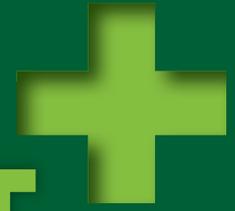




# THE PROFESSIONAL ASSISTANT LEARN & ADVISE



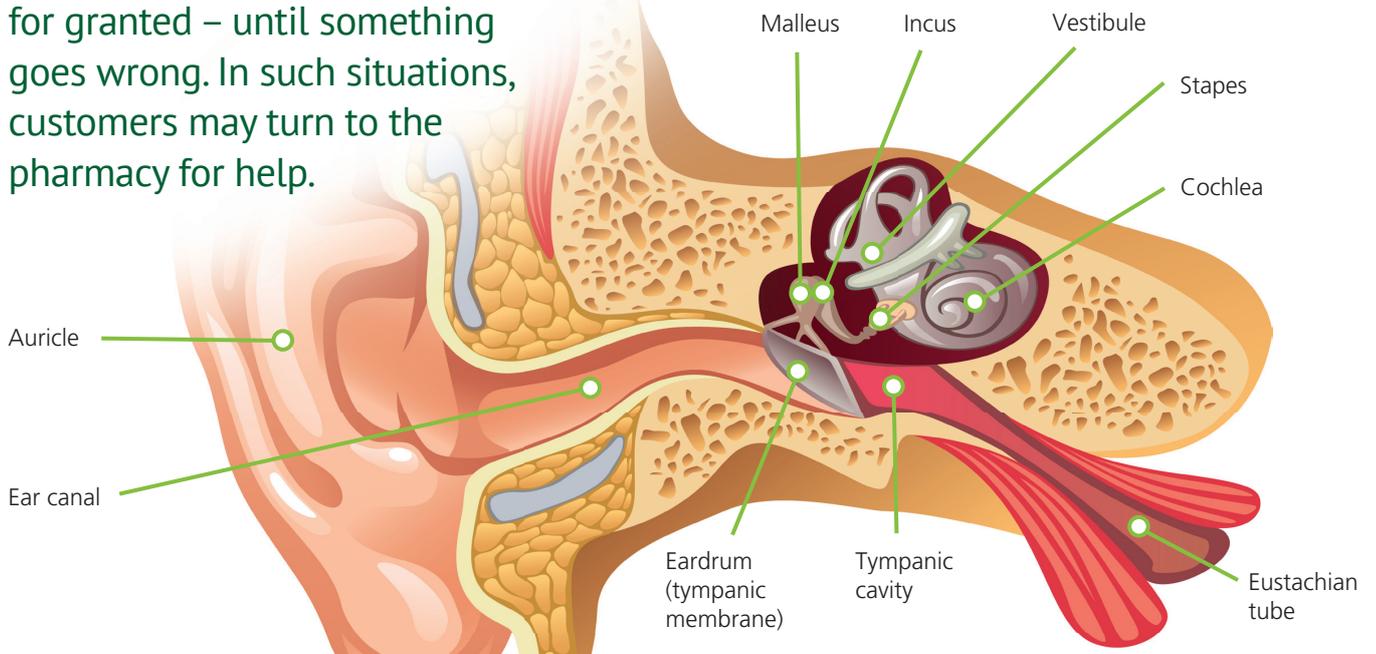
## Ear care

Our ears help with both hearing and balance, but they are often taken for granted – until something goes wrong. In such situations, customers may turn to the pharmacy for help.



**OBJECTIVES** After studying this module, assistants will:

- Have a basic understanding of the ear's structure
- Be familiar with some of the common conditions that can affect the ears
- Know the treatment options and when to refer.



To understand the different conditions that can affect the ears, it is useful to know how the ear is structured. Broadly speaking, the ear is comprised of three distinct sections – the outer, the middle and the inner ear.

The **outer ear** consists of the **auricle** (pinna), which is made up of flexible cartilage that extends into the ear canal. At the far end of the **ear canal** is the **eardrum** (tympanic membrane), which sits between the outer and the middle ear.

