

Laser assisted *in situ* keratomileusis for vision correction.

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Description

LASIK (Laser-Assisted *in Situ* Keratomileusis) surgery has gained immense popularity as a means to correct vision problems, offering freedom from glasses and contact lenses for millions of people worldwide. However, like any surgical procedure, LASIK comes with potential risks and complications, including a condition known as LASIK disease. LASIK disease, also referred to as Post-LASIK Ectasia, is a rare but serious complication that can occur following LASIK surgery. Ectasia refers to a bulging or thinning of the cornea, leading to progressive vision deterioration. This condition typically manifests months to years after the LASIK procedure and can result in significant visual impairment if left untreated.

While the exact cause of LASIK disease is not fully understood, several factors may contribute to its development. Corneal thinning, during LASIK surgery, a thin flap is created on the cornea to allow reshaping of the underlying tissue. In some cases, this procedure can weaken the structural integrity of the cornea, predisposing it to ectasia over time. Individuals with pre-existing corneal conditions, such as keratoconus or corneal dystrophy, may be at higher risk of developing LASIK disease due to the compromised structural stability of their corneas. Inadequate correction of vision errors or overcorrection during LASIK surgery can lead to irregular changes in corneal shape, increasing the risk of ectasia. Patients with thin corneas, high refractive errors, or a history of eye conditions may not be suitable candidates for LASIK surgery. Improper candidate selection can heighten the risk of complications, including LASIK disease.

The symptoms of LASIK disease can vary in severity and may include progressive deterioration of vision, including blurred or distorted vision, Increased sensitivity to light (photophobia), Halos or glare around lights, Difficulty with night vision, frequent changes in prescription glasses or contact lenses. It's essential for individuals who have undergone LASIK surgery to remain vigilant for any changes in their vision and promptly report any concerning symptoms to their eye care provider.

While LASIK disease is relatively rare, there are steps that can be taken to minimize the risk of developing this condition. Prior to undergoing LASIK surgery, it's crucial to undergo a comprehensive evaluation to assess candidacy and identify any pre-existing corneal abnormalities or risk factors. Choosing an experienced and reputable surgeon who utilizes the latest technologies and adheres to stringent safety protocols can reduce the likelihood of complications, including LASIK

disease. Understanding the potential risks and limitations of LASIK surgery and maintaining realistic expectations regarding outcomes can help individuals make informed decisions about their eye care. Following LASIK surgery, regular follow-up appointments with an eye care provider are essential for monitoring corneal health and detecting any signs of ectasia early on. For individuals deemed unsuitable candidates for LASIK surgery due to underlying corneal conditions or other factors, alternative vision correction options such as Photorefractive Keratectomy (PRK) or Implantable Collamer Lenses (ICLs) may be considered.

If LASIK disease is diagnosed, prompt intervention is necessary to prevent further vision loss. Treatment options for LASIK disease may include Corneal Collagen Cross-Linking (CXL), this minimally invasive procedure involves the application of riboflavin (vitamin B2) followed by exposure to ultraviolet light to fortify the corneal tissue and stop ectasia from spreading. Corneal Transplant, in advanced cases of LASIK disease where significant corneal thinning or scarring has occurred, a corneal transplant may be required to replace the damaged tissue with healthy donor tissue. Specialized contact lenses, such as scleral or hybrid lenses, may be prescribed to improve vision and provide comfort for individuals with LASIK-induced corneal irregularities.

LASIK surgery has revolutionized vision correction, offering freedom from glasses and contact lenses for many individuals. However, it's essential to recognize that LASIK disease is a potential complication that can arise following surgery, albeit rarely. By understanding the risk factors, recognizing symptoms, and prioritizing preventative measures, individuals can make informed decisions about their eye care and minimize the likelihood of experiencing LASIK-related complications. Regular monitoring and timely intervention are important for preserving corneal health and ensuring optimal visual outcomes for those who undergo LASIK surgery.

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