Brow Ptosis and Eyelid Repair (for Louisiana Only)

Policy Number: CS008LA.~~S~~**T**
Effective Date: ~~January 1, 2024~~**TBD**

➲ Instructions for Use

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Application

This Medical Policy only applies to the state of Louisiana.

Coverage Rationale

Note: The InterQual® criteria below only applies to persons 18 years of age and older.

Brow ptosis repair and repair of the eyelid are considered ~~Reconstructive~~reconstructive and medically necessary in certain circumstances. For medical necessity clinical coverage criteria, refer to the InterQual® CP: Procedures:

- Blepharoplasty
- Ectropion Repair
- Entropion Repair
- Eyelid Lesion Excision, +/- Reconstruction
- Eyelid Reconstruction
- Ptosis Repair

Click here to view the InterQual® criteria.

Note: If multiple procedures are requested, criteria for each individual procedure must be met.

~~Internal Browpexy~~Internal Browpexy for any condition is ~~not~~ considered ~~Reconstructive~~cosmetic and ~~is~~ not medically necessary ~~as it does not correct a Functional Impairment.~~.

Eyelid surgery for correction of ~~lagophthalmos~~Lagophthalmos is considered ~~Reconstructive~~reconstructive and medically necessary when the upper eyelid is not providing complete closure to the eye, resulting in dryness and other complications.

Lid retraction surgery (CPT code 67911) is considered ~~Reconstructive~~reconstructive and medically necessary when all of the following criteria are present:

- Other causes have been eliminated as the reason for the lid retraction such as use of dilating eye drops, glaucoma medications; and
- ~~Clear, high-quality, clinical photographs document the pathology; and~~
- There is ~~Functional Impairment (such as '~~**functional impairment** (e.g., dry ~~eyes'~~**eyes**, pain/discomfort, tearing, blurred vision); and
- Tried and failed conservative treatments; and
- In cases of thyroid eye disease two or more Hertel measurements at least 6 months apart with the same base measurements are unchanged

Canthoplasty/Canthopexy (CPT codes 21280, 21282, and 67950) ~~is~~are considered ~~Reconstructive~~reconstructive and medically necessary when all of the following criteria are present:

- ~~Functional Impairment; and~~
- ~~Clear, high-quality, clinical photographs document the pathology; and~~
- **There is functional impairment**
- Repair of ectropion or entropion will not correct condition; and
- At least one of the following is present:
  - Epiphora (excess tearing) not resolved by conservative measures; or
  - Corneal dryness unresponsive to lubricants; or
  - Corneal ulcer

Repair of Floppy Eyelid Syndrome (FES) (CPT codes 67961 and 67966) is considered Reconstructive and medically necessary when all of the following are present and have been documented and confirmed by history and examination:

- Subjective symptoms must include eyelids spontaneously "flipping over" when the member sleeps due to rubbing on the pillow, and **one** of the following:
  - Eye pain or discomfort; or
  - Excess tearing; or
  - Eye irritation, ocular redness and discharge
- Physical examination that documents all of the following:
  - **Both** of the following:
    - Eyelash ptosis; and
    - Significant upper eyelid laxity~~;~~
    and
  - **One** of the following:
    - ~~Presence of giant papillary conjunctivitis (GPC);~~
    - or
    - Corneal findings such as one of the following:
      - Superficial punctate erosions (SPK); or
      - Corneal abrasion (documentation of a history of corneal abrasion or recurrent erosion syndrome is considered sufficient); or
      - Microbial keratitis

- Clear, high-quality, clinical photographs that clearly document Floppy Eyelid Syndrome and demonstrate both of the following:
  - Lids must be everted in the photographs; and
  - Conjunctival surface (underbelly) of the lids must be clearly visible
- Documentation that conservative treatment has been tried and failed. Examples may include:
  - Ocular lubricants both drops (daytime) and ointments (bedtime); or
  - Short trial of antihistamines; or
  - Topical steroid drops; or
  - Eye shield and/or taping the lids at bedtime
- ~~Other causes~~**Infections** of the eye~~ findings~~ have been ruled out. Examples may include:
  - Allergic conjunctivitis
  - Atopic keratoconjunctivitis
  - Blepharitis
  - Contact lens (CL) complication **(e.g., Giant Papillary Conjunctivitis [GPC])**
  - ~~Dermatochalasis~~
  - ~~Ectropion~~
  - ~~GPC that is not related to FES~~
  - ~~Ptosis of the lid(s)~~
  - Superior limbic keratoconjunctivitis (SLK)

Definitions

Check the definitions within the federal, state, and contractual requirements that supersede the definitions below.

