



Balloon Dilation of the Eustachian Tube

DESCRIPTION

Balloon dilation of the eustachian tube (e.g., AERA® Eustachian Tube Balloon Dilation System, TubaVent™ Balloon Catheter, XprESS™ ENT Dilation System) is proposed to improve patency in individuals with eustachian tube dysfunction. The eustachian tube (ET) connects the middle ear space to the nasopharynx and ventilates the middle ear space to equalize pressure across the tympanic membrane, clear mucociliary secretions, and protect the middle ear from infection and reflux of nasopharyngeal contents. The eustachian tube opens while swallowing or yawning. Dysfunction occurs when the functional valve of the eustachian tube fails to open and/or close properly. This failure can be due to anatomic abnormalities, or more frequently to inflammation and can cause symptoms such as muffled hearing, ear fullness, tinnitus, and vertigo. Chronic dysfunction can lead to hearing loss, otitis media, tympanic membrane perforation, and cholesteatomas.

During the balloon dilation procedure, a saline-filled balloon catheter is introduced into the eustachian tube through the nose using a transnasal endoscope. Pressure is maintained for approximately two minutes after which the balloon is emptied and removed. The procedure is usually performed under general anesthesia.

The proposal is to add words or statements in red and delete words or statements with a strike through.

POLICY

- Balloon dilation of the eustachian tube is considered **medically necessary** if the medical appropriateness criteria are met. (**See Medical Appropriateness below.**)
- Balloon dilation of the eustachian tube for the treatment of all other conditions is considered **investigational**.

MEDICAL APPROPRIATENESS

- Balloon dilation of the eustachian tube is considered **medically appropriate** if ~~ALL~~ **ANY ONE** of the following are met:
 - Adult 18 years of age or older **and ALL the following**:
 - Symptoms of chronic obstructive eustachian tube dysfunction (e.g., otalgia, hearing loss) including **ALL** of the following:
 - Aural fullness
 - Aural Pressure
 - Symptoms lasting 3 months or longer that are continuous and not episodic (e.g., symptoms occur only in response to barochallenge such as pressure changes while flying)
 - Condition significantly affects quality of life or functional health status
 - Documentation of **ALL** of the following:
 - Nasal endoscopy
 - Tympanometry
 - Comprehensive audiometry, with **ALL** the following findings:
 - Abnormal tympanogram (Type B or C)
 - Abnormal tympanic membrane (retracted membrane, effusion, perforation, or any other abnormality identified on exam)
 - Failure to respond to appropriate medical management of coexisting conditions (e.g., allergic rhinitis, rhinosinusitis, and laryngopharyngeal reflux)



- Other causes of aural fullness have been ruled out. (e.g., temporomandibular joint disorders, extrinsic obstruction of the eustachian tube, superior semicircular canal dehiscence, and endolymphatic hydrops)
 - Documentation shows reversibility of eustachian tube dysfunction when individuals perform Valsalva maneuver. (e.g., popping ears)
 - No previous history of having balloon dilation of the eustachian tube
 - Absence of ALL the following:
 - Patulous eustachian tube dysfunction
 - Craniofacial syndrome (i.e., cleft palate)
 - Neoplasm causing extrinsic obstruction
 - History of radiation therapy to the nasopharynx
 - Enlarged adenoid pads
 - Nasopharyngeal mass
 - Neuromuscular disorders that lead to hypotonia/ineffective eustachian tube dynamic opening
- Individuals 8-17 years old and ALL the following.
- Individuals have chronic otitis media due to obstructive eustachian tube dysfunction (ETBD)
 - ETBD is refractory to standard surgical interventions (e.g., adenoidectomy, tube placement)

IMPORTANT REMINDERS

- Any specific products referenced in this policy are just examples and are intended for illustrative purposes only. It is not intended to be a recommendation of one product over another and is not intended to represent a complete listing of all products available. These examples are contained in the parenthetical e.g. statement.
- We develop Medical Policies to provide guidance to Members and Providers. This Medical Policy relates only to the services or supplies described in it. The existence of a Medical Policy is not an authorization, certification, explanation of benefits or a contract for the service (or supply) that is referenced in the Medical Policy. For a determination of the benefits that a member is entitled to receive under his or her health plan, the Member's health plan must be reviewed. If there is a conflict between the medical policy and a health plan or government program (e.g., TennCare), the express terms of the health plan or government program will govern.

ADDITIONAL INFORMATION

Individuals undergoing balloon dilation of the eustachian tube (BDET) concurrent with sinus ostial dilation should meet the same diagnostic criteria for BDET as those undergoing BDET alone. Individuals with a middle ear effusion at the time of BDET may benefit from concurrent myringotomy with or without tympanostomy tube placement.