The **middle ear** is an air-filled space. It contains the ossicles – three small bones that connect the eardrum to the inner ear and transmit vibration. These bones are called the **malleus**, the **incus** and the **stapes**, but are more commonly known as

the hammer, anvil, and stirrup. The eardrum is a small circle of skin, comprised of three layers. The inner layer of the eardrum is made up of cells that produce mucus when irritated (e.g. by smoke or infection). The **eustachian tube** connects the middle ear to the back of the throat and helps to drain fluid and keep pressure within the ear at the right level. Changes in pressure (e.g. when flying) can cause pain. This tube is shorter in children, so they are more at risk of ear infections.

The **inner ear** consists of the **cochlea**, a fluid-filled, snail-shaped organ that makes hearing possible by converting sound into electrical pulses; the vestibular system (situated in the **vestibule**), which plays a key role in balance; and the vestibular and auditory nerves, which connect the inner ear to the brain.



This module is suitable for all members of the pharmacy team who wish to increase their knowledge of common conditions, treatment options and communication skills. This module has been endorsed with the NPA's Training Seal as suitable for use by pharmacy teams as part of their ongoing learning. This module can also form part of your Team Tuesday training.



### **DID YOU KNOW?**

*The ear is a self-cleaning system and excess ear wax will typically move out of the ear canal naturally.*

## Understanding possible problems

The ears can be affected by a number of problems, including infections and build up of earwax. It is important to ask questions and check for any signs that would need referral when discussing ear problems, but there are many products available OTC to help customers.

### Inflammation

**Inflammation of the ear (otitis) can occur in different ways:**

**1**

#### **Otitis externa**

This is inflammation of the ear canal, which may be caused by allergy, irritation (e.g. by shampoo, soap or hairspray) or a superficial infection. It is also known as 'swimmer's ear', as it can occur when water is trapped in the ear canal. Symptoms include:

- Itching
- Muffled hearing
- Watery discharge
- Pain.

Some customers may need to use protective products such as swimming caps or swimmers' earplugs or drops to protect their ears from water. Otitis externa can also be caused by excessive cleaning that removes the protective ear wax, or a skin condition such as psoriasis.

**2**

#### **Otitis media**

This is inflammation and infection of the middle ear. It causes swelling and a build-up of fluid behind the eardrum, which leads to severe pain. Other symptoms include fever, nausea and vomiting.

Otitis media is more common in children under 10 years of age and often follows a cold. Symptoms in young children may also include unexplained crying, tugging at the ear and irritability.

If the eardrum perforates (i.e. a hole develops in it), there may be discharge from the ear. Most cases develop quickly then resolve in a few days once the infection has cleared, and can be managed with pain relief. Applying a warm flannel may also be soothing.

**3**

#### **Otitis media with effusion**

This is also known as glue ear. The middle ear fills with fluid, which can then affect hearing as the small bones that carry the vibrations of sound can't move freely. If a child is affected by hearing loss, parents may notice that they need to turn up the volume on TVs or games consoles, or that they become frustrated at not keeping up with conversations or are asking people to repeat themselves. In some cases, this will resolve within three months. However, if symptoms persist or speech or language development is affected, it may be treated with minor surgery or by inserting grommets (small tubes) into the ear to drain the fluid. Although it is more common in children, glue ear can affect adults too.

