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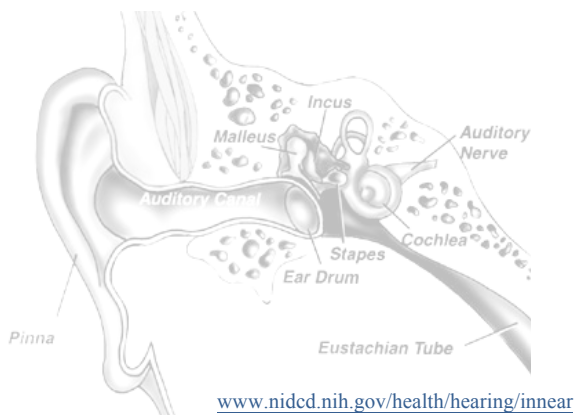
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Eustachian Tube Dysfunction

What is the Eustachian tube?

It connects the middle ear with the back of the throat. The space behind the eardrum is normally filled with air. That air is constantly being absorbed by the ear, so a fresh supply of air is needed in the middle ear. The Eustachian tube normally opens upon swallowing, yawning or chewing, allowing air in and fluid out, keeping air pressure equal on both sides of the eardrum. Equal pressure on the eardrum and a fluid-free ear enable the eardrum to vibrate normally, which is needed for normal hearing.



www.nidcd.nih.gov/health/hearing/innear

What is Eustachian tube dysfunction?

Eustachian tube dysfunction (ETD) means the tube does not open properly. The air pressure on the outer side of the eardrum becomes greater than the air pressure in the middle ear. The eardrum is pushed inward, becomes tense, and does not vibrate well. A healthy ear is one that “pops” easily and feels immediately better.

What are the symptoms of Eustachian tube dysfunction?

The main symptom is muffled or dulled hearing in one or both ears. There may be pain because the eardrum is stretched. This may be felt into the back of the throat or neck along the course of the tube. Other symptoms may include fullness in the ear, ringing, buzzing, popping, crackling or dizziness. Symptoms can last from a few hours to several months. As symptoms ease, popping sensations or noises in the ear may occur. The dulled hearing may come and go before getting back to normal.

What are the causes of Eustachian tube dysfunction?

ETD occurs if the tube becomes blocked, if the lining of the tube becomes swollen, or if the tube simply does not open as it should to allow air to travel to the middle ear.

- Nose, sinus, ear or throat infections
- Environmental allergies and sensitivities
- Anatomic variation, narrow tubes, cleft palate, i.e., just the way you were born
- Blockages e.g. enlarged adenoids. It can be a symptom of rare tumors in the back of the nose, though these usually cause other symptoms in addition to ETD.

Air travel or changing altitude while driving

As a plane or car descends, changes in air pressure push the eardrum inward. Swallowing, yawning and chewing usually open the Eustachian tube to equalize the pressure. . Any of the above may prevent this from happening, causing pain.

Old Farm Professional Plaza
4000 South 700 East #10
Salt Lake City UT 84107

TOSH Medical Towers
5770 South 250 East #285
Salt Lake City UT 84107

Lone Peak Medical Campus
74 East 11800 South #360
Draper UT 84020

Tooele Clinic
1929 North Aaron Drive #1
Tooele UT 84074

What can be done?

1. Force air to flow into the Eustachian tube

This does not harm your ears, despite common rumors, and is the most important aspect of treatment. Do the following every hour, or every 10 seconds if descending:

Breathe out forcefully with your mouth closed and nose pinched. The increased pressure in your nose may push air into the Eustachian tube. If successful, a 'pop' is felt in the ears. This may need to be repeated regularly, possibly for weeks, until the underlying problem resolves.

2. Decongestant tablets (e.g. Sudafed) and nasal sprays (e.g. Afrin, Neo-synephrine)

Tablets may reduce swelling in the tubes if used regularly for two weeks. Those with high blood pressure should use these for 7 days only. Over-the-counter sprays can be helpful, but should only be used for 5 days at a time as longer use may cause worse 'rebound' congestion.

3. Antihistamines (e.g. Zyrtec, Benadryl)

These reduce the effects of allergy.

4. Guaifenesin (e.g. plain Mucinex or Robitussin).

This thins mucus if you drink extra water while taking it. Thinner mucus is less likely to stick in the Eustachian tubes.

5. Combine #2, 3 and /or 4 (with something similar to Zyrtec-D, Mucinex-D or other combination cold medication) Generic medications generally work just as well.

6. Steroid nasal sprays (prescription only)

These may be a good option for people with chronic Eustachian tube problems. These work by reducing inflammation in the nose which may make the Eustachian tubes work better. It takes several days for a steroid spray to build up to its full effect, so you will not have an immediate relief of symptoms.

Remember that a combination of the above may need to be continued for weeks before relief occurs, especially as allergy is commonly an underlying cause.