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# Ear syringing: minimising the risks

Case histories are based on actual medical negligence claims or medicolegal referrals; however certain facts have been omitted or changed by the author to ensure the anonymity of the parties involved.

Cerumen ('ear wax') removal is the most common ear, nose and throat procedure performed in general practice. It has been estimated that complications occur in one in 1000 ears syringed. This article outlines some strategies to minimise the possibility of a complication, complaint and/or claim arising from ear syringing.

#### **Case study**

The patient, 61 years of age, saw the general practitioner for a repeat prescription for her blood pressure medication. During the consultation, the patient mentioned that she had some discomfort in her left ear. The GP examined the patient's ears and noted that both external auditory canals were blocked by wax. He recommended that the patient have her ears syringed and arranged for the practice nurse to perform the procedure. The GP did not see the patient again.

Five months later, the general practitioner received a letter from the Medical Board enclosing a copy of a complaint by the patient. The letter from the patient stated that the nurse had started to syringe her right ear and 'two squirts later' the patient 'nearly fell off the chair from the stabbing pain'. The patient reported that she told the nurse that water had come out of her nose but the nurse said 'that's impossible - they're not connected'. The patient wrote that every time the water was injected into her right ear, she felt intense pain. The nurse had then proceeded to syringe her left ear without any problems. The patient reported that she had continued to experience some pain in the right ear after the procedure and she had seen another GP 2 days later. The GP noted a small perforation of her right eardrum and referred her to an ear, nose and throat surgeon. Fortunately the perforation had healed without operative intervention. The patient concluded her letter by saying that she wanted to ensure that no other patient suffered a similar experience.

The GP provided a response to the Medical Board outlining his recollection of the consultation with the patient. He stated that he had discussed the matter with the practice nurse and confirmed that she was an experienced registered nurse who had performed many ear syringing procedures in the past.

Three months after providing his response to the Medical Board, the GP received another letter from the Board. The Medical Board noted that the GP's response had been considered by the Board. The letter concluded that there were 'insufficient grounds' to proceed with disciplinary action against the GP and the matter had been closed.

### Discussion

It has been estimated that cerumen impaction is present in approximately 10% of children, 5% of healthy adults, up to 57% of older patients in nursing homes, and 36% of patients with an intellectual disability.<sup>1</sup> Impacted cerumen can cause unpleasant symptoms, including itching, pain, tinnitus and dizziness. It is occasionally associated with serious sequelae, including hearing loss, perforated eardrums, social withdrawal and poor work function.

Syringing to remove impacted cerumen is the procedure of first choice for the majority of GPs. In a survey of GPs, 38% of respondents reported experiencing complications associated with cerumen removal.<sup>2</sup> Failure of ear wax removal accounted for 29% of the complications. Otitis externa (17%), eardrum perforation (15%) and damage to the external auditory canal (12%) were the next most common reported adverse events. Pain, vertigo and otitis media each accounted for fewer than 10% of the complications. Major complications occurred in approximately one in 1000 ears syringed.

Ear wax softeners can be used in conjunction with syringing. However, there are no well designed, large, double blind studies comparing various agents and strategies to loosen impacted cerumen.3

Medical negligence claims and complaints against GPs and their staff arising out of ear syringing are not uncommon. Underlying reasons include:

- poor technique 43% of claims
- faulty equipment 26% of claims
- excessive pressure 26% of claims
- failure to examine the ear before syringing 5% of claims.

# Risk management strategies

In order to minimise the possibility of an adverse event, claim or complaint arising out of ear syringing, GPs should ensure that the procedure is indicated and the benefits and risks of the procedure have been discussed with the patient. Equipment should be in good order and checked before use. The person performing the syringing should be appropriately trained.

Before removing ear wax GPs should:

- take a full history, asking specifically about ear discharge, previous perforation of the eardrum or ear infection
- · carefully examine the external auditory canal
- · recommend the use of wax softening agents
- explain the potential complications of the procedure
- ensure the person performing the ear syringing is fully trained
- ensure the equipment is correctly assembled. If the nozzle of the syringe is not properly secured, it may become detached and cause damage to the external auditory canal and/or tympanic membrane.

During ear syringing, the pinna should be pulled outward and backward and the jet of water should be aimed at the superoposterior part of the ear canal. Failure to do this may result in the pressure in the canal rising to a dangerous level. Following the completion of syringing, the external canal should be examined. The procedure and examination should be documented in the medical records.

Contraindications to ear syringing include:

- perforation (past or present) of the eardrum
- ear infection
- presence of a grommet
- history of ear surgery
- young children who are uncooperative
- only hearing ear.<sup>4</sup>

Conflict of interest: none.

#### References

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