

Patient Information

Please read this entire booklet. Discuss its contents with your doctor so that all your questions are answered to your satisfaction. Ask any questions you may have before you agree to the treatment.



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Facts you need to know about Laser In Situ Keratomileusis (LASIK) and Photorefractive Keratectomy (PRK) Treatment

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Introduction

The information in this Patient Information Booklet (Booklet) is to help you understand laser vision correction for nearsightedness (myopia), farsightedness (hyperopia), and/or astigmatism. LASIK (laser in situ keratomileusis) is the laser vision correction procedure doctors and patients most frequently choose. Some doctors may choose other vision correction procedures, depending on the condition of your eyes. Other procedures available at LasikPlus Vision Centers are PRK (photorefractive keratectomy) and Epi-LASIK (laser assisted sub-epithelial keratomileusis) (also called LASEK, E-LASIK, Epi-LASEK).

Please read this entire Booklet carefully. Discuss any questions with your doctor before you decide if laser vision correction is right for you. You need to understand the risks and benefits of the procedure before making a decision to have surgery. Only eye care professionals trained and certified in this type of treatment should determine whether or not you are a suitable candidate for laser vision correction. If you are a suitable candidate, your eye care professional will assist you in deciding which laser vision correction procedure is best for you.

How the Eye Functions

The cornea and lens of the eye focus light like a camera lens to form an image on the retina. The cornea, where light first enters, provides about two thirds of the eye's focusing power, and the lens inside the eye provides the other third. Variations in the shape of the eye are perfectly natural, although degrees of variation affect how well we see. Laser vision correction can be used to treat three of the most common focusing problems: myopia (nearsightedness), hyperopia (farsightedness), and astigmatism.

Myopia (nearsightedness) – Myopia, or nearsighted vision, results when the eyeball is too long or when the front and center surface of the eye (cornea) is curved too much. Light will focus in front of the retina, causing blurred vision.

Hyperopia (farsightedness) – Hyperopia, or farsighted vision, occurs when the eyeball is too short or the corneal curvature is too flat, causing light to focus behind the retina. Hyperopia is sometimes confused with presbyopia, an age-related change in vision causing the need for reading glasses.

Astigmatism – Astigmatism occurs when the eyeball is oblong (football shaped). In this condition light cannot be focused properly anywhere. Astigmatism is often present along with myopia and hyperopia.

Presbyopia – Patients over 40 to 45 years of age may have difficulty with their reading vision, while their distance vision is clear. This happens as the natural lens loses its ability to change the eye's focus from distance to near. Use of reading glasses helps the eyes to re-focus after LASIK, PRK, or Epi-LASIK.

What is Refractive Surgery?

The term refractive surgery describes various procedures that modify the refractive error of the eye. Most of these procedures involve altering the cornea and are collectively referred to as keratorefractive surgery, refractive keratoplasty, or refractive corneal surgery. Refractive surgery may be considered when a patient wishes to be less dependent on spectacles or contact lenses, or when there are occupational or cosmetic reasons not to wear spectacles. Refractive surgery is an elective procedure. The surgeon must provide thorough informed consent of its risks, benefits, alternatives, and limitations. The outcome of refractive surgery is not totally predictable; glasses or contact lenses may be necessary to obtain satisfactory distance vision after surgery, and reading glasses will be required by postsurgical patients who are presbyopic. Subjective visual function and patient satisfaction do not always correlate with objective measurements.

What is Laser Vision Correction (LVC)?

Laser vision correction (LVC) uses an excimer laser to correct nearsightedness (myopia), farsightedness (hyperopia), astigmatism, nearsightedness with astigmatism, and farsightedness with astigmatism.

The procedure is remarkably fast. The excimer laser produces a powerful beam of ultraviolet light. The computer-guided laser is controlled by the doctor and emits cool pulses of ultraviolet light, while cleanly, precisely, and smoothly removing a small amount of tissue at the front of the eye. The procedure is designed to correct and resculpt the corneal curvature, allowing light to properly focus on the retina resulting in improved, clearer vision. Since a layer smaller in thickness than a human hair is typically removed, the cornea usually maintains its original strength. Excimer laser light is designed not to penetrate the eye, therefore leaving other eye structures (iris, lens, retina) undisturbed.

