Corneal Cross-Linking

Policy Number: PA.217
Last Review Date: 11/14/2019
Effective Date: 06/01/2020

Policy

Evolent Health considers **Corneal Cross-Linking** medically necessary if the member meets all of the following indications:

1. Member must be in between the ages of 14 and 65
2. Member has a confirmed diagnosis of Progressive Keratoconus defined by any of the following:
    a. An increase of at least 1 D (diopter) in the steepest keratometry value
    b. An increase of at least 1 D (diopter) in regular astigmatism evaluated by subjective manifest refraction
    c. An increase of at least 0.50 D in the manifest refraction spherical equivalent
    d. A decrease ≥0.1 mm in the back optical zone radius in rigid contact lens wearers where other information was not available
3. Member has a clear central cornea without scarring or disease (e.g. herpetic keratitis, neurotrophic keratopathy)
4. Member has a corneal thickness of at least 300 microns at the thinnest area

Limitations

Corneal cross linking is not covered for pregnant individuals.

Corneal collagen cross-linking is considered experimental and investigational for any other indication including but not limited to:

1. Epithelial-on procedure
2. Corneal cross-linking combined with a second refractive procedure or in disease that does not have evidence of progression

Background

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Keratoconus is a vision disorder that affects the cornea — the clear, round-shaped front cover of the eye which controls the entry of glare and light. Keratoconus causes the cornea to expand and bulge out, thus bringing light rays out of focus and resulting in blurry and distorted vision. In later stages, symptoms progress to increased nearsightedness, astigmatism, and scarring of the cornea. Individuals with Keratoconus typically begin noticing symptoms in their late teens and early twenties; the condition then progresses over a period of roughly ten years. About one in ten people with Keratoconus have a parent with the same condition. Physicians have yet to discover the cause of Keratoconus in non-genetic cases but have associated the disease with eye allergies and extreme eye rubbing.

Corneal cross-linking (CXL) is a minimally invasive procedure that can provide relief of Keratoconus symptoms. According to the Kellogg Eye Center, CXL treatment begins with the removal of the epithelial layer from the cornea. The physician then applies riboflavin (Vitamin B-12) eye drops which are photosensitizers in the production of oxygen singlets and absorb the ultraviolet A (UVA) radiation, preventing further damage to the lens and retina. The UVA light is applied for up to 30 minutes; during this time, chemical bonds in the cornea are strengthened and result in new corneal collagen cross-links which produce a stronger cornea and stop the corneal ectasia. Side effects of corneal cross linking include infectious keratitis, herpetic keratitis, corneal opacity, epithelial haze, and delayed epithelial healing. Avedro Inc. is currently the only U.S. Food and Drug Administration (FDA) approved system for the application of corneal cross-linking.

Codes:

CPT Codes covered when the above indications are met	
Code	Description
0402T	Collagen cross-linking of cornea, including removal of the corneal epithelium and intraoperative pachymetry, when performed (Report medication separately)
J2787	Riboflavin 5'-phosphate, ophthalmic solution, up to 3 ml

References

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