

Amniotic Membrane Products

State(s): ☑ Idaho ☑ Montana ☑ Oregon ☑ Washington ☐ Other:	LOB(s): ☑ Commercial ☑ Medicare ☑ Medicaid
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Enterprise Policy

Clinical Guidelines are written when necessary to provide guidance to providers and members in order to outline and clarify coverage criteria in accordance with the terms of the Member's policy. This Clinical Guideline only applies to PacificSource Health Plans, PacificSource Community Health Plans, and PacificSource Community Solutions in Idaho, Montana, Oregon, and Washington. Because of the changing nature of medicine, this list is subject to revision and update without notice. This document is designed for informational purposes only and is not an authorization or contract. Coverage determination are made on a case-by-case basis and subject to the terms, conditions, limitations, and exclusions of the Member's policy. Member policies differ in benefits and to the extent a conflict exists between the Clinical Guideline and the Member's policy, the Member's policy language shall control. Clinical Guidelines do not constitute medical advice nor guarantee coverage.

Background

Amniotic Membrane Transplantation (AMT) is a procedure that utilizes amniotic membrane tissue to reconstruct damaged ocular surfaces and promote healing of corneal, conjunctival, and eyelid tissues after injury due to trauma, disease, or surgery.

Amniotic membrane products have been used for the management of select ophthalmologic wounds and reconstruction where there is limited access to autologous tissue for transplant, or when allogeneic transplant is not appropriate. These products come in a wide array of forms and most are obtained directly from tissue banks..

Criteria

Commercial

Prior authorization is required.

PacificSource considers amniotic membrane transplantation (AMT) or limbal stem cell transplantation for ocular surface reconstruction medically necessary when **ALL** following criteria are met:

- 1. Member has limbal deficiency (hypofunction or total loss of stem cells) refractory to conventional treatment (e.g., topical lubricants, antibiotics, therapeutic contact lenses and patching); **AND**
- 2. At least **ONE** of the following indications:
 - **A.** Reconstruction of Corneal Surface, as indicated for one of the following conditions:
 - Acute thermal/chemical burns
 - Band Keratopathy that failed conservative treatment
 - Corneal ulceration (central or peripheral)
 - Descemetocele or Perforation
 - Neurotropic Keratitis

- Painful bullous keratopathy
- Partial or complete limbal stem cell deficiency (with stem cell grafting)
- Persistent epithelial defect that failed conservative treatment
- Reconstruction of the surface of the conjunctiva
- **B.** Reconstruction of the Surface of the Conjunctiva, as indicated for **ONE** of the following conditions:
 - Acute Stevens-Johnson syndrome
 - Acute thermal/chemical burns
 - Covering defects after removal of conjunctival lesions (conjunctival intraepithelial neoplasia, tumors, scars, or folds parallel to the edges of the eyelids)
 - Bleb revisions
 - Pterygium if there was insufficient conjunctiva for an autograft
 - Scleral thinning
 - Superior Limbic Keratoconjunctivitis that failed conjunctival resection
 - Sympblepharon, fornix reconstruction

Medicaid

PacificSource Community Solutions follows Oregon Health Plan (OHP) Oregon Administrative Rules (OARs) 410-141-3820 to 3830 & 410-120-1200 for coverage of Amniotic Membrane Transplantation (AMT).

Medicare

PacificSource Medicare follows National Coverage Determination 80.1 for Hydrophilic Contact Lens for Corneal Bandage.

Experimental/Investigational/Unproven

PacificSource considers amniotic membrane transplantation and limbal stem cell transplantation experimental, investigational or unproven for all other indications (e.g., gelatinous drop-like ulcer, restrictive strabismus, use of trabeculectomy for primary open-angle glaucoma).

Coding Information

The following list of codes are for informational purposes only and may not be all-inclusive. Deleted codes and codes which are not effective at the time the service is rendered may not be eligible for reimbursement.

