

# Laser Refractive Surgery

All the latest techniques used for the correction of Myopia, Hypermetropia and Astigmatism are available here at Moorfields Eye Hospital Dubai, including IntraLase, WaveFront LASIK, LASEK, PRK and Epi-LASIK. We are also a referral centre for the management of complications from previous refractive surgery.

During a LASIK procedure, a very thin flap has to be created on the front of the cornea before the corrective laser is applied.

## *State-of-the-art technology for Laser Refractive Surgery*

### *IntraLase and LASIK*

Until a few years ago, LASIK flaps could only be created with a mechanical blade called "microkeratome". Nowadays however, with the latest advances in technology it is possible to create these flaps entirely with the laser. Such laser is called femtosecond IntraLase and allows to "cut" with a precision in the order of 15 microns (1 micron is 1/1000 of a mm). Greater precision also means reduced risks of complications compared to using the blade. The other significant advantage of IntraLase compared to PRK, LASIK or EPI-LASIK is that it provides a quicker recovery of the vision - a few days compared to a few weeks.

### *WaveFront*

In order to correct the vision with the laser, the cornea has to be sculpted by removing a certain amount of tissue. Traditionally, this amount used to be directly linked to the degree of short- or long-sightedness or astigmatism present in the eye, as determined by the optician prior to surgery. Recent advances in the field of optics and aberrations now allow us to study the eyes prior to surgery with a special laser scanner (WaveFront Aberrometer) with which a customized correction based on the unique optical features of the eyes of each patient is possible. WaveFront technology has been shown to provide better results than conventional treatment in most of the cases.

