PROCEDURE

LASIK

LASIK is laser eye surgery that reshapes the cornea to improve focusing.

PURPOSE
Reduce dependence on glasses or contact lenses

PROCEDURE TYPE
Therapeutic surgery reshaping the cornea with lasers

WHERE IT IS DONE
Outpatient clinic or dedicated laser surgery centre

ANAESTHESIA
Local anaesthesia using numbing eye drops

HOW LONG IT TAKES
About 10 to 20 minutes for both eyes

PREPARATION
Stop contact lenses beforehand; arrange transport home

RECOVERY
Same day; no driving until vision is confirmed safe

MAIN RISKS
Dry eye, glare, prescription error, corneal weakening

RESULTS
Clearer vision within days; stabilization over weeks to months

Overview

LASIK stands for laser-assisted in situ keratomileusis. It is an operation that changes the shape of the cornea, the clear front surface of your eye. This helps light focus more accurately on the retina at the back of the eye.

LASIK can correct short-sightedness, long-sightedness, and astigmatism. Astigmatism means the eye has an uneven curve that causes blurred or distorted vision.

The procedure can reduce your need for glasses or contact lenses. It cannot guarantee perfect vision, and you may still need glasses for some tasks. LASIK also does not stop normal age-related changes, including the need for reading glasses.

Why the procedure is performed

LASIK may be offered if you want less dependence on glasses or contact lenses and your eyes are suitable for laser correction.

Possible reasons for choosing it include difficulty wearing contact lenses, inconvenience from glasses during work or sport, or a personal preference for unaided vision. LASIK is usually an elective procedure, meaning it is chosen rather than medically necessary.

The expected benefit depends on your prescription, corneal shape, eye health, and visual needs. Your surgeon should discuss the result that is realistic for you, not only the sharpest result the laser might achieve.

Who should and should not have it

LASIK is generally considered for adults with a prescription that has been stable for a suitable period. You need healthy eyes, enough corneal thickness, and a prescription within the treatment range of the laser being used.

A detailed assessment checks your prescription, corneal shape and thickness, tear film, pupil size, and overall eye health. Tell the clinic what you need your vision for, especially if you drive at night or work in a visually demanding role.

LASIK may be avoided or delayed if you have:

Cataracts or other eye diseases may make a different treatment more appropriate. People with very high prescriptions may also be better suited to an implantable lens procedure.

LASIK is not a good choice if you expect guaranteed perfect vision or assume you will never need glasses again. Reading glasses commonly become necessary with age, whether or not you have LASIK.

- An unstable or changing prescription
- Keratoconus or another condition that weakens the cornea
- A cornea that is too thin or irregular for safe treatment
- Significant untreated dry eye
- Active eye infection or inflammation
- Pregnancy or breastfeeding, which can temporarily change vision
- An eye injury or recent eye operation that has not healed
- A health condition or medicine that may interfere with healing

How to prepare

Your treating facility's own instructions take priority because preparation can differ according to your eyes, contact lenses, medicines, and planned treatment.

Contact lenses can temporarily alter the shape of your cornea. You will usually need to stop wearing them before your measurements and surgery. The required time is based on the type of lenses you wear, so follow the clinic's specific instructions.

Tell the surgical team about all medicines and supplements you take, as well as previous eye surgery, eye injuries, allergies, dry-eye symptoms, and health conditions. Do not stop prescription medicine unless the clinician responsible for it tells you to.

LASIK normally uses numbing drops rather than general anaesthesia, so fasting is not usually required. If the facility plans to give you a sedative, follow its eating and drinking instructions.

On the day, avoid eye makeup, creams, lotions, and perfume if instructed. Arrange for someone to take you home. You will not be able to drive immediately after surgery.

What happens during the procedure

You lie on a reclining chair while the area around your eye is cleaned. Numbing drops are placed in the eye. A small device holds your eyelids open, so you do not need to worry about blinking.

The surgeon places a suction ring on the eye. You may feel pressure, and your vision may briefly become dim or dark.

A laser, or less commonly a mechanical blade called a microkeratome, creates a very thin flap in the cornea. The surgeon lifts this flap. An excimer laser then removes microscopic amounts of corneal tissue to change its shape.

You look toward a target light while the laser works. Modern systems track small eye movements. The surgeon then places the flap back into position, where it usually stays without stitches.

The laser treatment itself is brief. Both eyes are often treated during the same appointment. You remain awake, but the numbing drops should prevent sharp pain.

