



QUESTIONS AND ANSWERS ABOUT LASIK

What is LASIK?

LASIK is a surgical procedure used to correct nearsightedness, farsightedness, and astigmatism and quite recently, presbyopia, utilizing the Microkeratome to create a corneal "flap" of about one-third of the total corneal thickness. The Excimer laser is then used to reshape the exposed middle layer of the cornea. The flap is finally put back to assume a new shape created by the Excimer laser.

What is astigmatism?

Astigmatism is the result of the general inability of the eye to clearly focus images from any distance because of uneven curvatures of the cornea. Instead of being spherical, it is more similar to the side of an egg. This focusing problem usually occurs along with nearsightedness or inborn farsightedness.

What is presbyopia?

Presbyopia is a general condition affecting those over 40 years of age whereby the muscles used in focusing start to lose the ability to change shape to focus on near objects.

The surgical correction for presbyopia remains one of ophthalmology's greatest challenges. It is undoubtedly the final frontier of cataract and refractive surgery.

Monovision has its pros and cons. However, monovision, in the right surgical hands, still has much to offer the presbyopic patient. There is no doubt that it seems somewhat low-tech compared to some of the new techniques and concepts that are coming on-stream today.

Monovision is defined as the optical correction of distance vision in one eye and intermediate or near vision in the fellow eye in order to compensate for the loss of the accommodative capacity in presbyopia and pseudophakia.

To properly assess which patients might be good candidates for monovision, a three-week contact lens simulation, restricting the difference to 1.5D and ensuring the patient is well-informed about the limitations of the procedure. This is not well-tolerated by some patients. Informed consent really has to include the fact that the goal is distance and intermediate ranges, with reading spectacles needed for the fine details as the advancing age of the patient occurs

Advances in laser-based surgical techniques have given clinicians sophisticated new tools for the treatment of presbyopia. PRESBY-LASIK is defined as an umbrella term for the group of LASIK techniques that aim to increase depth of field in the presbyopic eye by creating in both eyes a peripheral area for near vision restoration. Data used in the treatment is obtained from wavefront and corneal topography.

Dr. Telandro of Cannes, France introduced this new peripheral concentric PRESBY-LASIK technique five years ago with a patient satisfaction ratio of over 90%. The procedure involves firstly a hyperopic treatment on a wide area, followed by a second myopic treatment at the center. THE AIM IS NOT BIFOCALITY, BUT A PROGRESSIVE ASPHERIC LENS ON THE CORNEA.

What is CustomLASIK?

CustomLASIK is a procedure that involves the use of a wavefront analyzer and enables your surgeon to customize the Conventional LASIK procedure to your individual eyes. This customized procedure can result in patients seeing clearer and sharper than ever before.

What is the difference between the conventional LASIK and CustomLASIK?

CustomLASIK uses a tool called the wavefront analyzer to accurately measure the way light travels through your eye. The resulting map of your eye is then programmed into the laser, and the laser treats your eye based upon that personalized 3D map.

CustomLASIK helps to treat “higher order” aberrations, which are tiny imperfections in the eye that can have a significant impact on one's quality of vision. In fact, higher-order aberrations have been linked to visual glare and halos. Higher-order aberrations have not been previously treatable with contacts, glasses or conventional LASIK.

Conventional LASIK is still a very good choice for many patients, though most will prefer the higher level of customization that CustomLASIK can provide. Ultimately, you need to discuss the options with your doctor.

The actual LASIK procedure is performed in exactly the same way in both conventional LASIK and CustomLASIK. The pre-op testing for conventional LASIK and CustomLASIK differ greatly. The wavefront analyzer used with CustomLASIK brings a whole new level of knowledge and accuracy to the surgeon.

What are the advantages of LASIK surgery?

- LASIK makes permanent changes to correct refractive errors.
- Quick surgery and rapid recovery.
- Minimal temporary side effects.
- Quick return of usable vision.

- No injections, no suture. Only numbing eye drops.
- Lasik can make you more eligible for certain professions.
- Lasik can increase convenience in everyday life.
- LASIK can improve your performance in many activities, especially water and outdoor sports.
- LASIK can improve your personalities and self-confidence
- LASIK can reduce your dependence on eyeglasses and contact lenses.

LASIK can eliminate risks associated with long-term contact lenses usage

Is the procedure safe?

LASIK is considered to be very safe. Over 10 million cases have been performed worldwide in the past 14 years. In the hands of an experienced surgeon utilizing state-of-the-art equipment the procedure has an extremely low incidence of complications that are significant.

What are the possible side effects of LASIK?

The risks of these side effects and complications are very small in LASIK, but if the patients experience them, they need to consult their doctors at once.

- Infection
Infections are very rare in LASIK, but they can damage the cornea if not resolved with early treatment. They are usually identified early and effectively treated with medications.
- Under and over corrections
Very uncommon, but corrections to fine-tune the vision can be carried out in appropriate cases, which must be agreed upon by the patient and the surgeon in charge. In the event where corrections by the same method cannot be carried out, most patients can return to using spectacles or contact lenses again.
- Glare and haloes
Glare and haloes may be experienced, especially at nighttime. This condition may happen in the early stages after treatment, but will gradually diminish. Nevertheless, some cases may experience more severe glare and haloes than others, and some permanently (with a probability of less than 1%). People with high corrections and large pupils are more prone to get this problem.
- Fluctuation vision
This is more prevalent in the early stages after treatment but will also slowly improve.
- Dry eyes
As a result of surgery, a patient may not be able to produce enough tears to keep the eyes moist and comfortable. This condition may stay for during the first few months or may be permanent. Intensive drop therapy may be required.

Who are the candidates for LASIK treatment? They must:

- Be at least 21 years old
- Have a stable vision for the past year
- Have a suitable range of refractive errors
- Have healthy eyes; free from complications and injuries
- Not be pregnant or nursing

What procedures must a patient undergo before any LASIK treatment?

- Complete eye examination with dilation to examine any retinal pathologies.
- A Cycloplegic refraction for hyperopia and presbyopia
- An OPD scan with topographical and wavefront map of the cornea showing both lower and higher order aberrations of the eye.
- A pachymetry reading assessing the corneal thickness of the eye.
- A biometry reading for records purposes.

What is the recovery period and success rate of LASIK?

Patients normally have good vision the next day after the treatment. Those undertaking presbyopia treatment will have stabilized vision after two to three weeks, and achieve best vision after one month. With proper screening of patients, rate of complication is close to zero.

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