FTC FACTS for Consumers

Basik Lasik: Tips on Lasik Eye Surgery

If you're tired of wearing glasses or contact lenses, you may

be considering Lasik eye surgery – a procedure to correct

vision problems. Before you sign up for the surgery, get a

clear picture of what you can expect.



Understanding Your Eyes

To see clearly, the cornea and the lens must bend – or refract – light rays so they focus on the retina – a layer of light-sensing cells that line the back of the eye. The retina converts the light rays into impulses that are sent to the brain, where they are recognized as images. If the light rays don't focus on the retina, the image you see is blurry. This is called a refractive error. Glasses, contacts and refractive surgery try to reduce these errors by making light rays focus on the retina.

Refractive errors are caused by an imperfectly shaped eyeball, cornea or lens, and are of three basic types:

- myopia nearsightedness; only nearby objects are clear.
- hyperopia farsightedness; only objects far away are clear.
- *astigmatism* images are blurred, regardless of whether they are near or far away.

There's also presbyopia – "aging eye," a condition that usually occurs between ages 40 and 50, and that can be corrected with bifocals or reading glasses.

Are You a Good Candidate for Lasik?

Lasik is not for everyone.

- You should be at least 18 years old (21 for some lasers), since the vision of people younger than 18 still is changing.
- You should not be pregnant or nursing; these conditions might change the measured refraction of the eye.
- You should not be taking certain prescription drugs, such as Accutane or oral prednisone.

- Your eyes must be healthy and your prescription stable. If you're myopic, you should postpone Lasik until your refraction has stabilized, because myopia may continue to increase in some patients until their mid- to late 20s.
- You should be in good general health. Lasik may not be recommended for patients with diabetes, rheumatoid arthritis, lupus, glaucoma, herpes infections of the eye, cataracts, keracotonus (a disorder of the cornea), and retinal disease. Discuss your general health status with your surgeon.
- If you have had problems with "dry eye," either from wearing contact lenses or another reason, talk with your eye doctor about how this could impact Lasik.
- Weigh the risks and rewards. If you're happy wearing contacts or glasses, you may want to forego the surgery.
- Understand your expectations from the surgery. Are they realistic? In general, having very poor eyesight reduces the chance of Lasik success and increases the chance of retreatment.
- Ask your doctor if you're a candidate for monovision – correcting one eye for distance vision and the other eye for near vision. Lasik cannot correct presbyopia so that one eye can see both near and far. However, it can be used to correct one eye for distance and the other for near. If you can adjust to this correction, it may eliminate or reduce your need for reading glasses. In some instances, surgery on only one eye is required.
- Discuss workplace requirements and lifestyle activities, like sports and recreation, with your doctor to make sure Lasik is appropriate for you.

Finding a Surgeon

Only ophthalmologists (Eye MDs) are permitted to perform Lasik. Ask your Eye MD or optometrist for a referral to an Eye MD who performs Lasik. The AAO website (geteyesmart.org) has a feature that can provide you with a list of their members who perform Lasik. Ninety-five percent of all ophthalmologists are AAO members. The International Society of Refractive Surgery website (LocateAnEyeDoc.com) also has names of refractive surgeons.

Ask your surgeon the following questions:

- 1. How long have you been doing Lasik surgery?
- 2. How much experience do you have with the Lasik procedure?
- 3. How do you define success? What's your success rate? What is the chance for me (with my correction) to achieve 20/20? How many of your patients have achieved 20/20 or 20/40 vision? How many patients return for retreatments? (A five to 15 percent return is not unusual.)
- 4. What laser will you be using for my surgery? Make sure your surgeon is using a laser approved by the U.S. Food and Drug Administration (FDA). Visit www.fda.gov/cdrh/LASIK for more information.
- 5. What's involved in after-surgery care?
- 6. Who will handle my after-surgery care? Who will be responsible?
- 7. What are the risks and possible complications?

Risks and Possible Complications

Before the surgery, your surgeon should explain to you the risks and possible complications, and potential side effects, including the pros and cons of having one or both eyes done on the same day. This is the "informed consent" process. Complications can include:

- over- or under-correction. These problems can often be improved with glasses, contact lenses and enhancements.
- corneal infection.
- a decrease in contrast sensitivity, "crispness," or sharpness. That means that even though you may have 20/20 vision, objects may appear fuzzy or grayish. This is referred to as "Lasik 20/20 or 20/40."
- flap problems, including: irregular or incomplete flaps, ingrowth of cells under the flap that may need to be surgically removed, and irregular healing that results in a distorted cornea, which can only be corrected with a corneal transplant.
- "loss of best corrected visual acuity"- that is, you would not be able to see as well after surgery, even with glasses or contacts, as you did with glasses or contacts before surgery.

The following side effects are possible, but usually disappear over time. In rare situations, they may be permanent.

- discomfort or pain
- hazy or blurry vision
- scratchiness
- dry eye
- glare
- haloes or starbursts around lights, and problems with night driving that may require glasses
- light sensitivity
- small pink or red patches on the white of the eye

Surgery: What to Expect Before, During and After

Before: You'll need a complete eye examination by your refractive surgeon. A preliminary eye exam may be performed by your referring eye care professional. Take your eye prescription records with you to the exams. If you wear contact lenses, stop wearing them (soft contact lenses – two weeks; toric soft lenses or rigid gas permeable lenses – three weeks; and hard lenses – four weeks) before your baseline evaluation, and switch to wearing your glasses full-time. Contacts can temporarily change the shape of the cornea, and compromise precise measurements in the pre-op exam.