SOURCES

Aboueisha, MA., Attia, AS., McCoul, ED., & Carter, John. (2022). Efficacy and safety of balloon dilation of eustachian tube in children: Systematic review and meta-analysis. *International Journal of Pediatric Otorhinolaryngology*, 154:111048. doi: 10.1016/j.ijporl.2022.111048. Abstract retrieved November 17, 2025 from PubMed database.

American Academy of Otolaryngology – Head and Neck Surgery. (2019). *Clinical consensus statement: balloon dilation of the eustachian tube*. Retrieved October 7, 2020 from <https://www.entnet.org/content/clinical-practice-guidelines>.

American Academy of Otolaryngology – Head and Neck Surgery. (2025). *Eustachian tube balloon dilation in the pediatric population*. Retrieved November 14, 2025 from <https://www.entnet.org/resource/eustachian-tube-balloon->



[dilation-in-the-pediatricpopulation/#:~:text=The%20American%20Academy%20of%20Otolaryngology,indicated%20by%20the%20performing%20physicians.](#)

BlueCross BlueShield Association. Evidence Positioning System. (10:2024) *Balloon dilation of the eustachian tube* (7.01.158). Retrieved November 14, 2025 from www.bcbsaoca.com/eps/. (13 articles and/or guidelines reviewed).

Cutler, J.L., Meyer, T.A., Nguyen, S.A., O'Malley, E.M., Thackeray, L., & Slater, P.W. (2019). Long-term outcomes of balloon dilation for persistent eustachian tube dysfunction. *Otology & Neurotology*, 40 (10), 1322-1325. (Level 2 evidence)

Froehlich, M.H., Le, T.P., Nguyen, S.A., McRackan, T.R., Rizk, H.G., Meyer, T.A. (2020). Eustachian tube balloon dilation: A systematic review and meta-analysis of treatment outcomes. *Official Journal of American Academy of Otolaryngology-Head and Neck Surgery*, 163 (5), 870-882. Abstract retrieved October 7, 2020 from PubMed database.

Gurberg, J., Dean, M., Kawai, K., Toivonen, J., & Poe, D. (2024). Long-term efficacy of balloon dilation of the pediatric Eustachian tube: A six-year matched cohort study. *American Journal of Otolaryngology*, 45 (3), 104208. doi: 10.1016/j.amjoto.2023.104208. Abstract retrieved November 17, 2025 from PubMed database.

Krogshede, S.K., Kirchmann, M., Jorkov, APS., & Glad, H. (2022). Balloon dilation of the eustachian tube: A randomized controlled trial with 6 months follow-up. *The Journal of International Advanced Otology*, 18(6), 501-506. (Level 2 evidence)

National Institute for Health and Care Excellence. (2019, December). *Balloon dilatation for chronic eustachian tube dysfunction*. Retrieved October 7, 2020 from www.nice.org.uk.

Poe, D., Anand, V., Dean, M., Roberts, W., Stolovitzky, J., Hoffmann, K. et al. (2018). Balloon dilation of the eustachian tube for dilatory dysfunction: a randomized controlled trial. *Laryngoscope*, 128 (5), 1200-1206. Abstract retrieved October 12, 2018 from PubMed database.

Satmis, M. & van der Torn, M. (2018). Balloon dilatation of the eustachian tube in adult patients with chronic dilatory tube dysfunction: a retrospective cohort study. *European Archives of Otorhinolaryngology*, 275 (2), 385-400. Abstract retrieved October 12, 2018 from PubMed database.

U. S. Food and Drug Administration. (2017, April). Center for Devices and Radiological Health. 510(k) *Premarket Notification Database*. K163509. (*XprESS ENT Dilation System*). Retrieved October 12, 2018 from <http://www.fda.gov>.

U. S. Food and Drug Administration. (2017, April). Center for Devices and Radiological Health. 510(k) *Premarket Notification Database*. K171761. (*AERA® Eustachian Tube Balloon Dilation System*). Retrieved October 12, 2018 from <http://www.fda.gov>.

U. S. Food and Drug Administration. (2023, November). Center for Devices and Radiological Health. 510(k) *Premarket Notification Database*. K230742. (*Acclarent AERA® Eustachian Tube Balloon Dilation System*). Retrieved November 17, 2025 from <http://www.fda.gov>.

Winifred S. Hayes, Inc. Health Technology Assessment. (2021, February; last update search March 2024). *Eustachian tube balloon dilation for the treatment of chronic eustachian tube dysfunction in adults*. Retrieved September 27, 2024 from www.hayesinc.com/subscribers. (58 articles and/or guidelines reviewed)



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Medical Policy Manual

Policy

Draft Revised Policy: Do Not Implement

EFFECTIVE DATE

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