



LASER EYE SURGERY

LASIK

LASIK (laser in situ keratomileusis) is the most common type of laser eye surgery performed today.

This is a two-step, two-laser vision correction procedure. A thin flap is created in the cornea to allow the reshaping to occur beneath the surface of the eye, resulting in less discomfort during healing and rapid visual recovery (when compared to advanced surface laser ablation or ASLA).

LASIK can be used to treat short-sightedness (myopia), long-sightedness (hyperopia) and astigmatism (an imperfection in the eye's curvature that results in distorted vision).

Who it's used for

To be suitable for LASIK, a patient needs to have a normally shaped cornea and adequate corneal thickness. Patients with thin or irregularly shaped corneas are not suitable for this procedure – ASLA may be recommended for vision correction in these situations.

Although LASIK and ASLA produce exactly the same results, LASIK patients tend to have a faster and more comfortable recovery. The correction to their vision is immediate, although it may take a few weeks to completely stabilise.

Before LASIK eye surgery, we perform a test called corneal pachymetry to determine the thickness of your cornea. This test involves touching a device called a pachymeter to the centre of your eye, where it uses ultrasound to measure corneal thickness.

The procedure

LASIK is a painless procedure. You may feel some pressure on the eye but no discomfort.

The surgery is usually performed on both eyes on the same day and the operating time itself is about 20 minutes (although you will be in the laser suite for about 2 hours). You will be given anaesthetic drops to numb your eye and minimise discomfort, and can also choose to have a mild sedative. The sedative takes approximately 30 to 45 minutes to take effect.

After being escorted into the laser suite, you will be asked to lie on a bed.

There are two stages to the procedure and each stage uses a different laser. The surgeon will have pre-programmed both lasers to ensure they are set to your precise refractive requirements. This is based on measurements taken at your previous consultation and sometimes with additional information on the day of surgery.

The first laser, a femtosecond laser, uses computer-guided light-pulse technology to create a thin flap of corneal tissue that remains attached by a 'hinge'. This allows the surgeon easy access to the underlying corneal bed (the stroma).

The second laser, the excimer laser, is then used to reshape the corneal bed with microscopic precision. The high-power ultraviolet output of the laser tracks across the eye, gently removing the exact amount of tissue needed to correct vision.

An infrared eye tracker is locked in position before using the laser. It measures eye movements during surgery and is capable of following and actively adjusting the laser beam as tiny eye movements are detected.

Once the second step is performed, the surgeon gently positions the corneal flap back in place. Because the flap adheres to the corneal bed, the healing process begins immediately. No sutures are required.

Recovery

You can return home shortly after leaving the laser suite, but must be accompanied by a friend or family member because your vision will be slightly blurry and your sedative will not have worn off completely.

You will be given protective glasses and eye drops (antibiotics and steroids) to go home with. Using artificial tears for at least a week after surgery is generally recommended.

We will follow up with you to ensure you are recovering well, so there will be plenty of opportunities to ask questions or discuss any concerns regarding your recovery.

Patients are able to return to most of their normal daily activities the day after surgery.

Fluctuations in your vision are normal for the first week or so following LASIK, although your vision will stabilise quickly. Most people find that they are now legally able to drive a car without glasses or contact lenses. However, you will need to wait a month to play contact sports and wait two weeks before swimming.

If you have any questions about what activities you can or can't participate in, please contact the clinic.

