TITLE: Ear Wax Removal Devices in Long Term Care: Clinical Effectiveness, Safety, and Guidelines

DATE: 22 July 2010

RESEARCH QUESTIONS:

1. What is the comparative clinical effectiveness of a metal ear syringe versus a spray nozzle ear wash system for removal of ear wax for residents in long term care?

2. What are the safety, risks, and complications associated with the use of ear wax removal devices for residents in long term care?

3. What are the evidence-based guidelines for the removal of ear wax for residents in long term care?

METHODS:

A limited literature search was conducted on key health technology assessment resources, including PubMed, Eboscohost CINAHL, the Cochrane Library (Issue 7, 2010), University of York Centre for Reviews and Dissemination (CRD) databases, ECRI (Health Devices Gold), EuroScan, international health technology agencies, and a focused Internet search. The search was limited to English language articles published between January 1, 2000 and July 14, 2010. No filters were applied to limit the retrieval by study type. Internet links were provided, where available.

The summary of findings was prepared from the abstracts of the relevant information. Please note that data contained in abstracts may not always be an accurate reflection of the data contained within the full article.

RESULTS:

HTIS reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports, systematic reviews, and meta-analyses are presented...
first. These are followed by randomized controlled trials, non-randomized studies, and evidence-based guidelines.

One evidence-based guideline for the removal of ear wax for residents in long term care was identified. No relevant health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, or non-randomized studies were identified regarding the comparative clinical effectiveness of a metal ear syringe versus a spray nozzle ear wash system for removal of ear wax for residents in long term care or the safety, risks, and complications associated with the use of ear wax removal devices for residents in long term care. Additional articles of potential interest can be found in the appendix.

OVERALL SUMMARY OF FINDINGS:

The identified guideline recommends ear irrigation not be used if a resident in long term care presents with any of the following: perforated tympanic membrane, acute or chronic otitis media, otitis externa, myringotomy tubes, a mastoid cavity, completely blocked the canal, or the resident can hear only in the ear with the impaction. These patients should be referred to a doctor for ear wax removal. Irrigation may be done using a 20 to 50 cc syringe or commercial irrigator and body temperature water.

No literature was found specific to the spray nozzle ear wash system. Two clinical practice guidelines included in the appendix suggest that the use of metal syringes for ear wax removal is no longer considered to be good clinical practice.
REFERENCES SUMMARIZED:

Health technology assessments
No literature identified

Systematic reviews and meta-analyses
No literature identified

Randomized controlled trials
No literature identified

Non-randomized studies
No literature identified

Guidelines and recommendations

   Note: see Cerumen Management - Aural Lavage/Irrigation

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APPENDIX – FURTHER INFORMATION:

Health technology assessments – not specific to the long term care setting

   Available from: http://www.hta.ac.uk/fullmono/mon1428.pdf (copy and paste link into URL bar)

Clinical practice guidelines

   Note: see Step 2 – Non-pharmacological Treatment

   Note: “The metal syringe is obsolescent for use in the ear canal. The syringe design is inherently dangerous.”

   Note: see page 14, point 2 – metal syringes are no longer considered good practice

Additional references

