

Basik Lasik: Tips on Lasik Eye Surgery

If you're tired of wearing glasses or contact lenses, you may be considering Lasik eye surgery — one of the newest procedures 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 attempt 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 at a distance and near.

There's also *presbyopia* — “aging eye.” The condition usually occurs between ages 40 and 50, and 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 usually continues to change.
- You should not be pregnant or nursing as these conditions might change the measured refraction of the eye.
- You should not be taking certain prescription drugs, such as Accutane or oral prednisone.

The Facts

- Lasik is surgery to a very delicate part of the eye.
- Hundreds of thousands of people have had Lasik, most very successfully.
- As with any surgery, there are risks and possible complications.
- Lasik may not give you perfect vision. The American Academy of Ophthalmology reports that 7 out of 10 patients achieve 20/20 vision, but 20/20 does not always mean perfect vision.
- If you have Lasik to correct your distance vision, you'll still need reading glasses around age 45.
- Lasik surgery is too new to know if there are any long-term ill effects beyond five years after surgery.
- Lasik surgery cannot be reversed.
- Most insurance does not cover the surgery.
- You may need additional surgery — called “enhancements” — to get the best possible vision after Lasik.

Facts for Consumers

- Your eyes must be healthy and your prescription stable. If you're myopic, you should postpone Lasik until your refraction has stabilized, as 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, or cataracts. You should discuss this with your surgeon.
- 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?
- 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 at both distance and near. However, Lasik 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. If your doctor thinks you're a candidate, ask about the pros and cons.

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 American Academy of Ophthalmology website (www.eyenet.org) feature "Find an Eye MD" can provide you with a list of their members who perform Lasik. Ninety-five percent of all ophthalmologists (Eye MDs) are Academy members. Also, the International Society of Refractive Surgery website (www.LocateAnEyeDoc.com) will provide you with 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 enhancements? In general 5-15% return.
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). As of this publication's printing, the FDA has approved five lasers for Lasik; they are manufactured by VISX, Summit, Bausch and Lomb, Nidek and ATC. Contact the FDA for updates.
5. What's involved in after-surgery care?
6. Who will handle after-surgery care? Who will be responsible?
7. What about 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. Some risks and possible complications include:

- Over- or under-correction. These problems can often be improved with glasses, contact lenses and enhancements.
- Corneal scarring, irregular astigmatism (permanent warping of the cornea), and an inability to wear contact lenses.
- Corneal infection.
- "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.
- 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.
- Problems with night driving that may require glasses.
- Flap problems, including: irregular flaps, incomplete flaps, flaps cut off entirely, and ingrowth of cells under the flap.

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
- Dryness
- Glare
- Haloes or starbursts around lights
- 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 a referring doctor (Eye MD or optometrist). Take your eye prescription records with you to the exams. Your doctor should:

- Dilate your pupils to fine-tune your prescription.
- Examine your eyes to make sure they're healthy. This includes a glaucoma test and a retina exam.
- Take the following measurements:
 - The *curvature* of your cornea and your pupils. You may be rejected if your pupils are too large.
 - 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, alternative options and possible complications. Review the form carefully. 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 to see the result of the first eye before doing the second eye.

The Surgical Procedure: 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 after the surgery. 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 necessary, to ease the discomfort.
- Your vision probably will be blurry the day of surgery, but it will 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.
- Do not drive until your vision has improved enough to safely do so.
- Avoid swimming, hot tubs, and whirlpools for two weeks after surgery.

Facts for Consumers

Alternatives to Lasik

You may want to discuss some surgical alternatives to Lasik with your eye doctor:

- Photorefractive keratectomy (PRK) is a laser procedure used to reduce myopia, hyperopia and astigmatism without creating a corneal flap.
- Astigmatic keratotomy (AK) is an incisional procedure to reduce astigmatism.
- Intrastromal corneal rings are clear, thin, polymer inlays placed on the eye to correct low myopia only.

For More Information

For more information about vision correction procedures, contact:

American Academy of Ophthalmology,
P.O. Box 7424, San Francisco, CA 94120-7424;
www.eyenet.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.

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.

International Society of Refractive Surgery, 1180 Springs Centre So. Blvd. #116, Altamonte Springs, FL; 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 20892-2510; 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.

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.

The FTC works for the consumer to prevent fraudulent, deceptive, and unfair business practices in the marketplace and to provide information to help consumers spot, stop, and avoid them. To file a complaint or to get free information on consumer issues, visit ftc.gov or call toll-free, 1-877-FTC-HELP (1-877-382-4357); TTY: 1-866-653-4261. The FTC enters Internet, telemarketing, identity theft, and other fraud-related complaints into Consumer Sentinel, a secure, online database available to hundreds of civil and criminal law enforcement agencies in the U.S. and abroad.

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