CLINICAL PRACTICE GUIDELINE: Emergency Department



Impacted Wax

Disclaimer: This Clinical Practice Guideline ('CPG') was written for use in The Royal Victorian Eye and Ear Hospital Emergency Department. It should be used under the guidance of an Ophthalmology or ENT registrar. If clinical advice is required, please contact the Eye and Ear Admitting Officer for assistance: EYE: +61 3 9929 8033; ENT: +61 3 9929 8032. Links to internal Eye and Ear documents cannot be accessed from the website CPG.

See also: Hearing loss, audiogram

Description:

Cerumen (wax) is a combination of the secretions produced by sebaceous and apocrine glands admixed with desquamated epithelial debris

Red Flags:

- Attic pathology visible after wax removal
- Persisting hearing loss after wax removal

How to Assess:

History:

- Otalgia, fullness in the ear or ear blockage sensation
- Partial hearing loss
- Tinnitus
- Enquire regarding history of otorrhoea, vertigo, perforated tympanic membrane, previous ear surgery, diabetes

Examination:

- Ear canal or tympanic membrane will usually not be visible due to obscuration by wax. However, after clearance of wax, both structures should be normal.
- Impacted wax may result in a conductive hearing loss
- Tuning fork tests should be performed after wax removal

Investigations:

- No investigations are typically required
- Audiogram if patient complains of persisting hearing loss post wax removal

Acute Management:

- Removal with cerumen curette or suction under direct vision
- Exercise caution when performing ear suction as trauma to ear canal or tympanic membrane may occur. Explain procedure to patient and instruct them not to move.
- For hard impacted wax, removal may be attempted with suction under direct vision after instilling Hydrogen Peroxide 3%. In some instances, it is preferable to advise patient to use wax softener or Hydrogen Peroxide 3% for several days then have removal in Eye and Ear Ear Care Clinic.
- Micro suction (suction using microscope)

Follow up:

- Routine follow up is not normally required, if the patient complains of hearing loss post wax removal, arrange audiogram and AENT review.
- If tympanic membrane is not visualised, arrange review after using wax softener (Eye and Ear Ear Care Clinic)

Discharge instructions:

• Advise against cotton-bud use/self-instrumentation

Evidence Table

| Author(s) | Title | Source | Level of Evidence (I – VII) |
|---------------------|---------------------------------------|--|--------------------------------|
| Burton MJ, Doree C. | Ear drops for the removal of ear wax. | <i>Cochrane Database of Systematic Reviews</i> 2009, Issue 1. Art. No.: CD004326. DOI: 10.1002/14651858.CD004326.pub2. | Ι |

The Hierarchy of Evidence

The Hierarchy of evidence is based on summaries from the National Health and Medical Research Council (2009), the Oxford Centre for Evidence-based Medicine Levels of Evidence (2011) and Melynk and Fineout-Overholt (2011).

- I) Evidence obtained from a systematic review of all relevant randomised control trials.
- II) Evidence obtained from at least one well designed randomised control trial.
- III) Evidence obtained from well-designed controlled trials without randomisation.
- IV) Evidence obtained from well-designed cohort studies, case control studies, interrupted time series with a control group, historically controlled studies, interrupted time series without a control group or with case series.
- V) Evidence obtained from systematic reviews of descriptive and qualitative studies.
- VI) Evidence obtained from single descriptive and qualitative studies.
- VII) Expert opinion from clinician, authorities and/or reports of expert committees or based on physiology.

| Version Details: | | |
|------------------------|---|--|
| CPG No: | CPG20.0 | |
| Responsible Executive: | Executive Director, Medical Services | |
| Review Officer: | Director, Emergency Department | |
| Contributor(s): | Clinical Practice Guideline Working Group Director Emergency Department ENT Medical Officer ENT Consultant | |
| National Standard: | Comprehensive Care | |
| Version Number: | 4.0 | |
| Approval Date: | 09/10/2018 | |
| Next Review Due: | 16/01/2022 | |