Ears and Eyes
The ear is a complex and delicate organ, which needs taking care of. It consists of three main parts, the external, middle and inner ear. There are a variety of conditions which affect the ear which are easily treated with the right product and/or advice. The most common conditions you will come across where you may offer advice and/or products for are:

- Earwax build up
- Glue ear
- Otitis externa
- Otitis media
Earwax is a material that is produced by the sebaceous glands in the ear. It is normal to have wax in the ear as it protects the membranes within the ear from infection and keeps them lubricated. It is slightly acidic and has antibacterial properties. Wax normally works it’s way out of the ear, taking with it any dirt or dust.

• Symptoms –
  • BLOCKED EAR
  • REDUCED HEARING
  • ITCHY FEELING IN THE EAR
  • TINNIUTS (HEARING SOUND THAT COMES FROM INSIDE THE BODY RATHER THAN OUTSIDE THE BODY)
  • SOMETIMES DISCOMFORT
Treatment

• Treatment is to soften the earwax so it can work its way out of the ear or in some cases syringing (this is when the ear is flushed with water).

• Products to help soften earwax:
  • Peanut (arachis oil, a refined version of peanut oil but not to offer if patient suffers with peanut allergy). Recommend almond, olive and camphor oil in the form of drops. These are normally used twice a day for three to four days.
  • Urea hydrogen peroxide drops. Five drops should be inserted once or twice a day for three to four days.
  • Docusate sodium drops. Repeat the next night.
Ear cleansing sprays can be used to gently cleanse the ears and disperse earwax.

Customers should be advised not to use cotton buds in their ears as they can push the earwax further into the ear.

Practical advice to provide:

- The bottle should be held in the hand to warm for a few minutes
- The head should be titled to one side with the ear pointing to the ceiling
- Be careful not to touch the ear with the bottle
- Leave the head down for a few minutes and insert a piece of cotton wool inserted
Glue Ear

This is the build up of fluid within the middle ear. This prevents the three bones that carry sound vibrations to the inner ear from moving freely and so the sound is not passed onto the inner ear.

These problems may be caused by smoke irritation or allergies. It is common in children (1 in 5 children under two will be affected but can affect adults)

Symptoms associated are:

- Earache, due to increased pressure from the fluid build up
- Loss of hearing, which may lead to temporary delay in speech development in small children
- Infections of the ear
Treatment

- Not normally needed, as glue ear should clear on its own within three months.

- Practical Advice:
  - Breastfeeding babies rather bottle feeding is thought to prevent glue ear
  - Children are not raised in a smoky environment
Otitis Externa

- Inflammation of the outer ear canal, due to an infection (bacterial or fungal). Common causes:
  - Humid and hot weather conditions
  - Water in the ear; from swimming or washing hair
  - Eczema or psoriasis in the ear
  - Having ears syringed as this can irritate the ear and cause inflammation

- Main Symptoms:
  - Redness in the ear
  - Discomfort in ear
  - Ear feeling itchy
  - Swelling of the ear canal
Treatment

On occasion it may resolve on its own, but those who are in pain or discomfort may need antibiotic treatment and will need to be referred to the GP.

• Products containing acetic acid may be of use in minor cases as they have antibacterial and antifungal action.
• Clotrimazole solution also could be an option.

Practical Advice

• Swimming should be avoided until the ear is clear
• Avoid getting their affected ear wet by using a shower cap in the shower
Otitis media

This is an infection of the middle ear. Common in children between 6 and 15 but can also affect adults. It is due to a build up of fluid in the middle ear that can get infected, as well as being a complication of a cold.

Main symptoms associated are:

- Discharge from the ear
- Severe earache, experienced as throbbing or sharp pain
- Dizziness
- Loss of balance
- Nausea and/or vomiting
Parents should look out for the following symptoms in small children:

- Pulling, tugging, or rubbing the ear
- Irritability
- High Temperature
- Not sleeping well
- Not feeding well

Treatment – is not always needed unless it is caused by an infection. If in pain or discomfort they may require an antibiotic and be referred to their GP

- Advice – Avoid children being in contact with others who are unwell to reduce the chance of infection spreading.
- Children’s vaccinations should be up to date
- Children should not be exposed to smoky environments
- Children should not be fed while they are lying on their back
WHO is it for? – You will need to know the age of your patient to determine the relevant product and children under 12 should be referred. Pregnant and breastfeeding women and diabetics should be referred.

