

Intrastromal Corneal Ring Segments for Keratoconus

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Definitions

Keratoconus (KC) is a noninflammatory condition in which the cornea undergoes progressive thinning, resulting in a conical shape that can result in significant visual impairment. The condition may appear in the late teens and early twenties and may progress for decades before slowing or stabilizing and can be asymmetric. The condition can be associated with a family history of keratoconus, as well as with frequent eye rubbing, or conditions including retinitis pigments, Down syndrome, Ehlers-Danlos syndrome. If a layer of the cornea, the Descemet's membrane, is disrupted, corneal edema can occur known as hydrops, which can lead to corneal scarring that further disrupts the visual acuity.

Guideline

Insertion of intrastromal corneal ring segments (ICRS) for Keratoconus (e.g., Intacs®) is considered medically necessary for members who:

- Have experienced a progressive deterioration in their vision, such that they can no longer achieve adequate functional vision on a daily basis with their contact lenses or spectacles.
- Are ≥ 21 years of age
- Have clear a central cornea
- Have a corneal thickness of ≥ 450 microns at the proposed incision site
- Have corneal transplantation as the only remaining option to improve functional vision

Limitations/Exclusions

- Intracorneal ring segment implantation is contraindicated in true pellucid marginal degeneration.
- Intrastromal corneal ring segments are not considered medically necessary when adequate vision correction is achieved through use of glasses or contact lenses.
- Requests for post LASIK keratectasia, a complication of laser in situ keratomileusis (LASIK), will be reviewed on a case-by-case basis.

Revision History

Sept. 11, 2020	Added that Intracorneal ring segment implantation is contraindicated in true pellucid marginal degeneration
Sept. 13, 2019	Added case-by case language for post LASIK keratectasia

Applicable Procedure Codes

65785	Implantation of intrastromal corneal ring segments
L8610	Ocular implant

Applicable Diagnosis Codes

H18.601	Keratoconus, unspecified, right eye
H18.602	Keratoconus, unspecified, left eye
H18.603	Keratoconus, unspecified, bilateral
H18.609	Keratoconus, unspecified, unspecified eye
H18.611	Keratoconus, stable, right eye
H18.612	Keratoconus, stable, left eye
H18.613	Keratoconus, stable, bilateral
H18.619	Keratoconus, stable, unspecified eye
H18.621	Keratoconus, unstable, right eye
H18.622	Keratoconus, unstable, left eye
H18.623	Keratoconus, unstable, bilateral
H18.629	Keratoconus, unstable, unspecified eye
H18.711	Corneal ectasia, right eye (coverage eff. 02/10/2020)
H18.712	Corneal ectasia, left eye (coverage eff. 02/10/2020)
H18.713	Corneal ectasia, bilateral (coverage eff. 02/10/2020)
H18.719	Corneal ectasia, unspecified eye (coverage eff. 02/10/2020)
H52.31	Anisometropia (coverage eff. 02/10/2020)
H59.88	Other intraoperative complications of eye and adnexa, not elsewhere classified (coverage eff. 02/10/2020)
H59.89	Other postprocedural complications and disorders of eye and adnexa, not elsewhere classified (coverage eff. 02/10/2020)

References

Clin Exp Ophthalmol. 2012 Jul;40(5):433-9. doi: 10.1111/j.1442-9071.2011.02698.x. Intrastromal corneal ring segments: visual outcomes from a large case series. Ferrara G1, Torquetti L, Ferrara P, Merayo-Llodes J.

Fernndez-Vega Cueto L, Lisa C, Poo-Lpez A, Madrid-Costa D, Merayo-Llodes J, Alfonso JF. Intrastromal Corneal Ring Segment Implantation in 409 Paracentral Keratoconic Eyes. Cornea. 2016 Nov;35(11):1421-1426.

Giacomin NT, Mello GR, Medeiros CS, Kili A, Serpe CC, Almeida HG, Kara-Junior N, Santhiago MR. Intracorneal Ring Segments Implantation for Corneal Ectasia. J Refract Surg. 2016 Dec 1;32(12):829-839.

Speiaty matched clinical peer review.

Piñero DP, Alio JL: Intracorneal ring segments in ectatic corneal disease - a review. Clin Experiment Ophthalmol. 2010 Mar;38(2):154-67.

Ertan A, Colin J . Intracorneal rings for keratoconus and keratectasia. J Cataract Refract Surg 2007 Jul;33(7):1303-14. y. 2003 may;110(5):1031-40.

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Carrasquillo KG, Rand J, Talamo JH : Intacs for keratoconus and post-LASIK ectasia: mechanical versus femtosecond laser-assisted channel creation. Cornea. 2007 Sep;26(8):956-62.

Asbell PA. :Intacs corneal implants for myopia: an effective refractive alternative with proven efficacy and safety. In Clin J, Ertan A, eds. Intracorneal Ring Segments and Alternative Treatments for Corneal Ectatic diseases. Ankara: Kudret Goz, 2007; 37-48

Preferred Practice Patterns. Corneal Ectasia. American Academy of Ophthalmology. Available at <https://www.aao.org/preferred-practicepattern/corneal-ectasia-ppp-2018>