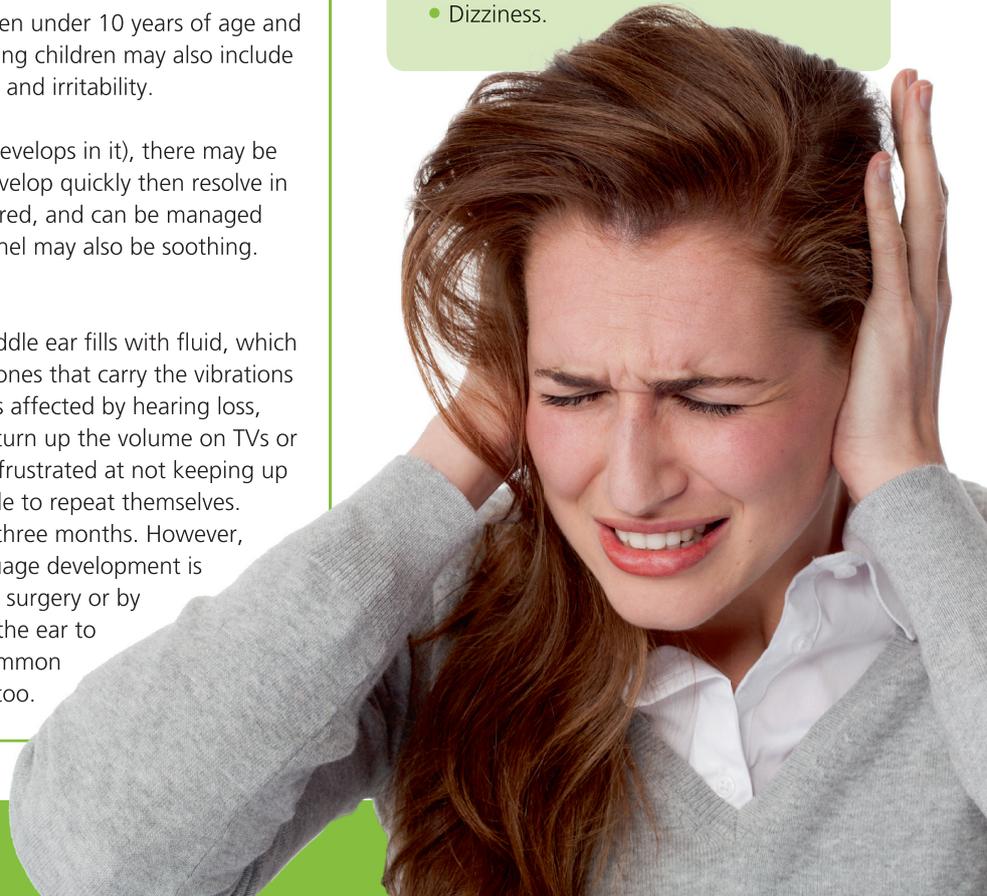
### Ear wax

**Ear wax (cerumen) is produced in the ear canal to protect it from dust, water and foreign particles. It usually moves along the ear canal (jaw movement helps this process) then dries up and falls out. However, if this doesn't happen and it builds up, ear wax can affect hearing or cause pain. If it stops a doctor from seeing into the ear properly, it can also prevent a proper diagnosis of another problem.**

A build-up of ear wax is more common in older people and in those who naturally produce too much of the substance.

Other people may have a narrow ear canal, making blockages more common, or produce wax that is dry or hard (e.g. if they have eczema). Customers who wear hearing aids or use cotton buds in their ears may be affected by ear wax blockages too. A build up of excess ear wax can result in symptoms such as:

- Pain in the ear
- Decreased hearing
- A sensation of having a blocked ear
- Temporary deafness after being exposed to water (e.g. after a bath or swimming)
- Dizziness.





### DID YOU KNOW?

It is estimated that hearing loss affects more than 10 million people in the UK.

## Treatment options

There are OTC products that you can recommend to help customers:

**Ear wax** can be softened and encouraged to come away naturally using one of the following products:

- **Hydrogen peroxide-based products** (e.g. Otex ear drops) – these may cause a bubbling sensation in the ear
- **Oils such as olive or almond oil** – remember that customers with a nut allergy should not use almond oil
- **Docusate-containing ear drops** (e.g. Waxol ear drops) – these should be used for a maximum of two nights at a time
- **Sodium bicarbonate ear drops** – these may make the ear canal dry.

