

Moxie digest

A Community Pharmacy training guide



VOL 6

This Volume contains:

- * General Overview
- * Self Care tips
- * WWHAM Questions
- * When to refer to the Pharmacist
- * Treatment algorithm
- * Test of Knowledge

Topic Of Focus
Ear Care

Ideal for training:

Corper Pharmacists | Intern Pharmacists | Pharmacy Technicians | Counter Assistants | Pharmacy Students

HOW TO USE THIS TRAINING MANUAL

This book is broken down into chapters based on different disease conditions. Each chapter is further broken down into different sections to help the reader fully understand the disease condition and empower the reader with the necessary skills and information needed to give the best form of pharmaceutical care to the patient. The sections include

1 Disease overview

This section looks at the general disease condition, symptoms and common medications used in treating the condition. It helps the reader get a deeper understanding of cause of the disease and how the medication works.

2 Self-care tips

This column focuses on additional steps and advice given to the patient to help ensure that recovery is quick. This section usually focuses on non-drug approach to disease management.

3 WWHAM Questions

This section provides a good framework for finding out more about a customer's condition.

Everyone in the pharmacy team should be familiar with the WWHAM questions. Proper use of these questions helps the Pharmacy team to obtain the necessary information so that they can offer the right advice and/or a product recommendation.

The WWHAM questions are intended to form the basis of any conversations with customers, whether you are responding to their health complaints and recommending a product or they have asked for a medicine by name.

The WWHAM Questions are

- W** Who **W: Who is the medicine for?**
It may not be for the customer
- W** What **W: What are the symptoms?**
You may need to ask a few more questions so that you can fully understand the symptoms.
- H** How **H: How long have you had the symptoms?**
Many minor ailments clear up within a few days.
- A** Action **A: What Action has been taken?**
Have they tried any medicine or treatment without success?
- M** Medi-
cation **M: Are you taking any other Medication?**
It is important to ask about prescribed medicines as well as any OTC and herbal remedies as some can interact with each other.

In addition to the WWHAM questions, it is also important to find out whether the patient has any allergies. (it is important to know if the patient reacts to any medicines, foods or other substances).

4 When to refer to the Pharmacist

This section focuses on things the care giver should look out for and then subsequently refer to the Pharmacist in Charge. The section focuses on triggers that point the care giver to the fact that there may be a more serious underlying condition which requires professional management.

5 At a glance

This is a pictorial treatment algorithm for the disease under consideration. It shows a flow chart that the care giver can easily follow in questioning the patient so as to rule out any complications. It also clearly spells out the point at which the case is referred to the Pharmacist in charge.

6 Test of Knowledge Exercise

After each topic, the reader is expected to answer 10 questions drawn from the content studied. The answers to the questions are provided at the back of this manual.

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Paracetamol

Oral Suspension



Ear care

Our ears really are something to be proud of. These remarkable organs are able to recognize no fewer than 400,000 different sounds, relaying them to a memory bank in the brain, and causing us to react with emotion. No wonder it has been called the 'road to the heart'.



Ears not only let us hear, but they also play a role in maintaining our balance, which is vital to our ability to function in daily life. We can't even see our ears, except in a mirror. Our ears never stop working even when we are asleep; yet, we ignore them. We take for granted what they do for us day in and day out until we notice something's wrong,

such as when an earache strikes or when we start having to ask people to repeat what they say. A customer with an ear problem may feel unsteady on their feet.

How does the ear work?

The ear is divided into three sections – the outer ear, middle ear and the inner ear. The outer ear consists of the pinna (the part

you can see that's outside the head) and ear canal (the passage about 2.5cm in length along which sound travels). At the end of the ear canal is the paper-thin eardrum (the eardrum is a membrane that separates the outer ear from the middle ear). The middle ear is a space about 1.3cm across, filled with air. A chain of three tiny bones stretches right

across the middle ear, passing sound from the eardrum to the inner ear, which has two parts – the cochlea (used for hearing) and the vestibular part (used for balance). When sound waves enter the ear, they travel along the external ear canal towards the eardrum. The eardrum vibrates in response, and as it does so it moves the three tiny bones situated in the middle part of the ear. These in turn send sound waves through the fluid-filled canals of the inner ear, stimulating the delicate hair cells of the cochlea responsible for transmitting sound along the auditory nerve to the brain.

