact lenses, solutions, cleaners, cases and spare eyeglasses and can view laser vision correction as a good long-term investment.

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Before Surgery

If you are considering having laser vision correction, the best way to learn more is to come in for a free consultation at The Cole Eye Institute.

Your consultation will begin with a meeting with one of our laser vision correction technicians. They will review your medical history with you and answer your initial questions. Next, we will perform basic tests of your eyes, including checking corneal thickness, assessing your refraction and possibly dilating your pupils. Then, you will watch a video that answers many questions about the procedure before you see a doctor who will examine your eyes and discuss which laser vision correction procedure would be best for you. Before you leave, you will spend a few minutes with one of our coordinators who can schedule your surgery and review payment options.

Do not wear your contact lenses for at least 3 days before your appointment (3 weeks if you wear rigid gas permeable lenses) and bring your glasses so we can review your prescription. Bring in your parking ticket so we can validate it.

On the day of your surgery, eat a light meal before coming and take all of your prescribed medications. Do not wear eye makeup or have any bulky accessories in your hair that will interfere with positioning your head under the laser. If you are not feeling well that morning, please call to discuss whether your procedure needs to be postponed.

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Cole Eye Institute Laser Center

Cost Includes:

- Procedure
- Post-op surgery kit (eye drops, goggles, sunglasses)
- Evaluation, measurements and related follow-up appointments for one year
- Enhancements needed in the first year of original surgery and related follow-up appointments for one year

Payment Notice:

- Financial payment must be completed on the day of surgery. Payments are accepted in the form of check, MasterCard, Visa, American Express or Discover. Financing available.

Contact Information:

Don Kless
Financial Counselor

9500 Euclid Avenue / i20
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Phone: 216.444.9104
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