Medical Coverage Policy | Balloon Dilation of the Eustachian Tube

EFFECTIVE DATE: 09|01|2026
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OVERVIEW

Eustachian tube dysfunction occurs when the functional valve of the eustachian tube fails to open and/or close properly. Chronic dysfunction can lead to hearing loss, otitis media, tympanic membrane perforation, and cholesteatomas. Balloon dilation of the eustachian tube is a procedure intended to improve the patency by inflating a balloon in the cartilaginous part of the eustachian tube to cause local dilation.

MEDICAL CRITERIA

Medicare Advantage Plans and Commercial Products
Balloon Dilation of the Eustachian Tube Use in Adult Populations

Balloon dilation of the eustachian tube (BDET) with a device approved by the U.S. Food and Drug Administration (FDA) for treatment of chronic obstructive eustachian tube dysfunction may be considered medically necessary when all the following criteria are met:

1. Individuals with symptoms of obstructive eustachian tube dysfunction (aural fullness*, aural pressure, otalgia, and/or hearing loss) for 3 months or longer in one or both ears that significantly affects quality of life or functional health status; AND
   *Aural fullness and pressure must be present
2. The individual has undergone a comprehensive diagnostic assessment; including patient-reported questionnaires, history and physical exam, tympanometry if the tympanic membrane is intact, nasal endoscopy, and comprehensive audiometry, with the following findings:
   - Abnormal tympanogram (Type B or C)
   - Abnormal tympanic membrane (retracted membrane, effusion, perforation, or any other abnormality identified on exam); AND,
3. Failure to respond to appropriate medical management of potential co-occurring conditions, if any, such as allergic rhinitis, rhinosinusitis, and laryngopharyngeal reflux, including 4-6 weeks of a nasal steroid spray, if indicated; AND,
4. Other causes of aural fullness such as temporomandibular joint disorders, extrinsic obstruction of the eustachian tube, superior semicircular canal dehiscence, and endolymphatic hydrops have been ruled out; AND,
5. If the individual had a history of tympanostomy tube placement, symptoms of obstructive eustachian tube dysfunction should have improved while tubes were patent; AND,
6. The individual does not have patulous eustachian tube dysfunction or another contraindication to the procedure as noted below:
   - Contraindications are as follows:
     - Individuals with patulous eustachian tube dysfunction
       - A diagnosis of patulous ETD is suggested by symptoms of autophony of voice, audible respirations, pulsatile tinnitus, and/or aural fullness.
     - Individuals with extrinsic reversible or irreversible causes of eustachian tube dysfunction including but not limited to:
       - craniofacial syndromes, including cleft palate spectrum
       - neoplasms causing extrinsic obstruction of the eustachian tube
       - history of radiation therapy to the nasopharynx
       - enlarged adenoid pads
       - nasopharyngeal mass
       - neuromuscular disorders that lead to hypotonia/ineffective eustachian tube dynamic opening

        - systemic mucosal or autoimmune inflammatory disease affecting the mucosa of the nasopharynx and eustachian tube (e.g. Samter's triad, Wegener's disease, mucosal pemphigus) that is ongoing/active (i.e. not in remission)
    - Individuals with aural fullness but normal exam and tympanogram
    - Individuals with chronic and severe atelectatic ears; AND,
7. The individual's eustachian tube dysfunction has been shown to be reversible as defined below by one of the following:
    - The individual states that they are able to relieve the pressure by performing a Valsalva maneuver to "pop" their ears; OR
    - Performing a Valsalva maneuver produces temporary improvement of the individual's tympanogram to Type A tympanogram; OR
    - Performing a Valsalva maneuver causes the member's middle ear to aerate, which is indicated by the provider visualizing lateral movement of the tympanic membrane on otoscopy; AND,
8. Symptoms are continuous rather than episodic (e.g., symptoms occur only in response to barochallenge such as pressure changes while flying); AND,
9. The individual has not had a previous BDET procedure

Balloon Dilation of the Eustachian Tube Use in Pediatric Populations
Balloon dilation of the eustachian tube (BDET) with a device approved by the U.S. Food and Drug Administration (FDA) for treatment of chronic obstructive eustachian tube dysfunction may be considered medically necessary in the pediatric population when all the following criteria are met:

- Individuals between the ages of 8 to 17; AND
- Symptoms of obstructive eustachian tube dysfunction with one of the following:
    - Evidence of middle ear dysfunction, including abnormal tympanometry (type B or C) OR
    - Objective middle ear disease (eg, retraction, effusion, cholesteatoma) with a history of prior tympanostomy tube placement and/or adenoidectomy; AND
- Individual has undergone a comprehensive diagnostic assessment, including all of the following:
    - history and physical exam, AND
    - tympanometry if the tympanic membrane is intact, AND
    - nasopharyngoscopy, AND
    - comprehensive audiometry; AND
- Failure to respond to appropriate medical management of alternative or co-occurring conditions that may contribute to symptoms of aural fullness or Eustachian tube dysfunction, if present (eg, allergic rhinitis, rhinosinusitis, laryngopharyngeal reflux, temporomandibular joint disorder), including a trial of intranasal corticosteroid therapy for 4 to 6 weeks when clinically indicated; AND
- None of the following contraindications are present for pediatric individuals:
    - Patulous eustachian tube dysfunction
    - Dehiscent carotid artery identified on imaging without appropriate device safeguards
    - Active acute infection of the nasopharynx or middle ear
    - Anatomic obstruction from non-adenoid nasopharyngeal masses requiring alternative management
    - Age <8 years
    - Failure to confirm obstructive ETD with objective testing
    - Uncontrolled allergic rhinitis or gastroesophageal reflux
    - Craniofacial anomalies with possible abnormal eustachian tube anatomy
    - Coagulopathy or bleeding disorders
    - Trisomy 21
    - Chronic inflammatory diseases and immunodeficiency

PRIOR AUTHORIZATION
Prior authorization is required for Medicare Advantage Plans and recommended for Commercial Products.

POLICY STATEMENT

Medicare Advantage Plans and Commercial Products
Balloon dilation of the eustachian tube (BDET) for treatment of chronic obstructive eustachian tube dysfunction may be considered medically necessary when the above medical criteria are met.

Balloon Dilation of the Eustachian Tube Used in Combination with Other Procedures:
- Individuals undergoing dilation of the eustachian tube concurrent with sinus ostial dilation should meet the same diagnostic criteria for dilation of the eustachian tube as those undergoing dilation of the eustachian tube alone.
- Individuals with a middle ear effusion at the time of dilation of the eustachian tube may benefit from concurrent myringotomy with or without tympanostomy tube placement.

Balloon Dilation of the Eustachian Tube Used in Pediatric Populations
Treatment of persistent obstructive eustachian tube dysfunction with the Acclarent AERA Eustachian Tube Balloon Dilation System that is refractory to standard surgical interventions may be considered medically necessary in individuals who between the ages of 8 to 17 when the above medical criteria are met.

COVERAGE
Benefits may vary between groups and contracts. Please refer to the appropriate Benefit Booklet, Evidence of Coverage, or Subscriber Agreement for applicable surgery benefits/coverage.

BACKGROUND
Eustachian Tube Function and Dysfunction
The eustachian tube connects the middle ear space to the nasopharynx. It ventilates the middle ear space to equalize pressure across the tympanic membrane, clears mucociliary secretions, and protects the middle ear from infection and reflux of nasopharyngeal contents. Normally, the tube is closed or collapsed and opens during swallowing, sneezing or yawning. Eustachian tube dysfunction (ETD) occurs when the functional valve of the eustachian tube fails to open and/or close properly. This failure may be due to inflammation or anatomic abnormalities. Symptoms of chronic obstructive ETD can include aural fullness, aural pressure, hearing loss, and otalgia. In milder cases, eustachian tube dysfunction may only be apparent in situations of barochallenge (inability to equalize with rapid barometric pressure changes), with otherwise normal function in stable ambient conditions.

Diagnosis
Because the symptoms of ETD are nonspecific, clinical practice guidelines emphasize the importance of ruling out other causes of ETD with a comprehensive diagnostic assessment that includes patient-report questionnaires, history and physical exam, tympanometry, nasal endoscopy, and audiometry to establish a diagnosis.

Medical and Surgical Management of Eustachian Tube Dysfunction
Medical management of eustachian tube dysfunction (ETD) is directed by the underlying etiology. Treatment of identified underlying conditions, such as systemic decongestants, antihistamines, or nasal steroid sprays for allergic rhinitis; behavioral modifications and/or proton pump inhibitors for laryngopharyngeal reflux; or treatment of mass lesions, may be useful in resolving ETD.

Patients who continue to have symptoms following medical management may be treated with surgery such as myringotomy with the placement of tympanostomy tubes or eustachian tuboplasty. These procedures create an alternative route for ventilation of the middle ear space but do not address the functional problem at the eustachian tube. There is limited evidence and no randomized controlled trials (RCTs) supporting use of these surgical techniques for this indication. Additionally, surgery may be associated with adverse events such as infection, perforation, and otorrhea. Tympanostomy tube placement may be a repeat procedure for the life of the patient, and the risk of complications from tympanostomy tubes increases with increasing numbers of tube placements and duration of tube placement.

