

Lasik or PRK

PRK (photorefractive keratectomy) is a type of refractive surgery to correct myopia (nearsightedness), hyperopia (farsightedness) and astigmatism.

PRK was the first type of laser eye surgery for vision correction and is the predecessor to the popular LASIK procedure.

Though PRK recovery takes a bit longer than recovery from

LASIK eye surgery, PRK is still commonly performed and offers advantages over LASIK for some patients.

Like LASIK and other types of laser eye surgery, PRK works by reshaping the cornea using an excimer laser, allowing light entering the eye to be properly focused onto the retina for clear vision.

The main difference between PRK and LASIK is the first step of the procedures.

In LASIK, a thin flap is created on the cornea with a microkeratome or a femtosecond laser. This flap is lifted to expose the underlying corneal tissue and is replaced after the cornea is reshaped with an excimer laser.

In PRK, the thin outer layer of the cornea (epithelium) is removed and discarded prior to

reshaping the underlying corneal tissue with an excimer laser. The epithelium repairs itself (grows back over the corneal surface) within a few days after surgery.

The final results of PRK surgery are comparable to LASIK outcomes, but initial PRK recovery is slower because it takes a few days for new epithelial cells to regenerate and cover the surface of the eye.

There also is a slightly increased risk of eye infection and haziness of vision in the first few days after surgery. LASIK patients generally have less discomfort, and their vision stabilizes more quickly, whereas vision improvement with PRK is gradual and the final outcome can take several weeks.

PRK, however, does offer some distinct benefits.

Because PRK surgery does not create a corneal flap (which contains both epithelial and the deeper stromal tissues), the entire thickness of the underlying stroma is available for treatment.

This is of particular benefit if the cornea is too thin for LASIK or if you have undergone LASIK previously and therefore have a thinner residual cornea. There also is no risk of flap complications, and the risk of

removing too much of the cornea with the excimer laser is reduced.



PRK ADVANTAGES AND DISADVANTAGES

ProsCons

Less depth of laser treatment
than LASIK

Slower recovery than LASIK

Suitable for patients with a thin
cornea

Best vision takes longer to
obtain

No risk of corneal flap
complications

Increased risk of post-surgery infection, inflammation and haze

Reduced risk of compromised corneal thickness

More eye discomfort during early PRK recovery, compared with recovery after LASIK surgery.