~~**Congenital Anomaly:** A physical developmental defect that is present at the time of birth, and that is identified within the first twelve months of birth.~~

~~**Cosmetic Procedures:** Procedures or services that change or improve appearance without significantly improving physiological function.~~

Canthopexy: a surgical technique for lid malposition that involves securing the lateral retinaculum to the periosteum of the superolateral orbital rim with a suture (Rizvi 2010).

Canthoplasty: a procedure that is indicated for a variety of eyelid conditions. It is applicable to any disruption to the normal architecture of the canthus which can lead to negative functional sequelae (AAO 2023).

Floppy Eyelid Syndrome (FES): ~~Characterized~~**A frequent eyelid disorder characterized** by ~~significant upper~~ eyelid laxity ~~and~~ **that determines a spontaneous eyelid eversion during sleep associated with** chronic papillary conjunctivitis ~~in upper palpebral conjunctiva that is poorly responsive to topical lubrication and steroids. FES is known to be associated with obesity, obstructive sleep apnea, Down syndrome, and keratoconus. Keratoconus can be linked to frequent rubbing and mechanical effect on the palpebral conjunctiva and cornea.~~**and systemic diseases (DeGregorio, 2021).**

~~**Functional or Physical or Physiological Impairment:** A functional or Physical or Physiological Impairment causes deviation from the normal function of a tissue or organ. This results in a significantly limited, impaired, or delayed capacity to move, coordinate actions, or perform physical activities and is exhibited by difficulties in~~

~~one or more of the following areas: physical and motor tasks; independent movement; performing basic life functions.~~

Internal Browpexy: A minimally invasive technique to provide stabilization and subtle elevation of the lateral brow. ~~The sub-brow tissue is accessed through an eyelid crease incision and the brow fat pad is dissected free of the frontal periosteum from the orbital rim. A guiding suture is placed from the skin to the internal wound to ensure placement of the suspension suture on the undersurface of the brow soft tissue. Suture is engaged at the periosteum, the internal brow tissue, and two to three similar sutures are placed laterally. When all the sutures are tied, the brow is anchored to the new position.~~**(Karimi et al., 2020).**

Lagophthalmos: the inability to close the eyelids completely. A portion of the eye remains open during a blink and during sleep and is subject to damage from exposure (AAO Exposure Keratopathy, 2024).

Marginal Reflex Distance -1 (MRD-1): ~~Measures the number of~~**The measurement in** millimeters from the ~~corneal~~ light reflex ~~or center of~~**on** the ~~pupil~~**patient's cornea** to the upper ~~lid~~**eyelid** margin~~. (**Note: The "-1" in MRD-1 refers to the upper lid and not the measurement in millimeters.) (Nerad, 2021).~~

~~**Reconstructive Procedures:** Reconstructive Procedures when~~ **with the patient gazing in** the primary ~~purpose of the procedure is either of the following:~~

- ~~Treatment of a medical condition.~~
- ~~Improvement or restoration of physiologic function.~~

~~Reconstructive Procedures include surgery or other procedures which are related to an Injury, Sickness or Congenital Anomaly. The primary result of the procedure is not a changed or improved physical appearance.~~

~~Procedures that correct an anatomical Congenital Anomaly without improving or restoring physiologic function are considered Cosmetic Procedures. The fact that you may suffer psychological consequences or socially avoidant behavior as a result of an Injury, Sickness or Congenital Anomaly does not classify surgery (or other procedures done to relieve such consequences or behavior) as a Reconstructive Procedure.~~

~~**Visual Field Testing:** Visual field measurements with the eyelid skin or ptotic eyebrow in resting~~ position ~~can be~~**. MRD1 is** used to ~~demonstrate a field defect that improves when the eyebrow and skin fold are lifted (Nerad, 2021).~~**indicate degree of ptosis or retraction (AAO 2023).**

Applicable Codes

The following list(s) of procedure and/or diagnosis codes is provided for reference purposes only and may not be all inclusive. Listing of a code in this policy does not imply that the service described by the code is a covered or non-covered health service. Benefit coverage for health services is determined by federal, state, or contractual requirements and applicable laws that may require coverage for a specific service. The inclusion of a code does not imply any right to reimbursement or guarantee claim payment. Other Policies and Guidelines may apply.