If you are a qualified candidate, your doctor will determine with you which method of laser vision correction is best for you.

What is Refractive Surgery for Myopia?

The most commonly performed procedures for low to moderate myopia utilize the excimer laser, which was first approved for this purpose by the United States Food and Drug Administration (FDA) in 1995. Photorefractive Keratectomy (PRK) was the first procedure performed; subsequently, laser in situ keratomileusis (LASIK) has become the most commonly performed keratorefractive surgery. Other keratorefractive procedures to correct low to moderate myopia currently include laser epithelial keratomileusis (LASEK or Epi-LASIK), and insertion of intrastromal corneal ring segments.

High myopia is less likely to be fully corrected by keratorefractive surgery than low to moderate myopia. Because of the greater functional impairment experienced by highly myopic patients, however, the potential limitations of keratorefractive surgery may be more acceptable. Alternative procedures to correct high myopia include clear lens extraction and phakic intraocular lens (IOL) implantation (currently under FDA investigation). Implantation of intracorneal alloplastic inlays to correct myopia also is under investigation. Epikeratoplasty, automated lamellar keratoplasty, and radial keratectomy have been largely abandoned.

What is LASIK?

LASIK, which means Laser In Situ Keratomileusis, is a surgical procedure in which a hinged flap consisting of corneal epithelium and superficial stroma is created. After the corneal flap is created, a tissue-ablating excimer laser is used to reshape the exposed corneal stroma, and the flap is repositioned. The anterior corneal surface can be altered to modify a patient's refractive error by varying the degree of corneal tissue removal beneath the flap. The corneal tissue has natural bonding qualities that allow effective healing without the use of stitches.

What is Photorefractive Keratectomy or PRK?

In PRK, the epithelium is removed either mechanically, chemically, or by laser. After removal of the central corneal epithelium, the excimer laser is used to remove corneal stroma over the entrance pupil. The laser can alter the anterior corneal curvature to modify a particular refractive error by varying the ablation pattern. The laser delivery methods currently being utilized to achieve the ablation pattern are broad beam, scanning slit, or flying spot systems. Recently, eye-tracking technology has been incorporated into some excimer laser systems, which permits the ablation to remain centered on the pupil despite small ocular movements. Systems that adjust the excimer beam pattern based on an individual's corneal topography and/or Wavefront analysis ("custom ablation") are becoming available.

What is Epi-LASIK or LASEK?

Instead of mechanically removing the eye's surface tissue (as in PRK) or creating a flap of the cornea (as in LASIK), in Epi-LASIK (which may be an off-label use of the excimer laser) a portion of the surface tissue is lifted from the eye's surface. The laser is applied and the part of the surface tissue that was lifted is put back in place. A bandage contact lens is applied after the procedure.

Benefits

Laser vision correction is often the solution for many individuals who are dependent upon contact lenses and eye glasses to see clearly. Laser vision correction in many patients can effectively eliminate or reduce nearsightedness, farsightedness, and/or astigmatism resulting in decreased dependency on corrective lenses.

Contraindications and Relative Contraindications

Contraindications

- Unstable refraction
- Certain abnormalities of the cornea (e.g., keratoconus or other corneal ectasias, thinning, edema, interstitial or neurotrophic kerotitis, extensive vascularization)
- Abnormal corneal topography suggestive of keratoconus or other corneal ectasias
- Insufficient corneal thickness for the proposed ablation depth
- Irregular astigmatism (e.g., corneal warpage)
- Visually significant cataract
- Uncontrolled glaucoma
- Uncontrolled external disease (e.g., blepharitis, dry eye, atopy/allergy)
- Uncontrolled connective tissue or autoimmune disease
- Unrealistic patient expectations
- Orbital, lid, or ocular anatomy that precludes proper function of the microkeratome

Relative Contraindications

- Functional monocularity (Having only one useful eye)
- Ocular conditions that limit visual function
- Overly steep or flat corneas
- Corneal stromal or endothelial dystrophies

