Medical Policy

BlueCross BlueShield Kansas
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Title: LASIK (laser assisted in situ keratomileusis)

Professional
Original Effective Date: August 26, 1998
Revision Date(s): February 15, 2007; February 5, 2014; May 13, 2015; June 8, 2016; May 14, 2021
Current Effective Date: February 15, 2007

Institutional
Original Effective Date: December 1, 2007
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Current Effective Date: December 1, 2007

DESCRIPTION

LASIK, now the most commonly performed refractive surgery, is an effective treatment for low, moderate, and high myopia with and without astigmatism, as well as hyperopia with and without astigmatism. LASIK is an outpatient surgery performed with topical anesthesia. A microkeratome, which works like a carpenter's plane, is used to raise a corneal flap about the size of a contact lens. This flap usually averages 160 microns thick and is folded back to expose the underlying stroma.

The excimer laser is used to ablate a precise amount of corneal stroma and the flap is irrigated and replaced. The cap is stabilized without sutures by the natural corneal dehydration created by the endothelial pump. Flap stability and adherence to the corneal stroma are checked after surgery, and patients are usually sent home on topical steroid, topical antibiotic, and topical nonsteroidal drops. The patient also is instructed

to use an eye shield overnight, with follow-up typically scheduled on postoperative day one and then at one week. The patient is usually seen again at one, three, and six months.

LASIK has significant attractions for the patient. It causes little pain, provides quick recovery of vision, and has the potential for treating higher levels of myopia. LASIK has also been found to be safe and effective to treat both eyes on the same day. LASIK enhancements are more easily performed, at least within the first 6 to 12 months, by lifting the original flap and retreating the stromal bed to correct any residual refractive error. LASIK produces less stromal haze than PRK and does not require continuous steroid therapy.

Ten-year outcomes for patients with moderate myopia, in a retrospective (nonrandomized) study that compared PRK and LASIK in patients with similar baseline visual acuity, were slightly more favorable for LASIK, with a lower retreatment rate and similar visual acuity. The authors note, however, that there have been subsequent technical improvements that might improve results for surface ablation procedures.

Patient Selection

Not every patient is a candidate for excimer laser treatment. Age, high refractive error, and underlying ocular disease may prevent a patient from obtaining a predictable refractive outcome. A study of laser-assisted in situ keratomileusis (LASIK) surgery for presbyopia compared patients aged 60 to 69 years with patients 40 to 49 years, demonstrating a trend toward higher retreatment rates and more myopia post-procedure in the older age group [39]. However, the procedure was comparably safe for older patients and outcomes at one year were comparable for both age groups.

Proper patient selection is critical for a successful surgery (table 1). The patient's eye must be healthy and the refractive error must be stable over a one-year period of time. The surgeon must select the correct surgical procedure based upon the patient's expectations and ophthalmologic examination with an accurate refraction. After the surgery is scheduled, the surgeon will perform a detailed and accurate surgical plan to include verification on the refraction prior to programming the laser. The surgical plan also includes the detection of complicating factors to maximize the results while minimizing the risks.

Contraindications

There are systemic and ocular contraindications to refractive surgery. Autoimmune, collagen vascular, and immunodeficiency diseases all affect corneal healing. Women who are pregnant or nursing have fluctuating visual acuity due to refractive changes of the eye secondary to corneal hydration. Patients with abnormal wound healing such as keloid or abnormal scar formation may have abnormal corneal healing. Systemic medications such as oral isotretinoin can aggravate dry eye symptoms, while amiodarone can leave transient corneal epithelial deposits.

While labeling from the US Food and Drug Administration (FDA) includes a warning against laser refractive surgery in patients with diabetes mellitus, a literature review has found that LASIK can be performed without complications in patients with well-controlled diabetes who are without cataract, diabetic retinopathy, or systemic complications of diabetes.

Ocular contraindications include severe dry eye from keratoconjunctivitis sicca, exposure keratitis, neurotrophic keratitis, and lid disorders affecting the tear layer. A patient with a history of herpetic keratitis is at risk of virus reactivation and corneal scarring following laser refractive surgery. In addition, any patient with an abnormally shaped cornea such as keratoconus, pellucid marginal degeneration, or keratoglobus may worsen after refractive correction and will not have a predictable refractive outcome.

Patients also may present with anatomic problems that prevent the proper placement of the microkeratome such as deep-set eyes, very narrow palpebral fissures, abnormal lid position, or severe acne rosacea.

Risks

Complications may arise from errors in the planned ablation, intraoperative mechanical factors, postoperative medications, and wound healing. The most common subjective complaints in one laser-assisted in situ keratomileusis (LASIK) study were night driving difficulty and glare. See references for a more comprehensive discussion of risks resource.

Outcomes

A 2017 systematic review and meta-analysis of 48 randomized controlled trials concluded that there were no significant differences in visual outcomes or quality among commonly used surgical techniques, which included laser-assisted in situ keratomileusis (LASIK), photorefractive keratectomy (PRK), laser epithelial keratomileusis (LASEK), and epithelial LASIK (Epi-LASIK), among others.

Patient satisfaction rates after LASIK are generally high. In a systematic review of 19 articles reporting patient quality of life and satisfaction after LASIK procedure, the overall patient satisfaction with surgical outcome was 95.4 percent.

POLICY

The procedure will be allowed for the diagnosis of anisometropia, meeting the following criteria:

a. The patient should be intolerant to contact lenses and glasses are not a corrective option.
b. The anisometropia must be an acquired/induced condition with symptoms.
c. The spherical difference must be at least 3 diopters or cylindrical difference must be at least 2 diopters.

DOCUMENTATION
At a minimum, the medical record should include symptoms, diagnoses, corneal topography, refractive findings, history that includes prior surgery, motility findings and vertical imbalance.

CODING

The following codes for treatment and procedures applicable to this policy are included below for informational purposes. Inclusion or exclusion of a procedure, diagnosis or device code(s) does not constitute or imply member coverage or provider reimbursement. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage of these services as it applies to an individual member.

HCPCS Code

65760	Keratomileusis
S0800	Laser in situ keratomileusis (LASIK)

ICD-10 Diagnosis (Effective October 1, 2015)

H52.31	Anisometropia

REVISIONS

Effective 02-15-2007	• The policy section item c. was liberalized to reflect the spherical difference must be at least 3 diopters or cylindrical difference must be at least 2 diopters. Previously the policy required both.
	• References were updated.
02-05-2014	Added Medical Policy and Coding Disclaimers
	Updated Description section.
	In Coding section: ▪ Added ICD-10 Coding *(Effective October 1, 2014)*
	Updated Reference section.

05-13-2015	Description updated
	In Coding section: ▪ Added CPT: 65760
	References updated
06-08-2016	Description section reviewed
	Policy section reviewed
	Rationale section reviewed
	References updated
05-14-2021	Description section updated
	Policy section reviewed
	Rationale section reviewed
	References updated

REFERENCES

1. UpToDate, Laser Refractive Surgery. Literature review current through April 2020. Accessed May 2020.

Other References

1. Blue Cross and Blue Shield of Kansas Ophthalmology Liaison Committee: August 1998; August 2001; May 2007; May 2009.
2. Blue Cross and Blue Shield of Kansas Medical Director and Ophthalmology Liaison Committee Chair Consent Ballot, February 15, 2007.