Balloon Dilation of the Eustachian Tube

Balloon dilation is a tuboplasty procedure intended to improve the patency of the cartilaginous eustachian tube to cause local dilation. During the procedure, a saline-filled balloon catheter is introduced into the eustachian tube through the nose using a minimally invasive transnasal endoscopic method. Pressure is maintained for 2 minutes or less, after which the balloon is emptied and removed. The procedure is usually performed under general anesthesia.
Balloon dilation of the eustachian tube can be done as a standalone procedure or in conjunction with other procedures such as adenoidectomy, intranasal surgery (e.g. septoplasty, turbinate procedures or sinus surgery), surgery for obstructive sleep apnea or sleep disturbed breathing, and myringotomy with or without tympanostomy tube placement. This addresses BDET as a standalone procedure.

In December 2023, the U.S. Food and Drug Administration (FDA) expanded the indication for the Acclarent AERA Eustachian Tube Balloon Dilation System (K230742), authorizing its use in pediatric patients aged 8 to 17 years with persistent obstructive Eustachian tube dysfunction refractory to medical management.

Multiple devices have been given a de novo 510(k) classification by the U.S. Food and Drug Administration (FDA):

- Acclarent Aera Eustachian Tube Balloon Dilation System (Acclarent, Inc)
- Xpress ENT Dilation System (Entellus Medical, Inc)
- Nuvent Eustachian Tube Dilation Balloon (Medtronic Xomed, Inc)
- Audion Et Dilation System (Entellus Medical, Inc)
- Vensure Balloon Dilation System (Fiagon GmbH)

For pediatric individuals who have chronic obstructive ETD refractory to surgical interventions who receive BDET, clinical input supports that this use provides a clinically meaningful improvement in net health outcome and indicates this use is consistent with generally accepted medical practice in appropriately selected patients using the following criteria:

- Individuals 8 years of age or older with symptoms of obstructive ETD with objective evidence of middle ear dysfunction, including abnormal tympanometry (type B or C) or objective middle ear disease (eg, retraction, effusion, cholesteatoma) with a history of prior tympanostomy tube placement and/or adenoidectomy;
- BDET can be used as a standard-alone procedure or used with concomitant surgical procedures (eg, adenoidectomy, tonsillectomy, or endoscopic sinus surgery);
- The patient has undergone a comprehensive diagnostic assessment, including history and physical exam, tympanometry if the tympanic membrane is intact, nasopharyngoscopy, and comprehensive audiometry; and
- Failure to respond to appropriate medical management of alternative or co-occurring conditions that may contribute to symptoms of aural fullness or Eustachian tube dysfunction, if present (eg, allergic rhinitis, rhinosinusitis, laryngopharyngeal reflux, temporomandibular joint disorder), including a trial of intranasal corticosteroid therapy for 4 to 6 weeks when clinically indicated

For individuals who have chronic obstructive eustachian tube dysfunction despite medical management who receive balloon dilation of the eustachian tube, the evidence includes RCTs, prospective observational studies, case series, and systematic reviews of these studies. Relevant outcomes are symptoms, change in disease status, quality of life, and treatment-related morbidity. Two 6-week randomized controlled trials found more improvement with balloon dilation plus medical management than medical management alone on patient-reported symptoms, ability to perform a Valsalva maneuver, proportion of patients with normalized tympanograms, and otoscopy findings. Durability of these effects was demonstrated at 52 weeks in the uncontrolled extension phase of both RCTs. No serious device- or procedure-related adverse events were reported through 52 weeks of follow-up. Multiple observational studies and case series have reported that patients experienced improvement when comparing symptoms before and after balloon dilation. Current pediatric data, though largely retrospective and observational, show balloon dilation to be safe and associated with durable improvements in middle ear function and symptom control. The evidence is sufficient to determine that the technology results in an improvement in the net health outcome.

CODING

Medicare Advantage Plans and Commercial Products

The following CPT code(s) are medically necessary for Medicare Advantage Plans and Commercial Products when the above medical criteria has been met:

69705 Nasopharyngoscopy, surgical, with dilation of eustachian tube (i.e. balloon dilation); unilateral
69706 Nasopharyngoscopy, surgical, with dilation of eustachian tube (i.e. balloon dilation); bilateral

RELATED POLICIES

Prior Authorization of Services, Treatments or Procedures

PUBLISHED

Provider Update, July 2026
Provider Update, January/December 2024
Provider Update, February 2023
Provider Update, November 2021
Provider Update, January 2021

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