- Poor epithelial adherence, anterior basement membrane dystrophy, or recurrent erosion syndrome
- History of herpes simplex or herpes zoster keratitis
- Dry eye syndrome
- Prior incisional or lamellar keratorefractive surgery
- Pupil diameter in dim illumination that is greater than the planned ablation diameter
- Glaucoma
- Poorly controlled diabetes mellitus or ocular complications of diabetes mellitus
- Pregnancy or lactation
- Connective tissue or autoimmune diseases, systemic immunosuppression
- Certain systemic medications (e.g., isotretinoin, amiodarone, sumatriptan, levonorgestrel implants, colchicines)
- Under 18 years of age
- Significant occupational or recreational risk for corneal trauma

Precautions

The safety and effectiveness of the excimer laser system have NOT been fully established in:

- Eyes with corneal disease or abnormality (e.g. scar, infection, etc.).
- Eyes with previous surgery or injury to the center of the cornea where laser vision correction will be performed.
- Eyes with progressive nearsightedness, farsightedness, or astigmatism.
- Eyes with abnormal blood vessels near the corneal area to be treated.
- Patients under 18 years of age for mild nearsightedness and under 21 years of age for high nearsightedness with or without astigmatism.
- Patients who are taking drugs for migraine (e.g. Summitripin, Imitrix).
- Patients who have a tendency to form excessive scarring or keloids.
- For PRK in patients with severe myopia (such as nearsightedness greater than -12.0 D), severe hyperopia (such as farsightedness greater than +5.0D), or severe refractive astigmatism (such as greater than +4.0 D).
- For LASIK in patients with severe myopia (such as nearsightedness greater than -14.0 D), severe hyperopia (such as farsightedness greater than +5.0D), severe refractive astigmatism (such as greater than +3.0 D) or mixed astigmatism (such as greater than 6.0 D), or patients with thin corneas.
- Patients taking hormone replacement therapy or antihistamines who may experience delayed re-epithelialization and dry eyes of the cornea following surgery.
- Patients who have had prior incisional refractive surgery.
- Retreatment of farsightedness with astigmatism.

While the effects of laser vision correction on visual performance under poor lighting conditions have not been determined, some data suggest that laser vision correction may cause certain deficits in low light vision and loss of contrast sensitivity. While matching the treatment zone to the pupil size in dim light may reduce the risk, following laser vision correction, you may find it more difficult than usual to see as well in conditions such as very dim light, rain, snow, fog, or glare from bright lights at night. You are more likely to experience symptoms if you are a person who has large pupils.

General Risks

Laser vision correction has undergone extensive scrutiny from public health agencies and medical professionals. After more than a decade of research, complications seriously affecting vision are not frequently reported. Potential risks include: a decrease in your best corrected vision compared to before your treatment; the treatment may cause or worsen visual problems or symptoms you did not have before the procedure; potential infection or inflammation of the cornea or other parts of the eye due to removal of tissue from the front surface of the eye; and potential perforation of the eye due to the microkeratome's creation of the corneal flap, which could lead to the formation of cataracts, infection and loss of fluid, among other risks. Inherently no surgery is absolutely safe or without risk. As with all medical procedures, there are challenges and risks associated with laser vision correction (as discussed in the previous sections) and you should discuss these risks with your doctor before undergoing any laser vision corrective procedure.

Vision recovery may take longer than expected, requiring an enhancement procedure or reliance on eye glasses or contact lenses to be optimal. Although uncommon, vision may not recover completely due to a complication.

Surgical Risks and Possible Side Effects

Dry Eye and Flap Surface Irritation– LASIK involves the creation of a microthin flap on the outer surface of the cornea. The making of the flap produces a mild decrease in corneal sensitivity for a period of time after LASIK. During this time, the use of topical artificial tears and gels may be needed to lubricate the surface cells that protect the corneal flap. You may also experience dryness after laser vision correction. In some cases, this dryness will cause severe irritation, discomfort, and blurring of vision that may last for weeks or even months. A doctor may recommend punctual plugs or other remedies for treatment of a dry eye condition. These plugs block the tear duct on an either temporary or permanent basis.

Corneal Edema– The creation of the flap causes microscopic amounts of swelling within the corneal tissue. This swelling may cause night glare and transient fluctuations of vision. Edema generally subsides during the recovery period.