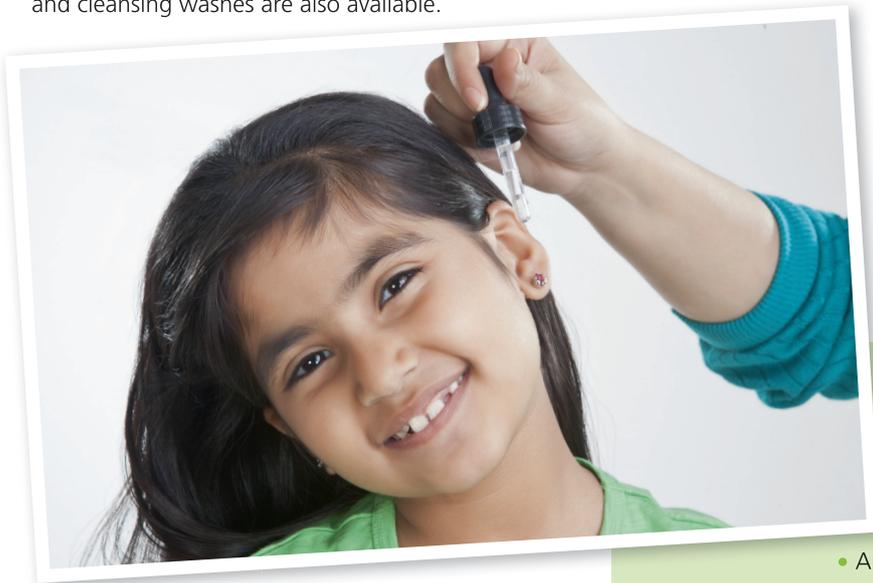
**Otitis externa** can be treated using a product containing acetic acid (e.g. EarCalm spray), which acts as an antifungal or antibacterial agent, but it is only suitable for use by adults and children over 12 years.

**Ear care products** such as drops (e.g. SwimSeal) and ear plugs that prevent water entering the ear, as well as products that relieve pressure build-up, and cleansing washes are also available.



### Don't forget...

**Customers should not try to remove ear wax with their fingers or items like matchsticks or cotton buds as this may push the wax further into their ears or cause damage.**



## Self care advice

**When recommending ear drops, the following advice on how to use them can be given, along with a reminder to read the patient information leaflet carefully:**

- Warm the bottle by holding it for a few minutes
- Remove any visible wax or discharge from the ear gently, using a piece of cotton wool
- Tilt the head to one side so that the ear points towards the ceiling
- Use a hand to straighten the ear canal – in adults, pull the ear up and back, and for children, gently pull the ear lobe down and back
- Apply the drops into the ear canal, taking care not to touch the dropper on the ear
- Keep the head tilted and gently pull and push the ear to work the drops in for about 30 seconds
- Keep the head in the tilted position for around three to five minutes so that the drops don't come straight out again
- After returning the head to the normal position, excess solution can be wiped away. Some products may recommend using a cotton wool plug in the ear
- Some people may find it easier to ask someone else to insert the drops.

## When to refer:

**You should refer a customer to the pharmacist if they:**

- Experience sudden hearing loss
- Are a child under 12 years of age
- Show signs of glue ear or otitis media
- Have a suspected foreign body trapped in their ear
- Have severe pain – this is likely to be an infection
- Have ringing in their ears or dizziness – these indicate potential inner ear problems
- Have tried products already with no success
- Notice no improvement in ear wax removal after three days of treatment
- Are suffering from otitis externa with severe symptoms, see no improvement after treatment, or if there is foul-smelling discharge.



### SIGNPOSTING

**For more information:**

- Use your *Counter Intelligence Plus* training guide
- Visit NHS Choices at: [nhs.uk/conditions/earache/Pages/Introduction.aspx](https://www.nhs.uk/conditions/earache/Pages/Introduction.aspx)
- Visit Action on Hearing Loss at: [actiononhearingloss.org.uk](https://www.actiononhearingloss.org.uk) or call: 0808 8080123

# TEST YOURSELF ONLINE

GOOD PRACTICE KNOWLEDGE IS IMPORTANT WHEN ADVISING CUSTOMERS



## Questions

### 1) Which statement about glue ear is TRUE?

- a) It can be treated with peroxide-containing ear drops
- b) Another name for it is otitis externa
- c) It can be treated using grommets
- d) It occurs when ear wax blocks the ear canal

### 2) The eardrum is also known as:

- a) The malleus
- b) The pinna
- c) The cochlea
- d) The tympanic membrane

### 3) Which statement is FALSE?

- a) Ear wax is produced by the eardrum
- b) Docusate drops should only be used for two nights at a time
- c) Almond oil drops shouldn't be used by customers with a nut allergy
- d) When using ear drops, customers should keep their head tilted for a few minutes after inserting them

### 4) Which statement is TRUE?

#### Otitis externa:

- a) Can be treated with a product containing acetic acid
- b) May be associated with nausea/vomiting
- c) Can be treated with drops of olive oil
- d) Can be treated with products that contain hydrogen peroxide