Note: The following codes may be cosmetic; review is required to determine if considered cosmetic or reconstructive.

CPT Code	Description
Blepharoplasty (Lower and Upper Eyelid)	
15820	Blepharoplasty, lower eyelid
15821	Blepharoplasty, lower eyelid; with extensive herniated fat pad
15822	Blepharoplasty, upper eyelid
15823	Blepharoplasty, upper eyelid; with excessive skin weighting down lid
Brow Ptosis Repair	
67900	Repair of brow ptosis (supraciliary, mid-forehead or coronal approach)
Upper Eyelid Blepharoptosis Repair	
67901	Repair of blepharoptosis; frontalis muscle technique with suture or other material (e.g., banked fascia)
67902	Repair of blepharoptosis; frontalis muscle technique with autologous fascial sling (includes obtaining fascia)
67903	Repair of blepharoptosis; (tarso) levator resection or advancement, internal approach
67904	Repair of blepharoptosis; (tarso) levator resection or advancement, external approach
67906	Repair of blepharoptosis; superior rectus technique with fascial sling (includes obtaining fascia)
67908	Repair of blepharoptosis; conjunctivo-tarso-Muller's muscle-levator resection (e.g., Fasanella-Servat type)
67909	Reduction of overcorrection of ptosis
Lid Retraction	
67911	Correction of lid retraction
Lagophthalmos	
67912	Correction of lagophthalmos, with implantation of upper eyelid lid load (e.g., gold weight)
Ectropion and Entropion	
67914	Repair of ectropion; suture
67915	Repair of ectropion; thermocauterization
67916	Repair of ectropion; excision tarsal wedge
67917	Repair of ectropion; extensive (e.g., tarsal strip operations)
67921	Repair of entropion; suture
67922	Repair of entropion; thermocauterization
67923	Repair of entropion; excision tarsal wedge
67924	Repair of entropion; extensive (e.g., tarsal strip or capsulopalpebral fascia repairs operation)
Canthoplasty/Canthopexy~~Canthus Repair and Lid Repair~~	
~~*~~21280	Medial canthopexy (separate procedure)
21282	Lateral canthopexy

CPT Code	Description
67950	Canthoplasty (reconstruction of canthus)
67961	Excision and repair of eyelid, involving lid margin, tarsus, conjunctiva, canthus, or full thickness, may include preparation for skin graft or pedicle flap with adjacent tissue transfer or rearrangement; up to one-fourth of lid margin
67966	Excision and repair of eyelid, involving lid margin, tarsus, conjunctiva, canthus, or full thickness, may include preparation for skin graft or pedicle flap with adjacent tissue transfer or rearrangement; over one-fourth of lid margin
Floppy Eyelid Syndrome	
67961	Excision and repair of eyelid, involving lid margin, tarsus, conjunctiva, canthus, or full thickness, may include preparation for skin graft or pedicle flap with adjacent tissue transfer or rearrangement; up to one-fourth of lid margin
67966	Excision and repair of eyelid, involving lid margin, tarsus, conjunctiva, canthus, or full thickness, may include preparation for skin graft or pedicle flap with adjacent tissue transfer or rearrangement; over one-fourth of lid margin

Codes labeled with an asterisk (*) are not on the State of Louisiana Medicaid Fee Schedule and therefore are not covered by the State of Louisiana Medicaid Program.

Clinical Evidence

Internal Browpexy

~~Korn et al (2016) cited that an~~**An** internal browpexy ~~will not elevate a severely ptotic brow and in general should only be considered when minimal~~ **is best for mild** brow ptosis ~~is present or if stabilization and prevention of descent of the~~**, which is considered cosmetic. It is difficult to generate a substantial amount of elevation using this technique (Shaw and Phelps, 2020).**