What is ear wax?

All healthy ears produce ear wax (also known as cerumen). The skin on the outer part of the ear canal has special glands that produce ear wax. The purpose of this natural wax is to protect the ear from damage and infection. They form a protective coating around the

skin lining the ear canal, acting as a temporary water repellent especially when taking baths or showers. Earwax is the ear's mechanism for cleaning itself. It is designed to keep the ear canal clean by trapping dust, sand and other particles so that sound can pass along it freely. They typically pass on their own slowly from the inside of the ear canal to the outer opening of the ear where they usually dry up and fall out of the ear taking the trapped dust and dirt with it. Sometimes, however, ear wax can build up and become a problem.

The amount of ear wax produced varies from person to person and doesn't need to be removed unless it is blocking the ear canal; this has caused reduced hearing or caused itchiness or discomfort. The softening and removal of ear wax is the main ear problem that can be safely treated with OTC products without the sufferer having to see a doctor first.

What are the causes?

In some people, ear wax is simply produced at a faster rate than normal and this leads to a buildup of excess ear wax. Other people may have ear canals that are narrow, or formed at an angle, which slows down the natural passage of wax. In these people, wax may build up in the outer ear. In extreme cases, wax may block the ear canal completely.

What are the symptoms?

Excess ear wax can cause the following symptoms:

- Hearing problems.
- Pain in the ear
- Tinnitus (a noise or ringing in the ear)
- A blocked feeling in the ear
- Temporary deafness after swimming or having a bath or shower

What are the treatment options?

Most cases of excess ear wax will respond to OTC treatment with a product designed to soften and loosen the wax, making it easier to remove. Simple remedies such as olive

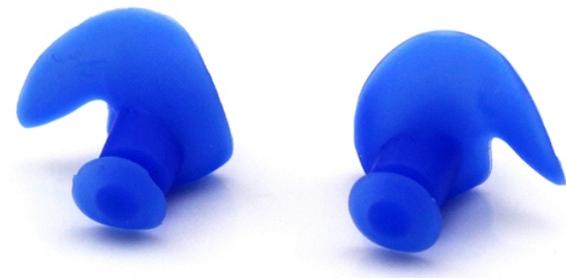
oil, baby oil or glycerine can be used. They are applied directly into the ear as drops to remove excess ear wax. The customer should lie with the affected ear uppermost and about 5 drops of the solution should be put into the ear. This may cause a harmless tingling sensation. A plug of cotton wool moistened with the solution or smeared with petroleum jelly should then be applied to retain the liquid. After about three hours the plug should be removed. This procedure is usually repeated twice a day for three days; the loosened wax may then come out on its own.

If the treatment has been used for three days without any improvement, there may be an underlying cause and the customer should be referred to the pharmacist.

Examples: Cerumol, Earex.

Other ear problems

Apart from excess ear wax, there are many other problems that



It is important to protect the ears while swimming using ear plugs

can affect the ears. The following are common conditions that you may come across in the pharmacy, but most will require diagnosis and treatment by a doctor:

^ Otitis media (Middle-ear infection)

This is a bacterial or viral infection of the middle ear (the small space behind the ear drum) that is common among children, especially between the ages of two and ten. It often begins with infections that cause

sore throats, colds or other respiratory problems, and spreads to the middle ear. It can sometimes affect adults. Symptoms include pus, fluid, redness and inflammation (swelling) inside the middle ear. It can also cause severe earache (pain), hearing loss, fever, tinnitus and a feeling of fullness in the ear. When not properly treated, otitis media can result in a ruptured eardrum, causing severe pain and deafness. Standard treatment for simple

Self-care tips

- ▲ Ear wax – do not use cotton buds to try to remove ear wax
- ▲ Otitis externa/otitis media – do not play with the ears or use cotton buds
- ▲ Swimming – the use of ear plugs can help prevent water getting into the ears

otitis media is a course of antibiotics and pain killers.

