# Laser Eye surgery in Birmingham-offering best possible services!

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Laser in situ keratomileusis or commonly referred to as LASIK has gained lot of popularity in past few decades. Eye is the most precious organ in a human body. Visualizing Godâ€™s wonderful creations from these eyes is a blessing. Lot of care needs to be taken to maintain the good health of these eyes. In Laser eye surgery in Birmingham, a laser is used underneath a corneal flap (in situ) in order to reshape the cornea (keratomileusis). A highly specialized laser known as excimer laser is utilized in this procedure and is designed in such a manner so as to treat refractive errors, reduce or eliminate the need for glasses or contact lenses and improve vision. The transparent front covering of the eye or cornea is shaped again using this laser procedure. Around 1991, the development of LASIK is generally credited to Ioannis Pallikaris from Greece though the excimer laser had been used for many years before.

A precise, thin hinged corneal flap using a microkeratome is created during the LASIK procedure by a specially trained eye surgeon. To expose the underlying corneal tissue the surgeon then pulls back the flap, and then the excimer laser ablates (reshapes) the cornea in a unique pre-determined pattern for each patient. Then without sutures, the flap is gently repositioned onto the underlying cornea.

The front surface or cornea and lens inside the eye form the eye's "focusing system" in the human eye and for focusing incoming light rays onto the surface of the retina is primarily responsible, much like the lenses of a camera focus light onto the film. The power of the cornea and lens are perfectly matched with the eyeâ€™s length and images are in focus in a perfect optical system; and in case there is any mismatch in this system, it is referred to as a refractive error, and the result is a blurred image.

There is variety of refractive errors. Some of them are-

Myopia or nearsightedness - The mismatch in focusing eye length and power causes distant objects to be blurry, hazy and near objects to be clearer in people with myopia.

Hyperopia or farsightedness - The mismatch in focusing power and length of the eye causes near objects to be blurry and distant objects to be relatively clearer in people with hyperopia.

Astigmatism - Either the corneal or lens shape is distorted, causing multiple images on the retina in people suffering with astigmatism. This causes blurry images of all objects at all distances. Either myopia or hyperopia with astigmatism, many people have a combination.

To compensate for the eye's refractive error, glasses or contact lenses are used by bending light rays in a way that complements the refractive error in an eye. In contrast, to correct the eye's refractive error to reduce the need for other visual aids LASIK and other forms of refractive surgery are popularly used.

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John smith is author of this article. For further details about a Cataract surgery in Birmingham and a Eyelid surgery in Birmingham please visit the website .

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