In a 2023 objective comparison of eyebrow ~~is desired. The author noted that the principle disadvantage of an~~**position following internal and external Browpexy, Huang et al. retrospectively reviewed the cases of 68 patients, mostly females, who underwent either internal browpexy** ~~is the~~**(39), external browpexy (9) or upper eyelid skin excision alone (20). Photographs were taken before, immediately after surgery, then at one week, 1-3 months, 4-6 months and 7-12 months. Brow height changes were measured using the ImageJ biological measuring program and compared among the three groups. The results showed both internal and external browpexy provided improvement within 3 months of surgery, however outcomes for those treated with an external browpexy had better brow-lift outcomes across the entire brow than did internal browpexy. The authors concluded that external browpexy is a better choice for those with severe whole brow ptosis, and internal browpexy is recommended for patients with mild ptosis. This retrospective observational study is limited** ~~effect and questionable longevity~~**by a small number of participants and a lack of randomization. Additionally, uneven distribution Furthermore, most patients were lost to follow up so longer term data is not available. Further high quality research is needed to validate these findings.**

Floppy Eyelid Syndrome (FES)

There is no diagnostic test for FES. It is a clinical diagnosis based on history, symptoms and systemic associations, including obstructive sleep apnea (OSA) and keratoconus as well as other sequelae of OSA and morbid obesity. Patients with this condition should be managed with an internal medicine team and a sleep disorder specialist. Addressing underlying obesity, OSA and avoiding sleeping in a prone position may improve symptoms. If there is minimal response to medical treatment, surgical procedures such as horizontal eyelid shortening can help to relieve ocular symptoms and provide good functional and cosmetic results. Surgery should be considered in significantly symptomatic patients after controlling ocular surface disease and optimizing medical status (AAO, 2023).

Cheong et al. (2022) conducted a systematic review and meta-analysis to investigate the relationship between obstructive sleep apnea (OSA) and FES. The systematic review included 12 studies, nine of which were included in the meta-analysis, with a total of 1,109 individuals. The analysis of the data determined a significant association between OSA and FES (OR = 1.89, 95% CI = 1.27-2.83, I 2 = 44%). Upon further investigation the study determined the more severe the OSA was, the higher the risk of developing FES. Patients with severe OSA had the highest risk of developing FES (OR = 3.06, 95% CI = 1.62-5.78, ~~I 2~~**I2** = 0%), followed by moderate OSA (OR = 2.53, 95% CI = 1.29-4.97, ~~I 2~~**I2** = 0%), and patients with mild OSA had the lowest risk (OR = 1.76, 95% CI = 0.85-3.62, I 2 = 0%). The authors concluded there was a positive association between OSA and FES with increasing severity of OSA correlating with significantly higher risk of FES. Limitations in the study were important covariates such as age, gender and body mass index were not adjusted. The authors recommend more longitudinal studies with sufficient duration of follow-up to better characterize the relationship between OSA and FES.

Acar et al. (2021) conducted a randomized controlled trial (RCT) of 51 patients with obstructive sleep apnea hypopnea syndrome (OSAHS) to assess the long-term effects of positive airway pressure (PAP) therapy on the eyelid and the ocular surface. Over a period of 18 months patients were treated with PAP then the scores were compared for the pre- and post-PAP values for eye examination which included the presence of FES, ocular surface disease index (OSDI) questionnaire results, Schirmer I test, tear film breakup time (TBUT), and corneal staining. The presence of FES before and after PAP was 56.9% and 74.5% ($p < 0.01$). FES stage was determined as 1.41 ±0.98 before PAP and 0.78 ±0.78 after PAP ($p < 0.01$). Pre-PAP and post-PAP ocular surface disease index OSDI results were 47.79 ±21.04 and 42.17 ±19.97, ($p < 0.01$). Schirmer values before and after PAP were 7.23 ±1.95 and 8.49 ±1.79 mm, ($p < 0.01$). TBUT values before and after PAP were 7.11 ±1.82 and 8.68 ±1.76 seconds, ($p < 0.01$). Scores of the corneal staining stages before and after PAP were 1.05 ±0.75 and 0.68 ±0.54, ($p < 0.01$). The authors concluded OSAHS was associated with low Schirmer and TBUT values, high scores on the OSDI questionnaire, and high corneal staining. Normal sleep patterns returned after appropriate use of PAP along with relief of systemic findings and ocular surface problems. The authors believe long term use of PAP (at least one year) improves FES and overcomes the problem of ocular irritation that occurs in the early stage of PAP therapy. Limitations of the study include lack of blinding when performing the ocular screenings and small sample size.

