

Refractive Laser Surgery

Refractive laser surgery is used to treat refractive errors such as myopia, astigmatism and hyperopia. The most commonly used techniques are PRK, LASIK and LASEK. PRK involves the removal of the corneal epithelium by surgical dissection and excimer laser removal of a calculated amount of the stromal bed of the cornea, to reshape the cornea. LASEK is a modification of PRK where dilute alcohol is used to loosen the corneal epithelium before it is lifted from the treatment zone as a hinged sheet, and then replaced at the end of the procedure. In LASIK a flap is created with a microkeratome; this is lifted before laser ablation and then repositioned.

Although the procedures are similar you need to consider which is best for you. This will include your prescription levels, your prescription stability, the thickness of your cornea, your occupation and lifestyle and your medical history. Only healthy eyes that have stopped changing can be operated on. As with any surgical procedure, there are risks associated with laser surgery and these should be discussed fully with your surgeon.

Here are a few extra points to consider:

- The procedure may over or under correct the eye (under corrections can be treated with additional surgery, however over correction often requires you to continue wearing correction) Recent studies have shown that the effects on vision are more predictable in mild- moderate short sighted eyes. Your corrected vision can decline over time and as with your natural eyes- your prescription can change at any age.
- Common reported problems include glare effect in the eye at night, or seeing a halo effect around objects at night. Some evidence suggests that this glare is reduced by surgeons using wavefront technology in their calculations. Another common complaint following treatment is Dry Eye Syndrome.
- At around 40 years of age, the normal changing of the lens inside the eye, presbyopia, will affect your vision. This will mean that you will need to use reading glasses in the future despite having any laser surgery. Having laser treatment can also make the measurements made before cataract surgery or to detect glaucoma less accurate.
- Some occupations exclude people who have had laser surgery in order to achieve their required level of vision.

If you decide to have surgery:

Make sure you understand all aspects including the uncertainties involved and make sure that your surgeon has had suitable training in this area.

If you would like any further information, please contact us.