Medical Policy: Intrastromal Corneal Ring Segments (Commercial)

POLICY NUMBER	LAST REVIEW DATE	APPROVED BY
MG.MM.ME.65c	**09/10/2021**	MPC (Medical Policy Committee)

IMPORTANT NOTE ABOUT THIS MEDICAL POLICY:

 The treating physician or primary care provider must submit to ConnectiCare, Inc. the clinical evidence that the patient meets the criteria for the treatment or surgical procedure. Without this documentation and information, ConnectiCare will not be able to properly review the request for prior authorization. This clinical policy is not intended to pre-empt the judgment of the reviewing medical director or dictate to health care providers how to practice medicine. Health care providers are expected to exercise their medical judgment in rendering appropriate care. The clinical review criteria expressed below reflects how ConnectiCare determines whether certain services or supplies are medically necessary. ConnectiCare established the clinical review criteria based upon a review of currently available clinical information (including clinical outcome studies in the peer-reviewed published medical literature, regulatory status of the technology, evidence-based guidelines of public health and health research agencies, evidence-based guidelines and positions of leading national health professional organizations, views of physicians practicing in relevant clinical areas, and other relevant factors). ConnectiCare, Inc. expressly reserves the right to revise these conclusions as clinical information changes, and welcomes further relevant information. Identification of selected brand names of devices, tests and procedures in a medical coverage policy is for reference only and is not an endorsement of any one device, test or procedure over another. Each benefit plan defines which services are covered. The conclusion that a particular service or supply is medically necessary does not constitute a representation or warranty that this service or supply is covered and/or paid for by ConnectiCare, as some plans exclude coverage for services or supplies that ConnectiCare considers medically necessary. If there is a discrepancy between this guideline and a member's benefits plan, the benefits plan will govern. In addition, coverage may be mandated by applicable legal requirements of the State of CT and/or the Federal Government. Coverage may also differ for our Medicare members based on any applicable Centers for Medicare & Medicaid Services (CMS) coverage statements including including National Coverage Determinations (NCD), Local Coverage Determinations (LCD) and/or Local Medical Review Policies(LMRP). All coding and web site links are accurate at time of publication.

Definitions

Keratoconus (KC)	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. Stromal thinning can distort the corneal surface and can lead to irregular astigmatism and myopia. Furthermore, if a layer of the cornea, the Descemets 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 micron 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 keratocmileusis (LASIK), will be reviewed on a case-by-case basis.

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
H18.712	Corneal ectasia, left eye
H18.713	Corneal ectasia, bilateral
H18.719	Corneal ectasia, unspecified eye
H52.31	Anisometropia
H59.88	Other intraoperative complications of eye and adnexa, not elsewhere classified
H59.89	Other postprocedural complications and disorders of eye and adnexa, not elsewhere classified

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-Lloves J.

Fernndez-Vega Cueto L, Lisa C, Poo-Lpez A, Madrid-Costa D, Merayo-Lloves 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.

Specialty 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.

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.

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

Revision history

DATE	REVISION
09/2021	• Added list of Intacs contraindications

09/2020	• Added that Intracorneal ring segment implantation is contraindicated in true pellucid marginal degeneration
10/2019	• Connecticare has adopted the clinical criteria of its parent corporation, EmblemHealth • Reformatted and reorganized policy, transferred content to new template