~~De Gregorio et al. (2021) published an article reviewing the demographics, pathogenesis and treatment of FES. FES is a frequent and under-diagnosed eyelid disorder syndrome characterized by eyelid laxity that determines a spontaneous eyelid eversion during sleep associated with chronic papillary conjunctivitis and systemic diseases. Many types of involutional, local and systemic diseases can cause eyelid laxity. FES is characterized~~

~~by upper eyelids that easily distort and turn out with minimal lateral traction and the tarsus appears soft, rubbery and easily folded. Patients present with marked papillary conjunctivitis underneath the eyelids with symptoms of ocular discomfort. The patients usually complain of tearing, redness, irritation such as photosensitivity, foreign body sensation, pain, mucoid discharge, dryness, eyelid swelling and blurred vision. Corneal punctate erosions, keratitis, and abrasions are often reasons for ophthalmological examine. In addition, clinical features may include dermatochalasis, trichiasis, entropion, ectropion, eyelid and lash ptosis, meibomian gland dysfunction and recurrent chalazia. Patients with FES are often obese with a BMI > 30kg/m, and frequently affected by OSAHS. FES has been reported as the most frequent ocular disorder associated with OSAHS. FES is treated with topical medication for related ocular surface diseases, medical therapy, and/or with surgical approach. If medical management of FES fails, surgical approach may be indicated for both symptomatic relief and preservation of ocular surface integrity. Various surgical techniques have been proposed for the correction of the superior eyelid laxity, focusing on the resolution of the upper eyelid spontaneous eversion. The authors concluded due to these clinical features FES occurs more frequently than expected because it is often under-diagnosed and misdiagnosed. Due to frequent association with OSAHS, FES early recognition is important to avoid serious sight-threatening and life-threatening conditions.~~

Lagophthalmos

Proper eyelid closure and a normal blink reflex are essential to maintaining a stable tear film and a healthy corneal surface. Patients affected with lagophthalmos are unable to fully close their eyelids, and they may describe symptoms of dry and irritated eyes. Common morbidities of lagophthalmos are corneal exposure and subsequent keratopathy, which may progress to corneal ulceration and infectious keratitis. It is important to recognize lagophthalmos early in the patient's course and begin treatment as soon as possible. The choice of therapy requires an understanding of both the etiology and expected duration of the lagophthalmos. (AAO, 2008)

Lid Retraction Surgery

Upper eyelid retraction is defined by abnormally high resting position of the upper lid. This produces visible sclera between the eyelid margin and corneal limbus, which produces the appearance of a stare with an accompanying illusion of exophthalmos. Eyelid retraction can lead to lagophthalmos and exposure keratitis, which can cause mild ocular surface irritation to vision-threatening corneal decompensation. The most common causes of upper eyelid retraction include thyroid eye disease, recession of superior rectus muscle, and contralateral ptosis~~.~~ (AAO ~~2021)~~**, 2023).**

Lower eyelid retraction is a malposition of the lower eyelid in which the lid margin is displaced inferiorly resulting in increased exposure of the surface of the eye to the environment. This can present with dry eye symptoms and can lead to exposure keratitis, corneal ulcer, and even corneal scarring. It can present unilaterally or bilaterally, depending on the etiology and most frequently presents due to thyroid eye disease. Mild cases may be managed with ocular surface lubrication and more severe cases with dermal filler or surgery (AAO, 2024).

Hoang T et al. (2021) completed the 2022 update on clinical management of Graves' ~~disease~~**Disease** and thyroid eye disease (TED). General treatment of patients with TED includes reversal of hyperthyroidism, monitoring for and prompt treatment of hypothyroidism, and cessation of smoking, if applicable. First-line therapy for individuals with moderate to severe TED would include intravenous glucocorticoids.

Surgery for TED is typically performed either emergently, such as for optic neuropathy, globe subluxation, or corneal thinning/perforation due to exposure keratopathy, or for rehabilitation after the disease has run its active course. Eyelid changes due to TED are common and include upper and lower eyelid retraction and eyelid fat compartment expansion. Eyelid retraction surgery is aimed at lowering the upper eyelid and raising the lower eyelid to correct the "thyroid stare" appearance. Eyelid contouring is targeted to restore the natural height and contour of the eyelid, including decreasing the fat compartment expansion and minimizing the temporal flare, which occur as part of the disease state. Eyelid surgery is typically the last step in the rehabilitation of the patient's appearance. The total time between onset of TED to the final eyelid surgery can span several years.

