

Medical Policy Balloon Dilation of the Eustachian Tube

Policy Number: 071

	Commercial and Qualified Health Plans	Mass General Brigham ACO	Medicare Advantage	OneCare	Senior Care Options (SCO)
Authorization					
Required					
No Prior	x		Х	Х	X
Authorization	^		^	^	^
Not Payable		Х			

Overview

The purpose of this document is to describe the guidelines Mass General Brigham Health Plan utilizes to determine the medical necessity for balloon dilation of the eustachian tube (BDET).

Coverage Guidelines

Mass General Brigham Health Plan covers balloon dilation of the eustachian tube for members 18 years of age and older when ALL of the following have been met:

- 1. The member has chronic eustachian tube dysfunction (ETD) with signs and symptoms present for at least three months. These symptoms include but are not limited to the following:
 - a. Otalgia;
 - b. Hearing loss;
 - c. Aural fullness and pressure;
 - d. A history of negative pressure in the middle ear and middle ear effusion;
- 2. The member has undergone a comprehensive diagnostic assessment including:
 - a. Examination of the ears;
 - b. Nasal endoscopy;
 - c. Tympanogram;
- 3. If allergic rhinitis is present, then a 4-week trial of nasal steroid spray has been completed, unless contraindicated and symptoms have persisted despite that trial.
- 4. If laryngopharyngeal reflux is present, then a 4-week trial of PPI or H2 blocker has been completed, unless contraindicated, and symptoms have persisted despite that trial.
- 5. If rhinosinusitis is present, then a 2-week course of therapy with an appropriate antibiotic has been completed, and symptoms have persisted despite that trial.
- 6. If the member has a history of tympanostomy tube(s) placement, there was improvement of obstructive Eustachian tube symptoms while the tube(s) were in place.

Exclusions

1. Members under the age of 18.



- 2. CT of the temporal bone shows dehiscence of the petrous segment of the internal carotid artery.
- 3. Enlarged adenoid pads are the sole cause of Eustachian tube obstruction.
- 4. Extrinsic compression of the Eustachian tube by a mass.
- 5. Craniofacial syndrome, including cleft palate spectrum.
- 6. Patulous eustachian tube.
- 7. History of radiation therapy to the nasopharynx.
- 8. Prior BDET has been performed on the same side.

Medicare Variation

Mass General Brigham Health Plan uses guidance from the Centers for Medicare and Medicaid Services (CMS) for medical necessity determinations for its Medicare Advantage plan members. National Coverage Determinations (NCDs), Local Coverage Determinations (LCDs), Local Coverage Articles (LCAs), and documentation included in the Medicare manuals are the basis for medical necessity determinations. When there is no guidance from CMS for the requested service, Mass General Brigham Health Plan's medical policies are used for medical necessity determinations. At the time of Mass General Brigham Health Plan's most recent policy review, there were no NCDs/LCDs for Balloon Dilation of the Eustachian Tube.

MassHealth Variation

Mass General Brigham Health Plan uses guidance from MassHealth for medical necessity determinations for its Mass General Brigham ACO members. When there is no guidance from MassHealth for the requested service, Mass General Brigham Health Plan's medical policies are used for medical necessity determinations. **As of our most recent policy review, MassHealth considers balloon dilation of the Eustachian tube to be a nonpayable service.**

OneCare and SCO Variation

Mass General Brigham Health Plan uses guidance from CMS for medical necessity determinations for its OneCare and SCO plan members. NCDs, LCDs, LCAs, and documentation included in the Medicare manuals are the basis for medical necessity determinations. When there is no guidance from CMS for the requested service, Mass General Brigham Health Plan uses medical necessity guidelines from MassHealth. When there is no guidance from CMS or from MassHealth, Mass General Brigham Health Plan's medical policies are used for medical necessity determinations.

Definitions

<u>Balloon Dilation of the Eustachian Tube:</u> A minimally invasive transnasal endoscopic procedure intended to improve the patency of the cartilaginous eustachian tube. During the procedure, a balloon catheter is introduced and dilated, and pressure is maintained for 2 minutes or less, after which the balloon is emptied and removed. The procedure is usually performed under general anesthesia.

Codes

The following codes are included below for informational purposes only. Inclusion of a code does not constitute or imply coverage or reimbursement.

Authorized CPT/HCPCS Codes	Code Description
69705	Nasopharyngoscopy, surgical, with dilation of eustachian tube (ie, balloon dilation); unilateral



69706	Nasopharyngoscopy, surgical, with dilation of eustachian tube (ie, balloon dilation); bilateral
	balloon dilation); bilateral

Summary of Evidence

The evidence supporting balloon dilation of the Eustachian tube (BDET) as a safe and effective treatment for adults with Eustachian tube dysfunction includes over a dozen retrospective case series and prospective single-arm trials from 2010 to 2017, which are summarized in systematic reviews and meta-analyses by Froehlich et al. (2020) and Huisman et al. (2018). Collectively, these uncontrolled studies suggested that scores on the Eustachian Tube Dysfunction Questionnaire (ETDQ7) and tympanometry findings improved in both short-term (6-week) and longer-term (3-12 month) follow-up after BDET.

An RCT by Liang et al. (2016) showed that the BDET improved tympanometric findings and otic endoscopic exam findings, and that myringotomy combined with BDET improved otic endoscopic exam findings more than BDET alone. Another RCT reported by Meyer et al. (2018) and Cutler et al. (2019) demonstrated short-term improvement in patient-reported ear symptoms compared with control patients who continued medical therapy; long-term follow-up of the treatment arm showed normalization of tympanogram in 63% and improvement in ear symptoms in 94%. A 2019 randomized controlled trial reported both by Poe et al. (2017) and Anand et al. (2019) showed that BDET, compared with medical management, produced significant improvements in patient-reported symptoms and tympanometry findings, sustained to 12 months, consistent with the other studies.

The Clinical Consensus Statement by Tucci et al. (2019) established standardized guidelines for patient selection, procedural techniques, and outcome assessment. Collectively, the literature establishes BDET as a viable treatment option for adults with Eustachian tube dysfunction refractory to medical management. Systematic reviews and meta-analyses by Aboueisha et al. (2022) and Ramagiri et al. (2024) indicate that the therapy shows some promise for children, but controlled trials are lacking and evidence of efficacy, particularly with respect to long-term outcomes when compared with myringotomy tubes, remains uncertain.

Consistent with the clinical consensus statement by Tucci et al. (2019), MGB Health Plan considers BDET to be medically necessary in adult members with symptoms of chronic ETD who have undergone an appropriate diagnostic evaluation and who have persistent symptoms despite medical treatment of common treatable causes. Consistent with the meta-analyses by Aboueisha et al. (2022) and Ramagari et al. (2024), MGB Health Plan considers the currently available evidence insufficient to determine whether BDET is effective when compared with standard care in pediatric patients.

Effective

January 2025: Ad hoc review. Updated prior authorization table at top of policy and added variation for One Care and SCO members.

July 2025: Annual Review. Removed prior authorization requirement for commercial and Medicare Advantage members. Added MassHealth variation.

March 2025: Ad hoc review. Summary of evidence added. Clarified Medicare variation language. References updated.

July 2024: Annual Review. February 2024: Effective Date.

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