### 5) Which of the following may be linked with swimming?

- a) Otitis media with effusion
- b) Otitis externa
- c) Otitis media
- d) Tinnitus

### 6) Which of the following customers would you NOT refer to the pharmacist?

- a) A 10-year-old girl who swims regularly and has an itchy sensation in her outer ear
- b) A 45-year-old man who has excessive ear wax that he has used drops for over the last week and tried removing with a cotton bud
- c) A five-year-old girl who has been crying and pulling at her ears. Her mother thinks she has seen some clear discharge
- d) A 30-year-old female who feels that her hearing is muffled and finds that after swimming sometimes she can't hear temporarily

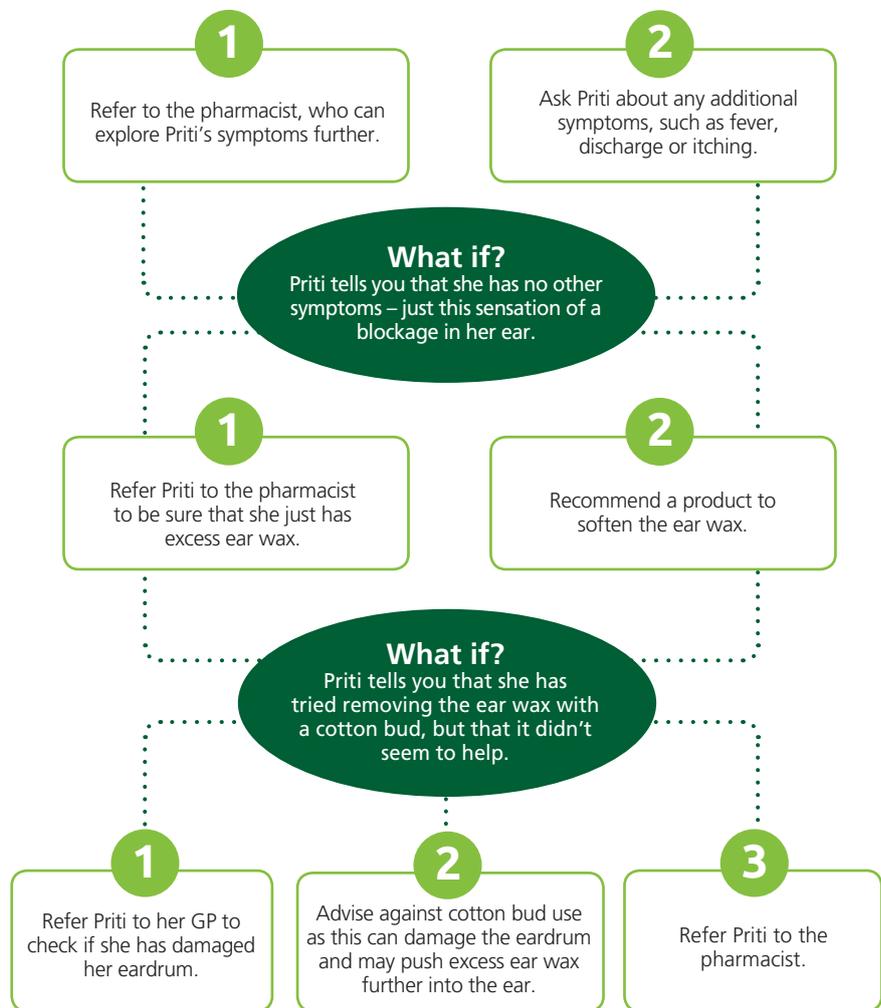


## Scenario

Priti is concerned about her hearing. She has noticed that she can't quite catch what people are saying and that her ears feel blocked. She uses earplugs when she goes swimming to protect her ears and also at night to help her sleep. She hasn't had this problem before.

## What would you recommend?

For each part of this scenario, think about the decision you would make and, importantly, why you would choose that option. In addition, for each decision that you make, think about how you would talk to the customer and provide the necessary advice. You can discuss this with your team and your pharmacist.



Go to [www.tmmagazine.co.uk](http://www.tmmagazine.co.uk) to submit your answers to these questions. When you pass, you'll be able to download a certificate to showcase your learning. You can also add this to your online, personalised learning log.

[www.tmmagazine.co.uk](http://www.tmmagazine.co.uk)