Eustachian Tube Dysfunction

Patient Information

Disclaimer: This leaflet provides general information and should not be used as a substitute for professional medical advice. It is essential to consult with a qualified healthcare professional for any health concerns or before making any decisions related to your health or treatment.

Overview

The Eustachian tube is a small canal that connects the middle ear to the back of the throat (nasopharynx). It helps to equalise the pressure in the middle ear with the outside air pressure, drain any fluid that may build up in the middle ear, and prevent infections.

Eustachian tube dysfunction (ETD) occurs when the Eustachian tube becomes blocked or does not open and close properly. This can lead to a build-up of pressure in the middle ear, which can cause a variety of symptoms.

Symptoms and Causes

The symptoms of ETD can vary from mild to severe and may be different for each person. Common symptoms include:

- Feeling of fullness or blockage in the ear
- Ear pain, especially when changing altitude (flying, driving in mountains)
- Muffled hearing or hearing loss
- Clicking or popping sounds in the ear
- Tinnitus (ringing in the ears)
- Dizziness or vertigo
- A feeling of needing to clear your throat frequently

ETD can be caused by a number of factors, including:

- The common cold or other upper respiratory infections
- Allergies
- Sinus infections
- Enlarged adenoids (tissues located at the back of the nasal passage)
- Changes in air pressure (such as during air travel or scuba diving)
- Smoking
- Nasal congestion

Diagnosis and Investigations

Your doctor will ask about your symptoms and examine your ears. They may also use a small, lighted instrument called an otoscope to look inside your ear. Sometimes, further investigations may be needed, such as:

- **Tympanometry:** This test measures the movement of the eardrum and can help to identify problems with the middle ear.
- Audiometry: This is a hearing test that can help to identify any hearing loss.
- **Nasopharyngoscopy:** A thin, flexible tube with a camera on the end is passed through your nose to view the back of your throat and the openings of the Eustachian tubes.

Management and Treatment

The treatment for ETD depends on the underlying cause. In many cases, the condition will clear up on its own without treatment. However, some people may need medication or other treatments to help relieve their symptoms.

Home Exercises

There are several exercises that you can do at home to help open your Eustachian tubes and relieve the pressure in your middle ears. These include:

• Valsalva manoeuvre: Pinch your nostrils closed, close your mouth, and gently try to blow air out of your nose. You should feel a popping sensation in your ears if the tubes open. Do not blow too hard, as this can damage your eardrums.

- **Toynbee manoeuvre:** Pinch your nostrils closed and swallow. This can help to open the Eustachian tubes.
- Lowry manoeuvre: Combine the Valsalva and Toynbee manoeuvres. Pinch your nostrils closed, swallow, and then gently try to blow air out of your nose.
- **Otovent manoeuvre:** This involves using a special balloon device to inflate the Eustachian tubes. The device is available over-the-counter at most pharmacies.
- Yawning or chewing gum: These actions can also help to open the Eustachian tubes.

How frequently to do the exercises:

You can do these exercises several times a day, as needed, to relieve your symptoms. Start slowly with each exercise and gradually increase the number of repetitions as you feel able. If you feel any pain, stop the exercise and consult your doctor. You may be advised to perform these exercises as a set for example: three times a day for 2-3 weeks.

Medical Treatments

If home exercises are not effective, your GP may recommend other treatments, such as:

- **Decongestants:** These medications can help to shrink the swollen tissues in the nasal passages and Eustachian tubes. They can be taken as pills, nasal sprays, or drops.
- Antihistamines: These medications can help to relieve allergy symptoms that may be contributing to ETD. They are available as pills, nasal sprays, or eye drops.
- **Nasal corticosteroids:** These medications can help to reduce inflammation in the nasal passages and Eustachian tubes. They are available as nasal sprays.
- **Myringotomy:** In some cases, a small incision may be made in the eardrum to relieve pressure and drain fluid from the middle ear. This procedure is usually done in children with persistent ETD.

Prevention

There are a number of things you can do to help prevent ETD, including:

- Avoid colds and other upper respiratory infections by washing your hands frequently and avoiding close contact with people who are sick.
- Treat allergies promptly.
- Avoid smoking.
- Use a humidifier to add moisture to the air, especially during the winter months.
- Avoid changes in altitude, if possible. If you must fly or travel to high altitudes, try using decongestants or nasal corticosteroids before and during your trip. You can also try chewing gum or yawning frequently during the ascent and descent.

Outlook/Prognosis

The outlook for ETD is generally good. In most cases, the condition will clear up on its own or with simple treatments. However, some people may experience recurrent episodes of ETD. If you have persistent or severe ETD, you should see an ENT specialist.