▲ Otitis externa (External-ear infection)

This is a bacterial or fungal infection that affects the ear canal. Again, it is common in children and often occurs when too much water gets inside the ear, removing the protective ear wax coating in the ear canal and making it easier for germs to thrive. In fact, it is sometimes called 'swimmer's ear' because it often affects people that swim as water tends to stay in their ears for a long time. Symptoms include pain and itching, dulled hearing and ear discharge. An OTC product containing a solution

of acetic acid is available for the treatment of mild otitis externa.

This acts as an antifungal and antibacterial in the external ear canal, but should only be used in adults and children aged 12 years and over. **Example: EarCalm Spray.**

Severe cases of otitis externa may require a topical anti-inflammatory product containing antibiotics or antifungal on prescription. In such cases, it is important that customers are seen by a pharmacist so that infections like otitis media can be ruled out.

Cautions

Customers should be reminded to avoid high volume levels when using stereos and home theater systems. If they think it is too loud, it probably is. When using personal sound systems, the volume should be at a comfortable level. If someone else can hear what they are listening to, the volume is too high. They should also remove the headphones/earpiece from time to time to give their ears a rest. They should wear earplugs at rock concerts, nightclubs and motor sporting events.



Everyone knows that loud noises can damage their ears, but there are many other ways to injure the delicate mechanisms that allow people to hear. Foreign objects or sudden blows to the ear can damage the eardrum, resulting in temporary or, in some cases, permanent hearing loss.

Customers should be reminded never to insert anything into their ear. Cotton buds, fingers, small or sharp pointed objects should never be used to clean the ears because they will simply push the ear wax deeper into the ear canal, increasing build-up. The skin of the ear canal and eardrum is very thin and fragile and is easily injured by them. In extreme cases, this may cause acute pain and even deafness. Children under 12 years or anyone complaining of severe pain in the ear should be referred to the pharmacist.

When to refer to the Pharmacist

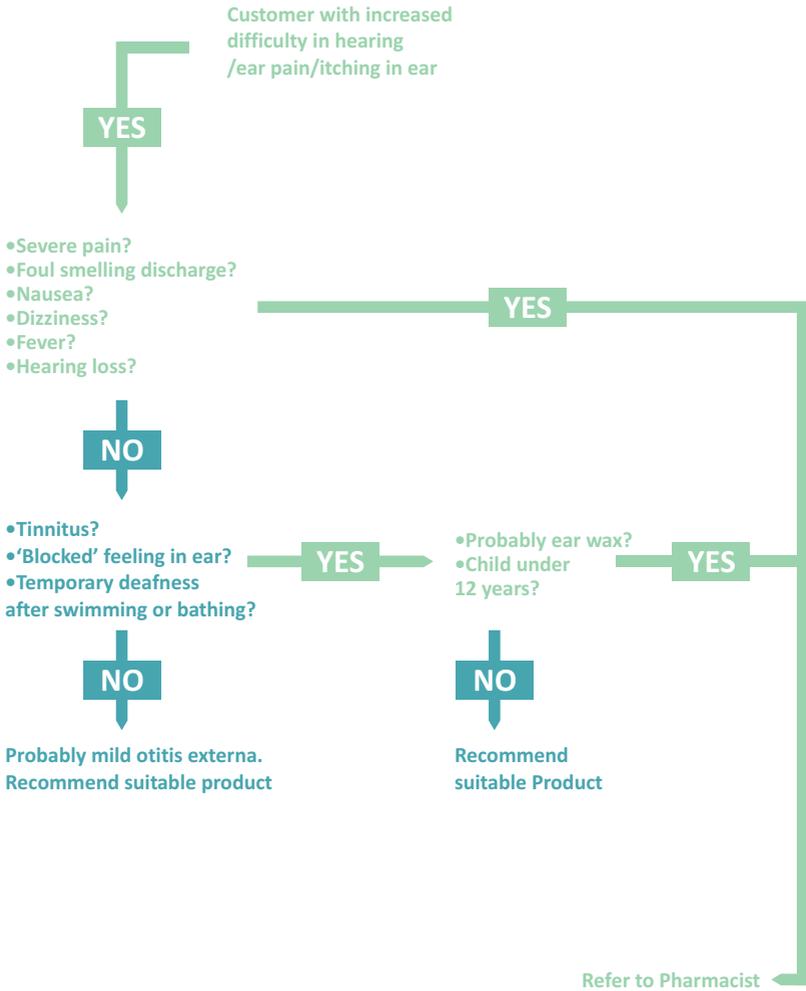
- ⤴ Ear wax – children under 12 years, if there is earache or if no improvement has been seen after three days of treatment.
- ⤴ Otitis externa – if symptoms persist after treatment, are severe or are accompanied by foul-smelling discharge
- ⤴ Otitis media – always refer
- ⤴ Any other type of earache in adults or children