Recovery and what to expect afterward

Mild burning, grittiness, watering, and light sensitivity are common during the first several hours. Your eyes may feel as though they contain sand. Avoid rubbing them. Use prescribed

drops and protective shields as directed.

You can normally eat and drink after LASIK unless you were given a sedative that requires special precautions.

Rest on the day of treatment. Avoid eye makeup, swimming, hot tubs, dusty settings, and contact sports until your surgical team says they are safe. Wear eye protection for activities that could involve a blow to the face.

Do not drive home. Start driving again only after your vision has been checked and you meet local driving requirements. Sedatives can extend the restriction.

Many people return to office work within a few days, but glare, dryness, and changing focus can make screens or night driving difficult at first. More time may be needed for dusty, physical, or safety-sensitive work.

Risks and possible complications

Dryness, fluctuating vision, glare, halos around lights, and starbursts can occur after LASIK. These effects may be more noticeable at night and often improve as the eyes heal, but they can persist.

The correction may be less or greater than intended. You might still need glasses, contact lenses, or another procedure. Vision can also change later because of ageing or further prescription changes.

Other possible complications include:

A further laser treatment is not always safe or suitable. Your surgeon should explain your individual risks based on your measurements and eye health.

- Infection or inflammation
- Problems with the corneal flap, including wrinkles or movement
- Cells growing beneath the flap
- Reduced contrast or difficulty seeing in dim light
- Persistent discomfort or sensitivity
- Corneal ectasia, in which the cornea progressively weakens and bulges
- Loss of vision that cannot be fully corrected with glasses or contacts

Results and follow up

Vision is often clearer within the first day or several days. It may fluctuate while the cornea and tear film recover. Full stabilization can take weeks or months.

You will usually have an early follow-up appointment, often soon after surgery, followed by further checks during healing. These visits assess your vision, corneal flap, eye pressure, and signs of dryness or inflammation.

Use antibiotic like amoxicillin or doxycycline , anti-inflammatory, and lubricating drops exactly as prescribed. Do not change or stop them without contacting the surgical team.

LASIK changes the cornea but does not prevent later eye conditions. Continue routine eye examinations after your surgical follow-up has ended.

Alternatives

You do not have to have LASIK. The main alternatives involve different balances of convenience, recovery, and risk.

- Glasses: The least invasive option and easy to update when your prescription changes, but they may be inconvenient for some work, sport, or weather conditions.
- Contact lenses: Provide clear vision without surgery and can be changed with your prescription, but require ongoing care and carry risks such as infection.
- PRK or other surface laser treatment: Reshapes the cornea without creating a flap. It may suit some thinner corneas, but usually causes more early discomfort and slower visual recovery.
- SMILE: Removes a small piece of corneal tissue through a short incision without a LASIK-style flap. It does not treat every prescription, and options for later adjustment may differ.
- Implantable contact lens: Places a permanent corrective lens inside the eye and may suit some high prescriptions. It preserves the natural lens but involves surgery inside the eye.
- Refractive lens exchange: Replaces the natural lens with an artificial one. It may help selected older adults, but removes the eye's natural focusing ability and carries the risks of internal eye surgery.
- No treatment: Continuing with your current correction avoids surgical risk, although you remain dependent on glasses or contact lenses.

When to call your healthcare team

Contact your surgical team promptly if dryness, blurred vision, glare, or discomfort is not improving as expected. These concerns are usually handled through routine or earlier follow-up rather than emergency care.

Seek urgent same-day eye assessment for increasing redness, worsening pain, discharge, marked light sensitivity, or a sudden decline in vision.

Seek emergency eye care after a significant eye injury or if you have sudden major vision loss, severe pain, or a flap that appears to have moved. Do not rub or press the eye while arranging help.

Common questions

Will I be asleep?

No. LASIK is normally performed while you are awake using numbing eye drops. You may be offered medicine to help you relax.

Can I drive home?

No. Arrange for someone else to drive you. Resume driving only after your surgical team has checked your vision and confirmed it is safe.

How painful is LASIK?

Sharp pain during treatment is not expected, although you may feel pressure. Burning, watering, and a gritty feeling are common for several hours afterward.

When will I know whether it worked?

You may notice clearer vision within a day, but the final result takes longer. Vision can change during the first weeks or months.

Will I still need glasses?

Possibly. Glasses may still be needed for reading, night driving, or fine detail. Your eyes and prescription can also change with age.

Can LASIK wear off?

The removed corneal tissue does not grow back, but your vision can change later because of ageing, prescription changes, or other eye conditions.

Sources

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