Abrasions– Surface cells that protect the corneal flap may become irritated or slough off during the procedure. Mild abrasions generally heal and typically do not cause problems with vision. Larger abrasions require the application of a bandage contact lens and may take several days or longer to heal. Visual acuity generally improves as the corneal surface heals.

Under or Over Correction– Most myopic treatments stabilize at three (3) months, whereas most hyperopic patients take longer. PRK treated patients may also take longer to stabilize. If there is a significant amount of nearsightedness, farsightedness, or astigmatism remaining three months after surgery, an enhancing treatment may be considered to fine tune the result. The benefits and risks of an enhancement should be discussed with your doctor. Unintended under or over correction occurs in a small percentage of cases, especially in patients with more severe corrective disorders. Continued use of glasses or contact lenses after the enhancement surgery has been performed may be required. Dependence on reading glasses is also a possibility, even if they were not needed before the procedure. If reading glasses were required before the procedure, they will likely continue to be required after the procedure.

Corneal Flap Complications- The microkeratome creates a thin corneal flap, which allows access to the inside of the cornea where the laser reshapes the cornea. Occasionally the flap is too short, not uniform, too thin, or incomplete, thus not allowing the treatment to be completed. A partial or irregular flap may result in a situation which induces a corneal scar or haze and may cause a loss in best corrected visual acuity (BCVA). Also it is possible that a partial or irregular flap may cause the refractive procedure to be stopped and not be performed at all thereafter. After the partial or incomplete flap is replaced and allowed to heal, plans may be made to complete the full treatment. In addition, traumatic injury to the cornea early in the healing process can result in a dislodged flap. Epithelium or corneal surface cells may grow under the flap which may induce edema, swelling, inflammation, or astigmatism. This may necessitate lifting the flap and removing the ingrowth if possible. A corneal flap that is not suitable may result in postponement of the procedure, prolonged visual recovery, and/or temporary or permanent blurred vision. Other potential corneal flap complications include a corneal flap incision that results in a free flap. A free flap may increase the potential for prolonged visual recovery, blurred vision, and epithelial ingrowth. The most potentially serious risk is a corneal flap that is too deep, which results in perforation of the eye and possible loss of some or all vision. Patients who choose the All-Laser Lasik with IntraLase reduce the risk of corneal flap complications. With IntraLase, the corneal flap is made using a precise computerguided laser, rather than the hand-guided microkeratome's metal blade. This technology gives the surgeon greater control, precision and accuracy which reduces the risk of corneal flap complications.

Ectasia– The occurrence in which the cornea becomes too thin and irregularly shaped. This may require a hard contact lens to improve visual acuity and if thinning continues the cornea may need to be replaced.

Glare and or Halos– Two possible reasons for night glare and halos include edema from the healing process and pupil size as it relates to the laser treatment area. This occurs commonly in the early healing process. Glare and/or Halos from healing typically improve over the first 2-6 weeks. Permanent glare and halos can remain after 3 to 6 months. In some cases this problem may be corrected with "custom" laser treatment. Consult with the doctor to find out what treatment is best for you.

Infection– Although infrequently reported, infection is a possible risk during the healing of the cornea. The chances of experiencing an infection are greatest during the first few days after surgery has been performed. There may also be some additional risk of infection if both eyes are treated on the same day. Infection may be preventable with antibiotic drops. If an infection occurs and leaves a corneal scar or if an unusual healing process occurs without a clear cornea, your best corrected visual acuity could be affected. Infection could also cause loss of some or all vision.

Loss of Best Corrected Visual Acuity– For most patients, visual acuity has stabilized in about 3 months, although full recovery, especially for PRK and hyperopic patients, may take longer. In some patients this may take up to 12 months. A small percentage of patients, however, develop irregular corneas that reduce the sharpness, clarity and crispness of their vision. These patients may not be able to read the last 2 or more lines of the eye chart that could be read with corrective lenses before surgery, regardless of corrective lens assistance. This is called loss of best corrected visual acuity.