WHAT are the symptoms? Refer to Pharmacist if:
• There is pain in the ear
• Ringing in the ears, dizziness or loss of balance
• Foreign body in their ear
• Temperature / Nausea and or Vomiting
• Discharge from ear
• Loss of hearing

HOW long have they had the symptoms? Refer if symptoms getting worse

ACTION taken

MEDICATION, if they are on any other – Refer if yes
Disorders of the eye

The most common conditions you will come across which you can offer advice for are:

• Styes
• Conjunctivitis
• Blepharitis
• Sore and tired eyes

Many of these will tend to resolve over time. Treatment focuses on making the customers comfortable.
Styes

These are caused by an infection at the base of an eyelash on the eyelid. This causes the site of the infection to inflame. They are like boils, which normally burst, realising pus and then disappear. Can occur internal or externally, if internal, they can last longer as the likelihood of it bursting is reduced therefore holding the infection for longer.

Symptoms are inflammation and pain at the site
Treatment is not always needed but reduces the length of time of suffering.
Propamidine isethionate which is a mild antibacterial product for adults and children – and is available in the form of ointment and drops
Practical Advice – Regular bathing with freshly boiled and cooled water
• Do not share face cloths and towels as the infection may be passed on
• Avoid wearing contact lenses until cleared up
Conjunctivitis

Sometimes referred to as ‘Pink eye’ and is the inflammation of the conjunctiva which is the thin skin covering the white of the eye and inner lids.

There are three types:
• Infective conjunctivitis
• Allergic conjunctivitis
• Irritant conjunctivitis
Infective

Can be caused by a viral or bacterial. It is very contagious and so is spread from person to person easily.

Symptoms – Infection usually start in one eye and can spread to both eyes, other common signs are:

- Eyelid(s) can become swollen
- Eye(s) feel gritty and irritated
- Reddened whites of the eye(s)
- Sticky discharge from the eye(s) particularly apparent on waking as it can stick the eye/eyelashes together when sleeping

Treatment – Antibacterial topical treatment e.g. Chloramphenicol
Practical Advice

• When using eye drops and ointments, always wash their hands to ensure they don’t introduce any additional infection

• Administration of drops – the head should be tilted backwards, the lower lid pulled whilst looking upwards, but not to touch the eye. Any excess liquid should be wiped away with a clean tissue.

• Administration of ointment: the lower eyelid should be pulled down whilst looking upwards, a line of ointment placed along the inside of the lower lid without the end of the tube touching the eye. The eyes should be closed to allow the ointment to form a layer within the eye. Excess ointment wiped with a clean tissue.

• Advise to reduce spreading – avoid rubbing eyes and always wash hands after touching the eye(s)

• If has sticky eyes in the morning, they can use a clean cotton pad moistened with freshly boiled and cooled water to bath their eye to remove discharge
**Allergic Conjunctivitis**

Common in people who suffer with hay fever as well as being an allergic reaction to another allergen such as animal fur. In either case, the allergen causes the conjunctiva to swell.

**Symptoms:**
- Reddened whites of the eyes
- Watery eyes
- Eyelids can become swollen
- Eyes feel gritty and irritated
- Main difference is the lack of sticky discharge

**Treatment**
- Anti-allergy agent (sodium cromoglicate)- short acting and should be used regularly, also can be used in children and adults
- Antihistamine in combination with a decongestant (antazoline and xylometazoline)- Prevents the release of histamine, therefore reducing symptoms – not recommended for use in children and shouldn’t be used for longer than 7 days
Irritant conjunctivitis

Caused by pollution, dust, concentrating for long periods of time on a computer, driving for a long time, or some sort of foreign body irritating the eye.

Symptoms include: Reddened whites of the eyes
• Eyes feel tired, irritated and sore
• Eyes feeling dry

Treatment can be with an astringent such as witch hazel, witch hazel which reduces swelling and soothes the eye, or naphazoline which reduces the blood flow to the tear ducts and redness of eye.

Naphazoline should not be used with anybody who suffers from glaucoma.

Advice – Eyewash soothes and helps reduce symptoms. They can use saline wash or ready made up wash to remove foreign bodies.

Take regular breaks if working on a computer.
Dry Eyes

Caused by a lack of tear production or quality of tears being produced. This reduces the lubrication on the eye causing them to feel uncomfortable and sore.