WWHAM questions

Ask these questions in order to find out more about the patient's condition so as to give accurate advice and correct medication for their problems.

- W – Who is it for?**
It may not be the customer who needs the treatment. Children under 12 years and anyone with severe pain should be referred to the pharmacist.
- W – What are the symptoms?**
Symptoms such as discharge from the ear may indicate that the customer has an infection.
- H – How long have the symptoms been present?**
Prolonged hearing difficulties or tinnitus may be symptoms of a more serious condition.
- A – Action already taken?**
Find out if the customer has already tried to remove the ear wax by using a cotton bud or other object, as this may have pushed the wax further down the ear canal.
- M – Medications?**
It is important to refer customers who are taking other medicines or who have established hearing problems.

At a glance



Test of Knowledge Exercises

1. **The human ears can recognize no fewer than _____ different sounds?**
 - a. 400
 - b. 4,000
 - c. 40,000
 - d. 400,000

2. **The ear can be used for _____.**
 - a. Hearing only
 - b. Balance only
 - c. Hearing and balance
 - d. None of the above

3. **The ear can be divided into the following sections**
 - a. Outer ear, median ear and inner ear
 - b. Pinna, ear canal and ear drum
 - c. Cochlea, vestibular part and ear drum
 - d. Inner ear, outer ear and middle ear

4. **The following are examples of ear problems EXCEPT**
 - a. Excess ear wax
 - b. Otitis media
 - c. Otitis median
 - d. Otitis externa

5. **Which of the following is NOT true of ear wax?**
 - a. It protects the ear from damage and infection
 - b. The amount of ear wax produced is the same from person to person
 - c. Ear wax can build up and become a problem
 - d. It acts as a temporary water repellent especially when taking baths or showers.

6. **Excess ear wax can cause the following symptoms EXCEPT**
 - a. Noise or ringing in the ear
 - b. Hearing problems
 - c. Pain in the ear
 - d. Headache

7. **Which of the following statements is NOT correct about the treatment for excess ear wax?**
 - a. Excess ear wax does not respond to OTC treatments
 - b. Simple remedies such as olive oil, baby oil or glycerine can be used
 - c. The procedure for softening the ear wax is usually repeated twice a day for three days
 - d. After three days of treatment without any improvement, the customer should be referred to the pharmacist

8. **Which of the following is NOT true about middle-ear infections?**
 - a. It is usually caused by a bacterial or viral infection
 - b. It is more common among children between the ages of two and ten
 - c. It is also called otitis externa
 - d. It often begins with infections that cause sore throats, colds or other respiratory problems

9. **External ear infections**
 - a. Are usually caused by viruses and not bacteria
 - b. Occurs when too much water gets inside the ear
 - c. Are usually not painful
 - d. Do not affect people that swim

10. **Which of the following statements is correct about taking care of the ear?**
 - a. Use of cotton buds to try to remove ear wax is good
 - b. Use of ear plugs can help prevent water from getting into the ears while swimming
 - c. Earpiece and headphones should be used at all times while listening to music
 - d. Loud noises cannot damage the ears

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