

Eustachian Tube Dysfunction (ETD).

Overview

The Eustachian Tube is a narrow tube which links the back of the nose to the middle ear. It is normally closed but opens when we swallow, yawn or chew. The Eustachian Tube has three main functions: to protect the middle ear from pathogens (Bacteria, Viruses, Fungi and Parasites); to ventilate the middle ear, which can help to keep the air pressure equal on either side of the eardrum, enabling the eardrum to work and vibrate properly; and to help drain secretions from the middle ear cleft.

ETD is the inability of the Eustachian Tube to adequately perform these functions. ETD may occur when the lining of the tube is swollen or sticky or does not open or close properly. If the tube is dysfunctional, symptoms such as muffled hearing, pain, tinnitus (pulsing, ringing, or buzzing in the ears), reduced hearing, a feeling of fullness in the ear or problems with balance may occur.

The lining of the Eustachian Tube can become swollen or sticky and the Eustachian tube can become dysfunctional following a cold, allergic rhinitis (Hay Fever) or sinusitis, leading to difficulties in pressure equalisation, discomfort, and other symptoms. Other causes include flights and scuba diving. Other potential risk factors include tobacco smoke, gastric reflux, and radiation exposure.

Management

Although ETD symptoms are common, they are often mild and generally resolve after a few days or weeks. Simple actions such as swallowing, yawning, chewing, or forced exhalation against a closed mouth and nose (Valsalva Manoeuvre) can help to equalise pressure in the middle ear and resolve symptoms.

- Self-management such as to swallow, yawn, or chew to help equalise the pressure in the middle ear.
- Pressure equalisation methods, which is a technique whereby the Eustachian Tube is reopened by raising the pressure in the nose. This can be achieved in several ways, including forced exhalation against a closed mouth and nose (Valsalva Manoeuvre) or blowing up a balloon through each nostril, using an anaesthetic mask. The aim is to introduce air into the middle ear, via the Eustachian tube, equalising the pressures and allowing better fluid drainage.
- Nasal douching, in which the nasal cavity is washed with a saline solution or water to flush out excess mucous and debris from the nose and sinuses.
- Decongestants, antihistamines, nasal or oral corticosteroids which are aimed at reducing nasal congestion and/or inflammation of the lining of the Eustachian tube.

Valsalva Manoeuvre

- Pinch the nose between your thumb and index finger.
- Take a deep breath.
- Close your mouth.
- Try to blow air out through your pinched nose.
- Do not do for longer than 10 seconds.