Change in or Inducing Astigmatism– Laser vision correction may also result in a change in astigmatism that could require the use of glasses and/or contact lenses. There is also a risk of inducing astigmatism or of astigmatism appearing in an entirely different part of the cornea than before the procedure. **Haze** After the procedure, some patients experience haze (or corneal cloudiness), which seems as though one is looking through a dirty window. Haze is not the initial blurriness experienced immediately after treatment. Rather, haze may become evident in the weeks and months after surgery. The risks of haze are lower after LASIK than PRK or Epi-LASIK. Haze, which is produced by scarring of the cornea during the healing process, may be persistent or recurrent and require further surgeries. Haze may also produce loss of visual sharpness or clarity and/or decrease in best corrected visual acuity.

Decreased Night Vision– Vision may not seem as sharp at night as during the day and may require the use of booster eye glasses at night. High myopic patients are at a greater risk of experiencing these effects, as are patients with large pupils.

Increased Sensitivity– There may be increased sensitivity to light, glare, and fluctuations in the sharpness of vision. These conditions usually occur during the normal stabilization period (1 to 3 months post-procedure), but they may also be permanent.

Blurriness– Blurriness is very common in the healing process and it generally takes 3 to 10 days to clear. It may take even longer in some cases.

Further Treatment – Further treatment may be necessary including eye drops, the wearing of glasses or contact lenses (hard or soft), or additional surgical or laser correction (enhancements).

Equipment Malfunction– There is a risk the microkeratome (in LASIK) or the excimer laser (in LASIK, PRK, and Epi-LASIK) could malfunction, requiring the procedure to be stopped before completion. In some instances, the malfunction may not be detected until after the procedure. Depending on the type of malfunction, this may or may not be accompanied by visual loss.

Rare Vision Threatening Complications— In some rare cases, corneal swelling, corneal thinning (ectasia), retinal detachment, hemorrhage, venous and arterial blockage, cataract formation, optic neuritis, total blindness and loss of an eye could occur. If the procedure is performed on only one eye, there may be a balance problem between the two eyes.

Other complications could occur beyond those mentioned in this Booklet. You should discuss with your doctor any additional questions or concerns you may have.

Are You a Good Candidiate for Laser Vision Correction?

A detailed screening process is used to determine whether laser vision correction is suited to the condition of your eyes, your overall medical situation, and your lifestyle. Candidates should be at least 18 years old with one year of stable vision, healthy eyes, and a refractive error within the range of effective treatment.

Most people who have nearsightedness, farsightedness, and/or astigmatism are candidates for laser vision correction.

What Happens Before Your Treatment (Pre-operative Evaluation)?

A comprehensive medical eye evaluation should be performed prior to any refractive surgery procedure. In addition to the elements of a comprehensive medical eye evaluation, the refractive surgery examination should include the following elements:

- Visual acuity without correction
- Computerized corneal topography
- Corneal pachymetry
- Measurement of pupil size in low-light conditions
- Evaluation of tear film
- Cycloplegic refraction

Because of the possibility of contact-lens-induced corneal warpage, patients who use contact lenses should discontinue their use for a period of time prior to the preoperative examination and procedure. As a general guideline, spherical soft contact lenses should be discontinued for several days, and toric soft lenses and rigid lenses should be discontinued until refractive and keratometric stability has been documented. Documentation of refractive stability increases the likelihood that the correction will be appropriate in the future. The LasikPlus medical staff will inform you of these details.

Corneal topography should be evaluated for evidence of irregular astigmatism, corneal warpage, or signs of asymmetric steepening, since all may be associated with unpredictable refractive outcomes and the latter with progressive ectasia following surgery.

Prior to surgery, pachymetry should be obtained and an estimate of the thinnest residual stromal bed following LASIK should be calculated. While 250 µm has been suggested as a safe residual stromal bed thickness, there is no absolute value that guarantees that ectasia cannot occur. The risk of postoperative ectasia may increase with decreasing stromal bed thickness and may also be influenced by other factors yet to be identified.

What Happens On the Day of Your Treatment?

