



Earwax

WHAT IS EARWAX?

Earwax is an oily substance produced by glands at the entrance to the ear canal, which it is designed to protect and lubricate. The skin which lines the ear canal moves outwards at the rate of 33mm a year and this natural movement encourages the wax to fall out of the ear from time to time.

There are two distinct forms of earwax: 'wet' and 'dry'. The type of wax a person has is probably genetically determined, and may vary by ethnicity. Most people in Britain have the 'wet' type of earwax.

The amount of wax a person produces varies due to lifestyle, diet, age, skin condition, anxiety levels and anatomy of the ear canal. You are more likely to have excess wax if you have a high fat diet, if you are elderly or of an anxious disposition, if you have narrow ear canals, if your parents had excess wax problems, or if you try to remove wax using an object in the ear, such as a cotton bud (Roeser & Ballachandar 1997).

As part of the ageing process the glands secrete less sebum (oily secretion), often causing wax to be drier and harder. This, together with the reduction in movement of the ear canal skin, means that older people are more likely to experience wax blockage.

DOES EARWAX NEED TO BE REMOVED?

Healthy ears produce wax and because the ear canal also has a self-cleaning action earwax only needs to be removed if it is causing dulled hearing, itchiness or discomfort, or the wax is obstructing the ear canal and a doctor or nurse cannot examine the ear. For people who have had mastoid surgery this self cleaning mechanism is disrupted so regular cleaning of the ear canal is needed by a clinician.

As wax is only produced at the entrance to the ear canal and the movement of the ear canal is outwards, trying to clean the ear using a cotton bud means some wax may appear on the cotton bud, but the majority will be pushed from the normal position, further down the ear canal. This can cause a blockage of the ear and damage the delicate skin of the ear canal. The acid content in the wax can cause

irritation of the skin further down the ear canal when it is pushed into the wrong place.

If you produce excess earwax the problem can be prevented by a regular ear check-up with a nurse trained in ear health who can just gently lift out excess wax with a little ring and leave minimal healthy wax to protect the ear canal skin. When your ears are examined the nurse or doctor will use an otoscope, which has a bright white light with a very small end which rests at the entrance of the ear canal. This enables the clinician to see the ear canal skin, any excess wax formation and the eardrum at the end of the ear canal. It is often possible to recognise some bones in the middle ear space behind the eardrum.

WHICH ARE THE BEST DROPS TO USE FOR WAX REMOVAL?

There are many types of wax softening drops on the market but not all live up to their advertising. Some may also irritate the skin, so you may want to ask your doctor or nurse to help you make the right choice. Such products should not be used where there is a perforated eardrum or previous otitis externa (outer ear infection).

An alternative is olive oil which lubricates both the skin and the wax, without causing discomfort (unless there is a rare allergy to oil). Olive oil is anti-bacterial and anti-fungal and contains vitamin E which helps to heal skin.

For people with a recurring problem of wax build up, one drop of oil inserted into each ear once a week can help maintain the gentle lubrication of both the skin and the wax and encourage natural wax movement out of the ear canal.

There is also an olive oil spray which delivers a measured dose of olive oil into the ear canal, as putting too much oil into the ear can clog the ear, temporarily reducing hearing. For this reason, it is advisable to use wax softening products for just a few nights prior to wax removal by a doctor or nurse and this is usually sufficient to make the wax easy to remove.

HOW TO USE EAR DROPS

If you are prescribed drops, make sure your doctor or pharmacist explains how to use them properly.

Using olive oil drops

- Lie down on your side with the ear requiring drops facing upwards
- Pull the pinna (outer ear) backwards and upwards (just backwards in children)
- Drop 2 or 3 drops of oil, at room temperature, into the ear canal and then massage the tragus (the skin just in front of the entrance to the ear canal) – this enables the oil to run down the ear canal more easily
- Stay lying down for 5 - 10 minutes and then get up and wipe away any excess oil with a tissue

- DO NOT put cotton wool in the ear following the drops as this absorbs the oil
- Repeat the procedure with the opposite ear if required.

WHAT IS EAR IRRIGATION (SYRINGING)?

Ear irrigation is the method of washing wax out of the ear canal once it is soft enough.

To perform ear irrigation, the clinician, usually a nurse will wear a headlight and sit down next to you so that s/he is able to see into the ear canal while carrying out the irrigation.

Warm water is placed into the reservoir of an electronic irrigator and a little white tip (a clean one for each patient) is placed on the end of the handle. A short flow of water is then passed through this tip into the ear canal and you will be asked if this is satisfactory before it is repeated. If the water is too cool it can sometimes cause a little dizziness but this will soon settle.

If there are no problems or discomfort the water flow will be continued along the ear canal wall and the action of the water behind the wax will bring the wax out into a container. Once the nurse has inspected the ear to see if all the wax has been removed, a small probe covered with cotton wool will be used to gently dry the ear canal. This reduces the chances of an ear infection following the irrigation.

CAN I GET AN INFECTION FOLLOWING EAR IRRIGATION?

You are more at risk of an outer ear infection, if you have previously tried to clean your ears with a cotton bud, as this may have damaged the skin lining of the ear canal. If any water is left in the ear following irrigation, then this may cause an infection to occur where the skin has been damaged with the cotton bud.

You should never experience any pain although some people may feel a little discomfort. If after a few days you have itchy or uncomfortable ears then it may be you have an outer ear infection and you should make an appointment with the doctor so that it can be treated.

IS IT SAFE FOR EVERYONE TO HAVE EAR IRRIGATION?

Ear irrigation is not suitable if you have had:

- previous ear surgery;
- problems with previous ear irrigations;
- recent middle ear pain or infection; or
- a perforated ear drum.

If it is not suitable in your situation, then as mentioned previously, it may be possible for a nurse trained in the procedure to lift out the wax with a special instrument.

A third option is for the wax to be sucked out at a hospital ENT department, for which you will be referred by your GP. A specialist doctor or nurse will use a microscope to look into the ear and a small suction tube to remove the wax. This procedure can be noisy and uncomfortable, depending on the position of the wax in the ear canal.

Ear irrigation is only one way to remove wax from the ear. Ear specialist nurses can often clear ears without using water irrigation. In very rare cases, earwax can become so impacted that it must be removed by an ENT surgeon.

References

Roeser RJ, Ballachander BB.(1997) 'Physiology, pathophysiology and anthropology/epidemiology of human ear canal secretions', *J Am Acad Audiology* 8: 391-400

FURTHER INFORMATION

If any of your questions concerning ear health have not been answered by reading this information sheet, contact the Deafness Research UK Information Service for further assistance. Our Information team will either answer your enquiry directly or refer it to one of our scientific or medical advisers.

Open: 9.00 a.m. to 5.00 p.m., Monday to Friday (a message can be left at other times).

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