

Symptom survey

Eustachian tube dysfunction patient questionnaire (ETDQ-7)⁴

Next to each question, circle the number that best describes how you feel.

During the past
1 month how
much of a problem
was each of the
following?

	No problem	1	2	Moderate problem	3	4	5	6	7	Severe problem
Pressure in the ears?	1	2	3	4	5	6	7			
Pain in the ears?	1	2	3	4	5	6	7			
A feeling that your ears are clogged or "under water"?	1	2	3	4	5	6	7			
Ear problems when you have a cold or sinusitis?	1	2	3	4	5	6	7			
Crackling or popping sounds in the ears?	1	2	3	4	5	6	7			
Ringing in the ears?	1	2	3	4	5	6	7			
A feeling that your hearing is muffled?	1	2	3	4	5	6	7			

Total score _____ ÷ 7 = mean item score _____

Do you get these symptoms in one ear only or both ears?

Left ear only Right ear only Both ears

Are you ready
to stop suffering?

Explore your
treatment options.

1 Meyer TA, O'Malley EM, Schlosser RJ, Soler ZM, Cai J, Hoy MJ, Slater PW, Cutler JL, Simpson RJ, Clark MJ, Rizk HG, McRackan TR, D'Esposito CF, Nguyen SA. A randomized controlled trial of balloon dilation as a treatment for persistent Eustachian tube dysfunction with 1-year follow-up. *Otol Neurotol*. 2018 Aug; 39(7):894-902.

2 Schilder AG, Bhutta MF, Butler CC, et al. Eustachian tube dysfunction: consensus statement on definition, types, clinical presentation and diagnosis. *Clin Otolaryngol*. 2015;40:407-411.

3 Seibert JW, Danner CJ. Eustachian tube function and the middle ear. *Otolaryngol Clin N Am*. 2006;39:1221-1235.

4 Edward D. McCoul MD, MPH, Vijay K. Anand MD, FACS, Paul J. Christos Dr PH, MS. Validating the clinical assessment of Eustachian tube dysfunction: The Eustachian tube dysfunction questionnaire (ETDQ-7). *Laryngoscope*, Volume 122, Issue 5, pages 1137-1141, May 2012. Reproduced with permission of John Wiley & Sons, Inc.

The XprESS ENT dilation system may be used to treat certain conditions affecting the sinuses above your eyebrows and behind your cheeks and eyes and the Eustachian tubes that connect your ears to the back of your throat. Your physician will need to determine if your condition is one that may benefit from the XprESS system. Possible side effects include but are not limited to post-operative bleeding; pain and swelling; allergic reaction to anesthesia or other medications administered during the procedure; or infection. Your condition may not respond to this treatment. To learn more about this procedure and the potential risks, ask your physician.

Indications for Use: To access and treat the maxillary ostia/ethmoid infundibula in patients 2 years and older, and frontal ostia/recesses and sphenoid sinus ostia in patients 12 years and older using a transnasal approach. The bony sinus outflow tracts are remodeled by balloon displacement of adjacent bone and paranasal sinus structures.

To dilate the cartilaginous portion of the Eustachian tube for treating persistent Eustachian tube dysfunction in patients 18 years and older using a transnasal approach.

Please see Instructions for Use (IFU) for a complete listing of warnings, precautions and adverse events.

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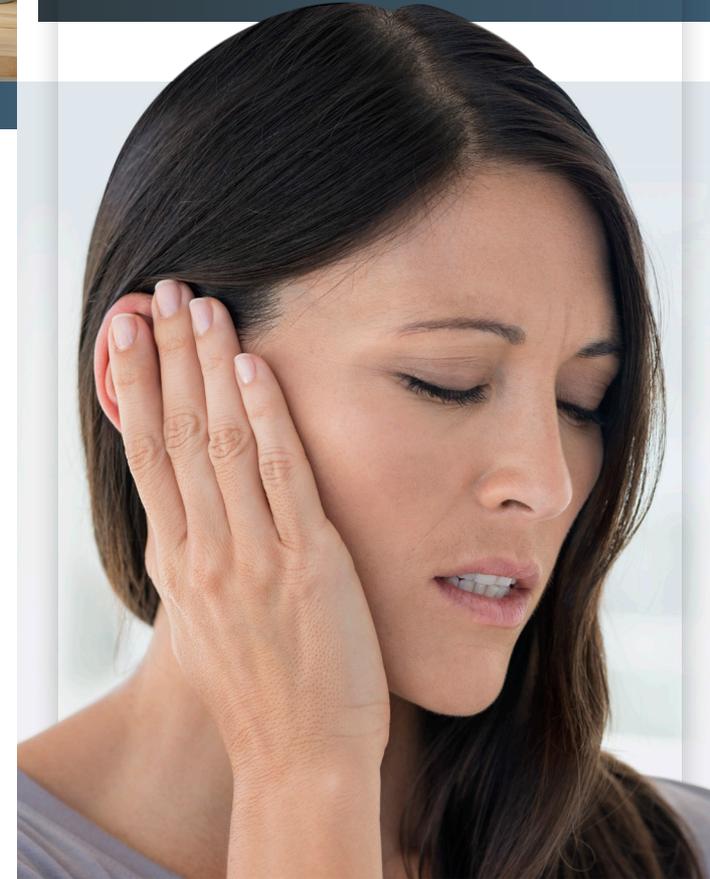
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Eustachian tube dysfunction