- Try to avoid caffeine, diet pills, workout stimulants or antihistamines, as these substances may affect pupil size.
- Wear comfortable clothing. All make-up should be removed from the operative eye(s) prior to treatment. Also, you should not wear any perfumes or colognes on the day of treatment.
- Prior to your treatment, you will receive drops in the operative eye(s) to prevent discomfort. You may experience some discomfort during the laser treatment. You may be offered medication to calm you during the procedure, which you are free to decline should you so choose.
- The non-operative eye may be patched or taped closed to better align the eye being treated.
- It will take a few minutes to properly position you under the microscope. Your physician will then insert an eyelid holder to prevent blinking.
- You will be asked to focus on a flashing light throughout the procedure. Your physician will monitor your eye through the microscope at all times.
- If you are undergoing LASIK, there will be two parts to your treatment. During the first part, the physician will place an instrument on your eye that will hold your eye still during creation of the flap. You will hear a sound and feel suction on your eye. Your vision will begin to dim and you will lose sight of the flashing light. Your vision will return after the suction ends.
- In the second part of the LASIK procedure, you will hear another vacuum sound accompanied by a metallic tapping sound as the laser gently alters the refractive curvature of your eye. After the laser treatment, your corneal flap will be repositioned.

- Immediately after the treatment, antibiotic and anti-inflammatory drops are placed in the treated eye(s). A shield may be placed over treated eye(s).
- For PRK and Epi-LASIK procedures, the procedure will be much the same, except in PRK no flap is being created and in Epi-LASIK a small surface flap is created instead, just over the area of the eye to be treated with the laser. A "bandage" contact lens will be placed over treated eye(s) after the procedure is finished to aid the eye's healing process.
- You may be asked to remain at LasikPlus Vision Center for a short time after your procedure so that your physician can ensure that everything is stable before sending you home.
- Please go directly home after your treatment. Arrange for friend or family to drive you home after the procedure. Do not drive yourself. You should rest for about 4 hours.

What Happens After Your Treatment?

- You will use antibiotic and anti-inflammatory drops following your laser vision correction. Written instructions will be given the day of your treatment. These are very important.
- Do not rub or squeeze your eye(s). This has been known to cause discomfort and possible damage. You may experience the following sensations after your treatment:

Burning– This usually occurs within the first 2-24 hours. It may feel like sand in your eye(s).

Watering/Tearing- Your eye(s) may water, or tear, for the first couple of days. Remember not to touch or rub your eye(s).

Red/Swollen Eye(s)— Your eye(s) may be slightly red and swollen during the first 48 hours. This is normal.

Blurriness- Your vision may be blurry for the first 48 to 72 hours and will gradually clear. You may notice a significant improvement by the end of a few days.

Ghosting/Glaring– During the first few weeks, your vision may fluctuate slightly or you may experience some ghosting or glare. This is normal and will usually improve. It should not interfere with your daily activities.

Light Sensitivity- You may experience increased sensitivity to light for the first few days to weeks after treatment. A good pair of sunglasses will help.

Red Spots- You may notice one or more bright red spots on the white of the eye. This is a bruise caused by the suction device and is generally harmless. It typically takes 7–10 days to go away.

- If you wear glasses and had only one eye treated, you may want to remove the lens on the operated side. If you wish to have plain glass put in your frame for balancing or cosmetic reasons, any optical store can provide this service for a nominal fee. If you are a contact lens wearer, you may wear your contact lens in your untreated eye.
- After LASIK, the surface of the cornea usually heals within the first 24 to 48 hours following LASIK treatment.
- You should not drive for 24 hours after treatment.
- Most patients return to normal activities including work and exercise in 24-48 hours. Avoid swimming for three weeks. In addition, please discuss with your doctor your regular activities to assess whether you should temporarily delay such activities. Eye make-up can usually be resumed one week after laser vision correction. Ask your doctor for more details.

Questions and Answers About Laser Correction of Nearsightedness, Farsightedness and Astigmatism

Q What is Nearsightedness?

A If you are nearsighted, you cannot see things clearly in the distance. This condition occurs when the cornea, which is located on the front part of the eye, is too steeply curved or if the eye is too long. Because of this curvature, light entering the eye focuses in front of the retina instead of on it. This causes blurry vision.

Q What is Farsightedness?

A If you are farsighted, you cannot see things clearly up close. This condition occurs when the eyeball is too short or the corneal curvature is too flat, causing light to focus behind the retina.