Hodgson and Rajaii (2020) conducted a systematic review on the pathophysiology and treatment options for the management of thyroid associated orbitopathy (TAO). TAO also known as Graves' orbitopathy (GO) and thyroid eye disease (TED) is associated with distinct clinical features, including upper eyelid retraction, restrictive strabismus and proptosis. Moderate to severe TAO is defined as lid retraction > 2 mm, exophthalmos > 3 mm, moderate to severe soft tissue involvement, and presence of diplopia. Sight-threatening TAO is defined as presence of direct optic neuropathy or corneal breakdown. Rehabilitative surgical options include orbital decompression for severe proptosis, strabismus surgery, followed by upper and lower lid retraction surgery. The authors concluded surgical management is required in cases of severe vision-threatening disease that is refractory to medical management, and as restorative treatment when the disease is inactive and clinical measurements are stable. Limitations to the study are small sample sizes and non-randomized studies.

~~Velasco Cruz et al. (2013) published an article addressing graves upper eyelid retraction. Graves upper eyelid retraction (GUER) is the most common and characteristic sign of Graves orbitopathy. In early case series lid retraction was found in 94.0% of the patients. Population-based studies have yielded comparable results. Retraction implies that the resting position of the affected lid is abnormally high. The lid position is usually measured with a millimeter ruler as a linear distance between the pupil center and the edge of the lid margin at the twelve o'clock position. The authors described in historical sequence the evolution of surgical attempts beginning in 1934. In summary, the plethora of technical variations described for the correction of GUER strongly suggests that the results are variable with any type of surgery. The upper lid retractors (LPS and Müller muscle) can be debilitated separately or in combination by an anterior or posterior approach. The muscles can be recessed, partially resected, or lengthened. Various materials have been tried as spacers between the recessed retractors and the upper tarsal border, but the results were not better than those obtained by just weakening the retractors. Residual lateral retraction is a well-known phenomenon, and most surgeons do more aggressive surgery laterally.~~

Medial and Lateral Canthoplasty/Canthopexy

Clinical Practice Guidelines

American Academy of Ophthalmology (AAO) **2008**

~~The AAO clinical coverage guidelines include the following indications for a reconstructive lateral or medial canthoplasty:~~

- ~~Lid Malposition due to horizontal laxity~~
  - ~~Involutional ectropion~~
    - ~~Poor lid to globe apposition causing exposure keratopathy~~

- ~~Punctal ectropion causing epiphora~~

~~Involutional~~**Indications for Functional Canthoplasty**

- **Congenital and involutional** entropion
  - ~~Significant ocular discomfort caused by lashes and keratinized skin rubbing directly on cornea~~
  - ~~Pathophysiology~~
- ~~Lower lid~~**Congenital, involutional and cicatricial ectropion**
  - ~~–~~ **Lid** laxity
  - ~~Dehiscence of lower lid retractors~~
  - ~~Overriding orbicularis – often exacerbated by irritative symptoms causing blepharospasm ("spastic" entropion)~~
  - ~~Enophthalmos~~
- ~~Lower-lid retraction~~
  - ~~Involutional – lid laxity~~
  - ~~Cicatricial – infection, inflammation, trauma, burns, postsurgical (e.g., lower-lid blepharoplasty, laser skin resurfacing)~~
  - ~~Mechanical – midface ptosis, craniofacial anomalies, tumor~~
- ~~Paralytic –~~ **(seen with anophthalmos or enophthalmos, and** facial nerve palsy**)**
- ~~Tear pump failure Involutional and/or paralytic~~
- ~~Medial canthal tendon (MCT) laxity~~
  - ~~Severe laxity, especially in setting of facial nerve paralysis, can cause punctal ectropion, medial lower lid retraction, lagophthalmos/exposure keratopathy, and epiphora~~
  - ~~Performing lateral canthal tendon (LCT) tightening in presence of MCT laxity can lateralize punctum and cause lacrimal outflow deficiency~~
- Canthal ~~malposition~~**dystopia**
  - ~~Involutional, developmental, postsurgical, or traumatic~~
- ~~Floppy eyelid syndrome~~
  - ~~Marked lid laxity associated with softening of tarsus~~
  - ~~Multiple possible factors implicated in pathogenesis:~~
    - ~~Prone or side sleeping position causes mechanical pressure on lids~~
    - ~~Ischemia and reperfusion injury~~
    - ~~Upregulation of matrix metalloproteinases (MMP) implicated in elastin degeneration~~
  - ~~Lids can spontaneously evert during sleep, causing exposure keratopathy and chronic papillary conjunctivitis~~
  - ~~Associated with obstructive sleep apnea and obesity~~
- ~~Surgical treatment involves upper-~~**Exposure keratopathy**
- **Epiphora**
- **Vertical eyelid retraction (due to trauma, after blepharoplasty, with thyroid eye disease [contraindicated if significant proptosis])**
- **Repair after Iatrogenic damage or trauma**
- **In conjunction with Blepharoplasty:**
  - **To prevent ectropion or** eyelid ~~tightening~~**retraction**
- ~~Eyelid imbrication~~
  - ~~Lid laxity causes upper-lid margin to overlap lower lid~~
    - ~~Upper palpebral conjunctiva rubs across lower lashes, leading to chronic irritation~~
  - ~~Sometimes associated with floppy eyelid syndrome~~
  - ~~Can be addressed with lower- and/or upper-lid tightening~~