It can affect people of all ages, although women after the menopause tend to be more susceptible. Causes of dry eyes include:

- Central heating
- A side effect of some prescribed medicines
- Air conditioning
- Smoky environments

Symptoms – Feeling dry, gritty and itchy
Feeling like there is a foreign body in the eye
Inflammation and redness
Treatment and advice

Treatment is with tear substitutes to help lubricate the eye. They can be used in adults and children:

- Carbomer gels which cling to the surface of the eye
- Hypromellose or ‘artificial tears’
- Liquid paraffin or white soft paraffin ointments

• Advice
  - Use tear substitutes as often as needed
  - Ointments are better used at night due to the potential temporary blurring of vision
  - Avoid smoky or dry atmospheres when possible
  - Avoid rubbing their eyes as this will make the skin around the eyes sore and can introduce infections
  - Take regular breaks when working on computers
Sore and tired eyes

- Can be caused by:
  - Smoky atmospheres
  - Using computers for long periods of time
  - Reading for long periods of time
  - Insufficient sleep

- Symptoms
  - Dry eyes
  - Sore Irritated eyes
  - Redness
Treatment and Advice

Treatment is with soothing eye lotions or drops

The following are ingredients in products for the treatment of sore or tired eyes:

• Naphazoline and xylometazoline constrict blood vessels of the eye, making it appear whiter and brighter. They should be used for short periods of time as long term use can cause the eyes to become red again.
• Witch hazel helps to soothe the eye and reduce soreness.
• Liposome particles soothe irritated eyes and are sprayed onto closed eyelids.

• Advice
  • Avoid smoky atmospheres
  • Taking regular breaks from close work such as computers and reading
  • Getting a good night’s sleep
Blepharitis

Inflammation of the entire edge of the eyelid usually affecting both eyes. It can be caused by an infection or by a skin condition such as dandruff or seborrhoeic dermatitis.

Symptoms include:

- **Infective** – Red and swollen lids
- **Seborrhoeic** – Flaky skin around the eyelashes spread from dandruff or seborrhoeic dermatitis on the scalp

For infective blepharitis an antibacterial topical treatment should be used. This can be a combination of drops during the day and ointment at night. The two available over the counter are:

- **Chloramphenicol** – Antibacterial used in adults and children over 2 and for five days only and then thrown away. You will find these stored in the fridge and advise patients to do the same.
- **Propamidine isethionate** – Mild antibacterial used in adults and children. If no improvement after 2 days refer to GP.
- To treat seborrhoeic blepharitis caused by dandruff, customers need to treat dandruff first.

- Practical advice – cleaning the area gently with a cotton bud using freshly boiled and cooled water regularly
Supplements and eye health

Generally people who eat a healthy balanced diet should not need vitamin or mineral supplements. The following vitamins and minerals are required for good eye health:

- Vitamin A is an antioxidant and is necessary for night vision. Antioxidants help protect cells against damage from free radicals (unstable atoms that can interact with break down healthy tissue)
- Vitamin B may help reduce inflammation and prevent vascular problems affecting the retina. They may also reduce the risk of macular degeneration (the macular is part of the retina and so macular conditions affect the retina and can cause loss of vision)
- Vitamin C is an antioxidant and is associated with reduced risk of cataracts
- Vitamin D is associated with a lower risk of macular degeneration
- Vitamin E is an antioxidant and is associated with a reduced risk of cataracts
- Lutein and zeaxanthin are carotenoids and so have antioxidant properties. They may reduce the risk of macular degeneration and cataracts
- Plant extracts such as those from ginkgo biloba and bilberry contain phytochemicals which appear to provide protection from damage to the lens
- Omega 3 reduces risk of dry eyes
- Zinc enables vitamin A to create melanin which protects the eye
Who is it for? If Pregnant and breastfeeding women, customers with diabetes or have glaucoma should be referred to the pharmacist.

What are the symptoms? Refer to Pharmacist if:

- There is pain in the eye
- The complain of any vision impairment or blurring
- They wear contact lenses
- There has been trauma to the eye
- There are blisters or sores around the eye
- They are suffering with infective blepharitis
- They are suffering with photophobia
- They have had laser eye surgery

How long they have had the symptoms

Action they have taken so far

Medication they are taking at the moment
Training Complete

Thank you for completing the training, please now complete the multiple choice questions