Your doctor should:

- dilate your pupils to fine-tune your prescription.
- examine your eyes to make sure they're healthy, including a glaucoma test, a retinal exam, and an assessment of dry eye.
- take the following measurements:
 - The *curvature* of your cornea and your pupils.
 - The *topography* of your eyes to make sure you don't have an irregular astigmatism or a cone-shaped cornea – a condition called keratoconus.
 - The *pachymetry* or thickness of your cornea. You need to have enough tissue left after your corneas have been cut and reshaped.
- ask you to sign an informed consent form after a thorough discussion of the risks, benefits, options, and possible complications. Review the form carefully, and don't sign until you understand everything in the form.
- if your doctor doesn't think Lasik is right for you, you might consider getting a second opinion; however, if the opinion is the same, believe it.

If you qualify for surgery, your doctor may tell you to stop wearing your contact lenses for a while before the surgery is scheduled because contacts can temporarily change the shape of the cornea. Your cornea should be in its natural shape the day of surgery. Your doctor also may tell you to stop wearing makeup, lotions, or perfume for a few days before surgery. These products can interfere with the laser treatment or increase the risk of infection after surgery.

During: Lasik is an outpatient surgical procedure. The only anesthetic is an eye drop that numbs the surface of the eye. The surgery takes 10 to 15 minutes for each eye. Sometimes, both eyes are done during the same procedure; but sometimes, surgeons wait (sometimes days or weeks) to see the result on the first eye before doing the second eye.

The Surgical Procedure: The eye is moistened and a suction ring is positioned to keep the eye from moving and the cornea in the correct position. A special device cuts a hinged flap of thin corneal tissue off the outer layer of the eyeball (cornea) and the flap is lifted out of the way. The laser reshapes the underlying corneal tissue, and the surgeon replaces the flap, which quickly adheres to the eyeball. There are no stitches. A shield – either clear plastic or perforated metal – is placed over the eye to protect the flap.

After: Healing is relatively fast, but you may want to take a few days off from work after the surgery. All sports should be avoided for three days after surgery; impact sports or similar activities for four weeks. Be aware that:

- you may experience a mild burning or sensation for a few hours after surgery. Do not rub your eye(s). Your doctor can prescribe a painkiller, if you need one, to ease any discomfort.
- your vision probably will be blurry the day of surgery, but it should improve considerably by the next day when you return for a follow-up exam.

- if you experience aggravating or unusual side effects, report them to your doctor immediately.
- you shouldn't drive until your vision has improved enough to safely do so.
- you will be asked to avoid swimming, hot tubs and whirlpools for two weeks after surgery.



Alternatives to Lasik

You may want to discuss some surgical alternatives to Lasik with your eye doctor. Photorefractive keratectomy (PRK), Epi-Lasik, and LASEK are "surface ablation" laser procedures similar to Lasik that are used to reduce myopia, hyperopia and astigmatism without creating a corneal flap. Both Epi-Lasik and LASEK are relatively new second generation procedures.

Facts for Consumers

The Facts



Lasik is surgery to a very delicate part of the eye, and cannot be reversed.



As with any surgery, there are risks and possible complications.



Hundreds of thousands of people have had Lasik, many very successfully.



Lasik may not give you perfect vision. The American Academy of Ophthalmology (AAO) reports that nine out of 10 patients achieve 20/20 vision, but 20/20 does not always mean perfect vision. Detailed, precise vision may be slightly diminished.



Even if you have Lasik to correct your distance vision, you are likely to need reading glasses around age 45.



Lasik surgery provides lasting results for the majority of patients, but the benefits for some patients may diminish over time.



Most insurance plans do not cover the surgery.



You may need additional surgery – called "retreatments" – to achieve the best possible vision after Lasik.



For More Information

For more information about vision correction procedures, contact:

American Academy of Ophthalmology

P.O. Box 7424 San Francisco, CA 94120 www.geteyesmart.org

The AAO works to advance the lifelong learning and professional interests of ophthalmologists to ensure that the public can obtain the best possible eye care.

International Society of Refractive Surgery

1180 Springs Centre So. Blvd. #116 Altamonte Springs, FL 32714 www.LocateAnEyeDoc.com

The ISRS provides scientific research, knowledge and information to all individuals who are interested in refractive surgery.

National Eye Institute

31 Center Drive MSC 2510 Bethesda, MD 20892 301-496-5248 www.nei.nih.gov

The NEI conducts and supports research on eye diseases and vision disorders, and offers free publications for the general public and patients.

American Society of Cataract and Refractive Surgery 4000 Legato Road, Suite 850 Fairfax, VA 22033 www.ascrs.org

The ASCRS works to raise the standards and skills of anterior segment surgeons through clinical and practice management education. The Society also works with patients, government and the medical community to promote delivery of quality eye care.

Food and Drug Administration

5600 Fishers Lane (HFE-88) Rockville, MD 20852 1-888-463-6332 301-827-4420 www.fda.gov

The FDA oversees the safety of food, cosmetics, medicines, medical devices, and radiation- emitting products and provides information on contact lenses, intraocular lenses, refractive surgery, and corneal implants for myopia.

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FEDERAL TRADE COMMISSION	ftc.gov
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October 2008