- ~~Reconstruction following trauma or surgery~~
  - ~~Traumatic LCT/MCT avulsion~~
    - ~~Must rule out canalicular injury with MCT avulsion~~
  - ~~LCT resuspension following emergent lateral canthotomy and cantholysis for orbital compartment syndrome~~
  - ~~Tumor resection~~
  - **Festoons**
- **Delayed repair resulting in rounding of the canthus**
- **Telecanthus**
- **Congenital malposition or occlusion of the visual field**
- **Absent naso-orbital valley**
- **With lateral orbitotomy:**
  - **In orbital decompression**
  - **Removal of orbital tumors**

U.S. Food and Drug Administration (FDA)

This section is to be used for informational purposes only. FDA approval alone is not a basis for coverage.

Brow ptosis repair and eyelid repair are procedures and, therefore, not regulated by the FDA. However, devices and instruments used during the surgery may require FDA approval. Refer to the following website for additional information: http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfPMN/pmn.cfm. (Accessed ~~July 14, 2023~~March 25, 2024)

Acar M, Firat H, Yuceege M, et al. Long-term effects of PAP on ocular surface in obstructive sleep apnea syndrome. Can J Ophthalmol. 2014 Apr;49(2):217-21.

~~American Academy of Ophthalmology, Lateral and medial canthoplasty, Oculofacial Plastic Surgery Education Center.~~

~~Burkat CN, Lemke BN. Acquired lax eyelid syndrome: an unrecognized cause of the chronically irritated eye. Ophthal~~**American Academy of Ophthalmology (AAO). Lagophthalmos Evaluation and Treatment. April 2008. Available at: https://www.aao.org/eyenet/article/lagophthalmos-evaluation-treatment. Accessed April 16, 2024.**

American Academy of Ophthalmology (AAO). EyeWiki®. Canthoplasty. December 2023.

American Academy of Ophthalmology (AAO). EyeWiki®. Exposure Keratopathy. March 2024.

American Academy of Ophthalmology (AAO). EyeWiki®. Floppy Eyelid Syndrome. February 2024.

American Academy of Ophthalmology (AAO). EyeWiki®. Lower Eyelid Retraction. April 2024.

American Academy of Ophthalmology (AAO). EyeWiki®. Margin to Reflex Distance 1,2,3. October 2023.

American Academy of Ophthalmology (AAO). EyeWiki®. Upper Eyelid Retraction. December 2023.

Centers for Disease Control and Prevention. Disability and Health Promotion. Disability and Health Overview. September 2020. Available at: https://www.cdc.gov/ncbddd/disabilityandhealth/disability.html. Accessed March 25, 2024.

~~Plast Reconstr Surg.~~ ~~2005 Jan;21(1):52-8.~~

Chambe J, Laib S, Hubbard J, et al. Floppy eyelid syndrome is associated with obstructive sleep apnoea: a prospective study on 127 patients. J Sleep Res. 2012 Jun;21(3):308-15.

Cheong AJY, Ho OTW, Wang SKX, et al. Association between obstructive sleep apnea and floppy eyelid syndrome~~): Asystematic~~: **A systematic** review and meta-analysis. Surv Ophthalmol. 2022 Nov 22:S0039-6257(22)00170-9.

De Gregorio A, Cerini A, Scala A, et al. Floppy eyelid, an under-diagnosed syndrome: a review of demographics, pathogenesis, and treatment. Ther Adv Ophthalmol. 2021 Dec 5;13:25158414211059247.

