

*10-minute consultation***Removal of ear wax**

T Aung, G P Mulley

An elderly man says he cannot hear properly and the problem has been worsening for a few months. He now has difficulty conversing and watches television at high volume. Normally, he is a sociable man, so he is frustrated and depressed. You find that both external ear canals are occluded with hard wax, which you offer to remove.

**What issues you should cover**

**Prevalence**—Explain that impacted ear wax is common; just under a third of older people experience the problem. In the United Kingdom thousands of people every week have ear wax removed. The chances of wax accumulating are increased by use of hearing aids and cotton buds.

**Removing wax**—Explain that ear wax can be removed in several ways. Wax softeners for five days can be tried first and are often effective. Mechanical methods are the next step. The traditional way is with irrigation, after softening, with a metal hand held syringe. A safer method is an electric oral jet irrigator (with special ear irrigator tip), which provides better water pressure control and more precise water jet direction. Some people need further intervention, with wax removed under direct vision using suction, probes, or forceps.

**Effects of impacted wax**—Though some people are asymptomatic, others may have (in addition to some hearing loss) earache, itchiness in the ear, reflex cough, dizziness, vertigo, or tinnitus. Hearing impairment can cause frustration, stress, social isolation, paranoia, and depression.

**Contraindications to syringing**—Perforation (past or present) of the ear drum, ear infection, presence of a grommet, history of ear surgery, and young children who are uncooperative are contraindications to ear syringing.

**Evidence of complications**

- A postal survey of 312 general practitioners who served 650 000 people in Edinburgh found that problems associated with ear syringing were failure of wax removal (29%), otitis media (17%), perforation of the ear drum (15%), and trauma to the external auditory meatus (11%)
- Although 85% of general practitioners organised ear syringing, only 19% did it themselves—they usually delegated this procedure to practice nurses
- Severe injuries can result from syringing using an oral jet irrigator with a dental tip (whose original purpose was to remove dental debris). Trauma should rarely occur with the electrical oral jet irrigator with a special tip specially designed for ear wax removal, as this does not develop pressures above a safe level

**Useful reading**

- Sharp JF, Wilson JA, Ross L, Barr-Hamilton RM. Ear wax removal: a survey of current practice. *BMJ* 1990;301:1251.
- Cook R. Ear syringing. *Nursing Standard* 1998;13:56-61.
- Grossan M. Cerumen removal—current challenges. *Ear Nose Throat J* 1998;77:541-8.
- Price J. Problems of ear syringing. *Practice Nurse* 1997;14:126-8.
- Kemp B. A practical guide to cerumen-removal tools. *Hearing Journal* 1999;52:58.
- Browning G. Wax in ear. *Clin Evid* 2001;6:420-7.

**Complications of syringing**—Adverse effects are common. Perforation of the ear drum, otitis externa, damage to the external canal, pain, deafness, vertigo, and tinnitus are all possible complications.

**What you should do**

- Always take a full history, asking specifically about ear discharge, previous perforation of the ear drum, or ear infection.
- Carefully examine the ear canal.
- Suggest wax softeners (such as sodium bicarbonate ear drops) as first line treatment.
- If wax softeners are ineffective, consider ear syringing and explain the possible risks to the patient.
- The person doing ear irrigation must be fully trained.
- If syringing, aim the jet at the superoposterior part of the ear canal. If the nozzle of the syringe is not properly secured, it can be detached during the procedure. If the ear canal is occluded by the instrument tip, the pressure can rise to a dangerous level. It is important to use the correct technique—pulling the pinna outwards and backwards to avoid occlusion and using the correct equipment.
- If a metal syringe is used, it should not be pressed too forcibly, as excess pressure can damage the ear drum.
- Water used in ear syringing should be at body temperature (37°C)—if it is too cold or too hot, it will cause dizziness or vertigo.
- Keep a detailed medical record of the procedure
- Advise patient on ear hygiene and to avoid using cotton buds
- Look for signs and symptoms of complications—for example, severe pain during syringing, deafness, or vertigo—and refer immediately to an ear, nose, and throat specialist if problems occur during or after the procedure or if deafness persists.

**This is part of a series of occasional articles on common problems in primary care**

Department of Medicine for the Elderly, Hull Royal Infirmary, Hull HU3 2JZ  
T Aung  
*specialist registrar*  
Elderly Services, St James's University Hospital, Beckett Street, Leeds LS9 7TF  
G P Mulley  
*professor*

Correspondence to: G Mulley  
Graham.Mulley@leedsth.nhs.uk

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