Barnsley Healthcare Federation
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Better Health, Better Care, for a Better Barnsley

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Barnsley Ear Care Pathway

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When should earwax be removed?

- Earwax is produced by the ear as part of its natural process of cleaning and protection, and, in the majority of cases, it does not need to be removed.

- Offer earwax removal if:
    - Earwax is contributing to hearing loss or other symptoms.
    - The tympanic membrane is obscured by wax but needs to be viewed to establish a diagnosis.
    - An impression needs to be taken of the ear canal.

How should earwax be removed?

If earwax removal is indicated:

- Advise the use of ear drops to soften wax and aid removal. Use Olive/almond oil initially and sodium bicarbonate 5% drops as a secondary softener.
- Advise the person to use the olive/almond oil drops 3–4 times daily for 3–5 days initially.
- Warn the person that instilling ear drops may cause transient hearing loss, discomfort, dizziness, and irritation of the skin.
- Advise that removal of earwax may not necessarily relieve the symptoms (for example hearing loss may be a sensorineural loss and not due to impacted wax).

- **Do not:**
    - Recommend ear drops if you suspect the person has a perforated tympanic membrane, active dermatitis, or active infection of the ear canal.
    - Recommend almond oil drops to people who are allergic to almonds.

- **If symptoms persist:**
    - Repeat the above steps with sodium bicarbonate 5% ear drops, 3-4 times daily for a maximum of five days.
    - If following the use of olive/almond oil and sodium bicarbonate ear drops, the wax is still present, consider ear irrigation (flushing the wax out using water) using an electronic irrigator provided the expertise is available, there are no contraindications to the method, and the person is advised on the possible risks and adverse effects of the procedure.
        - When carrying out ear irrigation, use pre-treatment wax softeners, either immediately before ear irrigation or for up to 5 days beforehand (if following the above steps, this does not need to be repeated).
        - Following irrigation, examine the ear with an auriscope to check that the wax has been removed and that the tympanic membrane is intact. Look for old, healed perforations. Inspect the canal for otitis externa.
        - Seek immediate advice from an ear, nose, and throat specialist if severe pain, deafness, or vertigo occurs during or after irrigation, or if a perforation is seen following the procedure.
        - If irrigation is unsuccessful, repeat use of wax softeners, and attempt again after 7 days.
        - If irrigation is unsuccessful after the second attempt, refer the person to a specialist ear care service or an ear, nose, and throat service for removal of earwax.

- **Advise the person:**
    - Not to remove earwax or clean their ears by inserting small objects, such as cotton buds, into the ear canal. Explain that this could:
        - Damage the ear canal and eardrum.
        - Cause the wax to become impacted by pushing it further into the canal.
        - Perforate the tympanic membrane.
    - That the use of ear candles has no benefit in the management of earwax removal and may result in serious injury.
    - To return if they develop fever, ear pain, significant itching of the ear, discharge from the ear (otorrhoea), or swelling of the external auditory meatus, as these may indicate infection.

Contraindications and cautions

- **Do not use ear irrigation to remove wax in people with:**
    - Factors that increase the risk of trauma, infection, or haemorrhage, such as:
        - A perforated tympanic membrane — some experts advise that any history of perforation at any time, even one that has been surgically repaired, is a contraindication to irrigation because a healed perforation may have a thin area, which would be more prone to re-perforation.
        - Active dermatitis or infection of the ear canal.
        - Abnormalities of the ear canal (such as exostoses and ear canal stenosis).
    - Acute otitis externa with an oedematous ear canal and painful pinna.
    - Grommets in place.
    - A history of:
        - Any ear surgery (except extruded grommets within the last 18 months, with subsequent discharge from an ear, nose, and throat department).
        - Middle ear infection in the previous 6 weeks.
        - Any previous problem with irrigation (such as pain, perforation, or severe vertigo).
    - Mucus discharge from the ear (which may indicate an undiagnosed perforation) within the past 12 months.
    - Foreign body in the ear — hygroscopic matter, such as peas or lentils, will expand on contact with water making removal more difficult.
    - Cleft palate, whether repaired or not.
    - Hearing in only one ear if it is the ear to be treated — there is a remote chance that irrigation could cause permanent deafness.
    - Confusion or agitation — they may be unable to sit still.
    - Inability to cooperate, for example young children and some people with learning difficulties.

- **Use ear irrigation with caution (should be carried out on a low setting) in:**
    - People with:
        - Tinnitus.
        - Vertigo — this may indicate the presence of middle ear disease with perforation of the tympanic membrane.
        - Recurrent otitis media with or without documented tympanic membrane perforation — thin scars on the tympanic membrane can easily be perforated.
        - Recurrent otitis externa or tinnitus — ear irrigation may aggravate their symptoms.
    - People who are immunocompromised, especially older people with diabetes — there is an increased risk of infection from iatrogenic trauma to the external auditory canal in this group of people.
    - People taking anticoagulants or high-dose steroids
    - People who have had radiotherapy of the head or neck

What are the risks and possible complications of earwax removal procedures?

- **Possible complications of earwax removal include:**
  - Failure of wax removal.
  - Otitis externa.
  - Perforation of the tympanic membrane.
  - Damage to the external auditory meatus — necrotizing (malignant) external otitis is a rare infection that occurs primarily in immunocompromised people, especially older people with diabetes mellitus, and is often initiated by iatrogenic trauma to the external auditory canal.
  - Pain.
  - Vertigo.
  - Otitis media due to water entering the middle ear when there is a previous perforation.
  - Exacerbation of pre-existing tinnitus.
  - Serious injury to the middle and inner ear (rare).
  - Bleeding (usually self-limiting).
  - Nausea, vomiting, and vertigo resulting from temperature variations of the irrigating fluid.

When should I refer a person with earwax?

- **Refer the person to an ear, nose, and throat service if:**
  - There is a visible tympanic membrane perforation.
  - The person has (or is suspected to have) a chronic perforation of the tympanic membrane.
  - There is a past history of ear surgery.
  - There is a foreign body in the ear canal.
  - Ear drops have been unsuccessful, and irrigation is contraindicated or unsuccessful.
  - Multiple attempts to remove the impacted earwax, including a combination of treatments, are ineffective.
  - The person has persistent symptoms despite resolution of the impaction.

- **After irrigation:**
  - Seek immediate advice from an ear, nose, and throat (ENT) specialist if severe pain, deafness, or vertigo occur during or after irrigation, or if a perforation is seen following the procedure.
  - Refer the person to a specialist ear care service or an ENT service for removal of earwax if irrigation is unsuccessful after the second attempt.

- **Refer or seek urgent advice** if infection is present and the external canal needs to be cleared of wax, debris, and discharge.

- **Consider referring adults with hearing loss to an ENT service if, after initial treatment of any earwax or acute infection, they have any of the following:**
  - Partial or complete obstruction of the external auditory canal that prevents full examination of the eardrum or taking an aural impression.
  - Pain affecting either ear (including in and around the ear) that has lasted for 1 week or more and has not responded to first-line treatment.
  - A history of discharge (other than wax) from either ear that has not resolved, has not responded to treatment, or recurs.
  - Abnormal appearance of the outer ear or the eardrum, such as inflammation, polyp formation, perforated eardrum, abnormal bony or skin growths, swelling of the outer ear, or blood in the ear canal.
  - A middle ear effusion in the absence of, or that persists after, an acute upper respiratory tract infection.