Stop suffering
from ear pain, fullness,
ringing and popping



Balloon dilation provides a safe, effective and minimally invasive treatment option for your Eustachian tube dysfunction (ETD).¹ So you can stop suffering and start thriving.

stryker

Share your results with your physician.

What is Eustachian tube dysfunction?

Eustachian tube dysfunction (ETD) is an affliction that can lead to chronic ear pressure and pain or discomfort with barometric changes.²

Typically, when you yawn, chew, sneeze or swallow, your Eustachian tubes – small passageways that run between your middle ear and upper throat – open to keep pressure and fluid from building up. If you experience a blocked Eustachian tube – also known as Eustachian tube dysfunction or ETD – your ears may feel full or painful, and your hearing may seem muffled.³

ETD symptoms:

- Full or plugged feeling in your ears
- Muffled sounds
- A popping or clicking sensation
- Pain in one or both ears
- Ringing in your ears (called tinnitus)
- Trouble keeping your balance

Your symptoms may get worse when you are flying (because of altitude changes). Riding in elevators, driving through mountains or diving may also make your symptoms worse.

ETD is considered persistent when symptoms have continued more than 12 weeks despite medical management.²

How is it treated?

Your doctor may first recommend over-the-counter treatments, such as:

- decongestants to reduce the swelling of the lining of the tubes
- antihistamines and/or steroid nasal spray to reduce an allergic response

If a bacterial infection is present, your doctor may prescribe an antibiotic. Some people with more severe or chronic symptoms may need to undergo a surgical procedure. These include:

- fluid removal: after making a tiny incision in the eardrum, fluid is suctioned out fluid from the middle ear, giving the Eustachian tube lining time to shrink while the eardrum is healing
- ear tubes: implantation of small tubes in the eardrums allows built-up fluid to drain out of the middle ear

A safe, effective, new treatment option

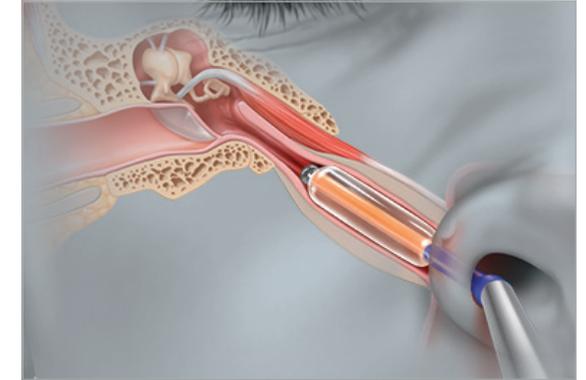
Many of the current treatment options for ETD are limited or invasive, but a newer treatment option, balloon dilation with XprESS ENT dilation system, provides a safe, effective and less invasive treatment.¹

During this procedure, a small balloon is inserted through your nose and into your Eustachian tube. The balloon is then gently inflated, and after treatment, removed. The procedure is performed under local anesthesia.

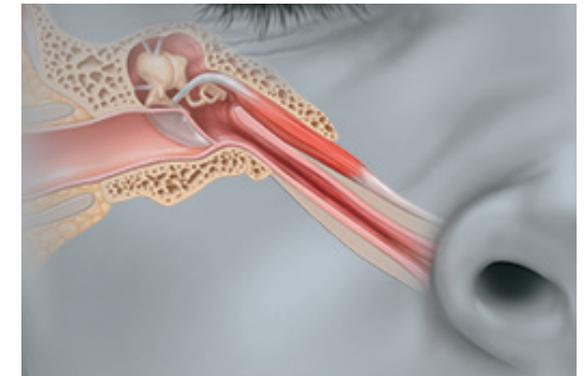
A recent randomized clinical trial comparing balloon dilation to medical therapy in patients with persistent ETD found:¹

- balloon dilation with the XprESS system is superior to continued medical management for improving symptoms in patients with persistent Eustachian tube dysfunction
- improvement in symptoms and middle ear assessments are durable
- balloon dilation is a safe and effective treatment for patients with persistent Eustachian tube dysfunction

Procedure overview



- 1 Balloon is placed in the Eustachian tube through the nose and inflated to compress soft tissue lining the Eustachian tube.



- 2 Once treatment is complete, the balloon is deflated and removed.