Dickinson J, Perros P. Thyroid-associated orbitopathy: Who and how to treat. Endocrinology and Metabolism Clinics, 2009-06-01, Volume 38, Issue 2, Pages 373-388.

Fowler AM, Dutton JJ. Floppy eyelid syndrome as a subset of lax eyelid conditions: relationships and clinical relevance (an ASOPRS thesis). Ophthal Plast Reconstr Surg. 2010 May-Jun;26(3):195-204.

Hoang TD, Stocker DJ, Chou EL et al. 2022 update on clinical management of Graves' ~~disease~~Disease and thyroid eye disease. Endocrinology and Metabolism Clinics. N Am 51 (2022) 1-18.

Hodgson NM, Rajaii F. Current understanding of the progression and management of thyroid associated orbitopathy: a systematic review. Ophthalmol Ther. 2020 Mar;9(1):21-33.

Huang PJ, Mao SH, Yen CI, et al. Objective comparison of eyebrow position after internal and external browpexy. Plast Reconstr Surg. **2023 Sep 1;152(3):414e-423e.**

Karimi N, Kashkouli MB, Sianati H, Khademi B. Techniques of eyebrow lifting: a narrative review. J Ophthalmic Vis Res. 2020 Apr 6;15(2):218-235.

~~Korn BS, et al. Video atlas of oculofacial plastic and reconstructive surgery. 2nd ed. Elsevier Inc. 2016. Chapter 21, Internal Brow Plasty; p.143-146.~~

Nerad JA. Techniques in ophthalmic plastic surgery. 2nd ed. Philadelphia: Elsevier; 2021.

Periman LM, Sires BS. Floppy eyelid syndrome: a modified surgical technique. Ophthal Plast Reconstr Surg. 2002 Sep;18(5):370-2.

Rizvi M, Lypka M, Gaon M, et al. A simplified lateral canthopexy technique. Plast Reconstr Surg. 2010 Jun;125(6):248e-249e.

Shaw LT, Phelps PO. The basics of brow ptosis. Dis Mon. 2020 Oct;66(10):101038.

Valenzuela AA, Sullivan TJ. Medial upper eyelid shortening to correct medial eyelid laxity in floppy eyelid syndrome: a new surgical approach. Ophthal Plast Reconstr Surg. 2005 Jul; 21(4):259-63.

Velasco Cruz AA, Tibeiro SFT, Garcia DM, et al. Graves upper eyelid retraction. Survey of Ophthalmology, 2013-01-01, Volume 58, Issue 1, Pages 63-76.

Policy History/Revision Information

Date	Summary of Changes
TBD	**Coverage Rationale** • **Replaced language indicating "Internal Browpexy is *not considered reconstructive* and is not medically necessary *as it does not correct a functional impairment*" with "Internal Browpexy *for any condition is considered cosmetic* and not medically necessary"**

Date	Summary of Changes
	• Revised coverage criteria for: ***Lid Retraction Surgery*** ○ Removed criterion requiring "clear, high-quality, clinical photographs document the pathology" ***Canthoplasty/Canthopexy*** ○ Removed criterion requiring "clear, high-quality, clinical photographs document the pathology" ***Floppy Eyelid Syndrome (FES)*** ○ Replaced criterion requiring "*other causes* of the eye *findings* have been ruled out" with "*infections* of the eye have been ruled out" ○ Revised list of examples of infections of the eye: ▪ Replaced "contact lens (CL) complication" with "contact lens (CL) complication *[e.g., Giant Papillary Conjunctivitis (GPC)]*" ▪ Removed: – Dermatochalasis – Ectropion – GPC that is not related to FES – Ptosis of the lid(s) **Definitions** • Added definition of: ○ Canthopexy ○ Canthoplasty ○ Lagophthalmos • Removed definition of: ○ Congenital Anomaly ○ Cosmetic Procedures ○ Functional or Physical or Physiological Impairment ○ Reconstructive Procedures ○ Visual Field Testing • Updated definition of: ○ Floppy Eyelid Syndrome (FES) ○ Internal Browpexy ○ Marginal Reflex Distance -1 (MRD-1) **Supporting Information** • Updated *Clinical Evidence* and *References* sections to reflect the most current information • Archived previous policy version CS008LA.S

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