Q What is Astigmatism?

Astigmatism occurs when the eyeball is oblong (football shaped). In this condition, light cannot be focused properly anywhere. Astigmatism is often present along with nearsightedness and farsightedness.

Q How Does Laser Vision Correction Improve Nearsightedness, Farsightedness, and/or Astigmatism?

A Laser vision correction uses cool pulses of ultraviolet light to cleanly, precisely, and smoothly remove a very small amount of corneal tissue at the front of the eye. This corrects the problem reshaping of the cornea and allows light to properly focus on the retina. The result is improved, clearer vision.

Q Who Performs Laser Vision Correction?

A The lasers are computer-controlled and operated by ophthalmologists specially trained and credentialed to perform the procedure. Because the training, skill and experience of attending ophthalmologists and other personnel is important to the outcomes of laser vision correction, the LasikPlus clinical and management services cover training laser vision correction for ophthalmologists, optometrists, nurses and technicians.

Q Will I Be Able To See Right Away?

A In most circumstances, you will have improved vision immediately following treatment. In fact, many patients return to work the next day. Your vision should continue to improve as your eye heals and adjusts to its new shape.

Q Is Laser Vision Correction Safe?

As with all medical procedures, there are challenges and risks involved with laser vision correction. The procedure has passed extensive scrutiny from public health agencies and medical professionals.

Q When Did Laser Vision Correction First Receive FDA Approval?

A The FDA approved the excimer laser used in laser vision correction for patients with mild to moderate cases of myopia (nearsightedness) was in October 1995. For more information regarding laser vision corrective procedures and the lasers used for such procedures, you can visit: www.fda.gov/cdrh/lasik.

Q What About Risks and Side Effects?

A As with any medical procedure, some risk is involved. A small percentage (by normal surgical standards) of laser vision correction patients experience complications or side effects. Among the documented side effects are infection; post-operative discomfort; corneal abrasions; corneal haze which occurs during healing; glare or halos; or unintended over- or under-correction. Permanent or disabling vision loss is infrequent but has been reported in a small percentage of patients. Causes of permanent or disabling vision loss that have been reported include severe dryness; severe quality of vision loss; inflammation under the flap (known as DLK); infection; corneal haze or scarring; surface (epithelial) cells under a flap; lasik flap complications; corneal weakness (ectasia); damage to the corneal surface (called epithelial basement membrane dystrophy); retinal bleeding and optic nerve damage.

Please see the "General Risks" and "Surgical Risks and Possible Side Effects" sections of this Patient Information Booklet for more information about risks associated with laser vision correction.

Q Does Laser Vision Correction Hurt?

A Anesthetic eye drops generally render the procedure itself virtually painless. Some patients may experience discomfort similar to sand in the eye for several days after the treatment.

Q How Much Does Laser Vision Correction Cost?

A The cost of laser vision correction is reasonable compared to the ongoing expenses usually associated with glasses or contacts and often more than pays for itself over a several year period.

Q Who is LasikPlus[®]?

A LasikPlus, a pioneer in laser vision correction, provides advanced laser technology and facilities for some of America's leading ophthalmologists. LasikPlus Vision Centers are owned by LCA-Vision Inc., one of the largest U.S.-based providers of laser vision correction facilities. LCA-Vision Inc. is listed on Nasdag under the ticker symbol LCAV. Innovation in medicine is essential to assure the future health of the American public, and LasikPlus encourages the development of new diagnostic and therapeutic methods that will improve eve care. It is essential to recognize that true medical excellence is achieved only when the patients' needs are the foremost consideration. Practice patterns are reviewed by LasikPlus and updated.

The Eye

NORMAL EYE



NEARSIGHTED EYE





 NEARSIGHTED and ASTIGMATIC EYE

 Light
entering
eye

 Cornea

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Astigmatism corrections bring all rays of light from different focal points to one focal point. Astigmatism may be all myopic (nearsighted), hyperopic (farsighted), or a combination of both (mixed). PRK and LASIK treatments correct astigmatism by altering the central cornea by different amounts at different radial orientations to correct for the uneven focus of light rays.



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