



LASIK and PRK/EPI-LASIK Information

LASIK (Laser Assisted in **SI**tu Keratomileusis) is a technique where a thin corneal flap is created with the XP Zyoptix microkeratome to create a flap. The flap is folded back and the middle part of the cornea, called the stroma, is exposed. An Excimer Laser, the MEL 80 Laser from Carl Zeiss Meditech, is then used to remove a thin layer of tissue from the central region or corneal stroma. This reshapes the cornea and changes its curvature to a desired, pre-determined shape. With **LASIK**, the corneal flap is then replaced.

Photo Refractive Keratectomy (PRK) is a technique where the superficial corneal epithelium is loosened with alcohol and removed before applying the laser. **EPI-LASIK** is a new technique which involves creating an epithelium flap with an Epi-separator. Following **PRK**, a bandage contact lens is placed on the eye for 3 days, whereafter it is removed.

With **LASIK**, a wide range of refractive errors can be corrected.

- In **Myopia**, or nearsightedness, the corneal curvature is changed by reducing its thickness more centrally. Up to -10.0 Diopters can be corrected.
- In **Hypermetropia**, or farsightedness, the corneal curvature is changed by reducing its thickness more peripherally. Up to + 6.0 Diopters can be corrected.
- **Astigmatism**, or irregular corneal curvature, up to 5.0 Diopters can be corrected.
- A **combination** of Myopia or Hypermetropia, with Astigmatism can be corrected.

With **PRK**, the following refractive errors can be corrected:

- In **Myopia**, or nearsightedness, up to -8.0 Diopters can be corrected.
- In **Astigmatism**, up to 5.0 Diopters can be corrected.
- A **combination** of Myopia, with Astigmatism can be corrected.

A minimum age of **18 years** is required before Refractive surgery can be considered.

Before your surgery booking, you will be refracted, and a full eye examination performed.

NB! Prior to your screening visit, the wear of soft contact lenses must be discontinued for 1 week, hard contact lenses for 3 weeks, and toric soft contact lenses for 10 days, as they alter the natural shape of the cornea.

Patients that qualify for LASIK must meet the following criteria:

- Minimum age of 18 Years
- Myopia of less than -10.0 Diopters (Spherical equivalent)
- Hypermetropia of less than + 5.0 Diopters
- Astigmatism of less than 5.0 Diopters
- Show refractive stability. A change of less than 1 Diopter in the previous 12 months is needed to qualify for Corneal refractive surgery. Please bring your glasses or contact lenses to your examination to provide your prescription history.
- Sufficient corneal thickness.

Contra-indications to **Corneal Refractive Surgery** include the following:

- Keratoconus
- Active Corneal Infection
- Active Intra-ocular inflammation or infection
- Uncontrolled Glaucoma
- Systemic Collagen-Vascular Disease
- Pregnancy and Lactation

With Refractive surgery, patients have a 98% chance to be fully corrected with one procedure. About 2% of people will need a revision, or enhancement surgery. This involves re-lifting of the corneal flap following Lasik, or repeating the PRK procedure after 3 months, and applying some more laser to the stroma to correct the remaining refractive error.

Patients younger than 42 years of age, can expect to have equally good distant and near vision following **LASIK** or **EPI-LASIK/PRK** surgery.

Patients older than 45 years of age undergoing Corneal Refractive Surgery will be needing reading glasses, due to changes in the crystalline lens of the eye (called presbyopia). Their distance vision should be unaffected and stable.

Patients will be supplied with specific post-operative instructions and follow-up schedules.

Patients that undergo **LASIK** surgery can expect to be back at work and drive their car after 2 days. Following **PRK/Epi-Lasik**, patients can expect to be back at work and drive their car after 7 days.

Specific Antibiotic and anti-inflammatory drops will be inserted into the eyes for approximately 2-4 weeks after surgery to prevent corneal infection, inflammation and haze.

You will be supplied with a complete list of possible side-effects and complications of **LASIK** and **PRK/Epi-Lasik** in the **Treatment Agreement and Consent Form**. Please ensure that you read it before signing the consent form.

Patients are not allowed to:

- Swim
- Wear eye make-up for 2 weeks post-operatively.

Patients are not allowed to:

- Take part in contact sports
- Rub their eyes for 4 weeks post-operatively.

To have Refractive surgery done, should be one of the most rewarding experiences of your life!

Please discuss any concerns or queries with our Refractive Coordinator by e-mail at info@peacelasikcentre.com or phone Peace Lasik Centre at (780) 538 9997.