Placement of amniotic membrane on the ocular surface for wound healing; self-retaining Single layer, sutured Ocular surface reconstruction; amniotic membrane transplantation, multiple layers

V2790 Amniotic membrane for surgical reconstruction, per procedure (bundled payment)

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Definitions

- Acute thermal/chemical burns consist of burns to the sclera, conjunctiva, cornea, and eyelid and are associated with significant limbal ischemia and lack healthy limbal stem cells for epithelialization; classified by etiologic agents as either chemical injuries (e.g., those caused by acid or alkali) or radiant energy injuries (e.g., those caused by heat or ultraviolet [UV] radiation).
- Band keratopathy a corneal disease derived from the appearance of calcium on the central cornea; causes include trauma, eye drops PV Carpine (aka Pilocarpine), and hypercalcemia due to renal failure, sarcoidosis, hyperparathyroidism and certain malignancies.
- Bleb revisions excision of avascular bleb tissue, dissection posteriorly between conjunctiva and tenon's capsule, and advancement and suturing of the conjunctiva at the limbus.
- Bullous keratopathy a disorder caused by corneal endothelial decompensation due to degeneration (Fuch's endothelial dystrophy), surgical trauma, intractable glaucoma or previous corneal graft failure.
- Deep corneal ulcer can be caused by trauma, chemical injury, contact lens and infections or other eye conditions such as entropion, distichiasis, corneal dystrophy, and keratoconjunctivitis sicca.
- Descemetocele protrusion of Descemet's membrane through the cornea.
- Limbal stem cell deficiency (LSCD) when limbal epithelial stem cells are destroyed or become dysfunctional, frequently associated with superficial vascularization and compromised corneal surface.
- Persistent epithelial defect (PED) is often caused by microtrauma, neurotrophic keratopathy and exposure. Etiologies for PED include dry eye, exposure keratopathy, limbal stem cell deficiency, diabetic keratopathy, neurotrophic keratopathy following corneal transplant surgery (involving the anterior portion of the cornea), and herpetic infections.
- Pterygium is a wing-shaped, vascular, fleshy growth that originates on the conjunctiva and that can spread to the corneal limbus and beyond.
- Scleral thinning can occur in various conditions, including myopic degeneration, chronic scleritis, local scleral pathologies and scleral injury. Autoimmune conditions or collagen vascular diseases often present with scleral pathologies, which can also lead to scleral thinning.
- Stevens Johnson syndrome (SJS) begins with flu-like symptoms, followed by a painful red or purplish rash that spreads and blisters. Stevens-Johnson syndrome is an immune-complex—mediated hypersensitivity complex that typically involves the skin and the mucous membranes.
- Sympblepharon partial or complete adhesion of the palpebral conjunctiva of the eyelid to the bulbar conjunctiva of the eyeball; can be caused by any conjunctival infection (bacterial or viral conjunctivitis) or allergic conjunctivitis (vernal or atopic conjunctivitis) with secondary scarring.

References

Abdulhalim BE, Wagih MM, Gad AA, et al. Amniotic membrane graft to conjunctival flap in treatment of non-viral resistant infectious keratitis: a randomised clinical study. Br J Ophthalmol. 2015; 99(1):59-63.

ECRI Institute. Hotline Response. Amniotic membrane transplantation for ophthalmic surgery, wound care and orthopedic procedures. Published August 12, 2014.

Hayes, Inc. Evidence Analysis Research Brief. Aril acellular allograft amniotic membrane for ocular indications. https://evidence.hayesinc.com/report/earb.aril5024. Published October 7, 2020.

Optum 360, LLC (2020) "Billing for Amniotic Membrane" HCPCS code V2790, CMS directives Internet Only Manuals - 100-04, 4,200.4 American Medical Association

Appendix

Policy Number:

Effective: 10/1/2020 **Next review:** 10/1/2022

Policy type: Enterprise

Author(s):

Depts: Health Services

Applicable regulation(s): NCD 80.1; 410-141-3820 to 3830 3825 & 410-120-1200

Commercial Ops: 11/2021
Government Ops: 11/2021