

Intrastromal Corneal Ring Segments for Keratoconus

Last Review Date: Sept. 10, 2021

Number: MG.MM.ME.65c

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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 pigmentosa, Down syndrome, Ehlers-Danlos syndrome. Stromal thinning can distort the corneal surface and can lead to irregular astigmatism and myopia. Furthermore, 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.
- Contraindications for Intacs:
 - Patients with collagen vascular, autoimmune, or immunodeficiency diseases

- Patients using one or more of the following prescription medications that may affect corneal healing or vision: isotretinoin (Accutane), amiodarone (Cordarone), and/or sumatriptan (Imitrex)
 - In the presence of recurrent corneal erosion syndrome, or corneal dystrophy.
- Requests for post LASIK keratectasia, a complication of laser in situ keratocmilleusis (LASIK), will be reviewed on a case-by-case basis.

Revision History

Sept. 10, 2021	Added list of Intacs contraindications
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

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Jump up to: 7.0 7.1 Piñero DP, Alio JL: Intracorneal ring segments in ectatic corneal disease - a review. *Clin Experiment Ophthalmol.* 2010 Mar;38(2):154-67.

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