

# **Cerumen Management Workshop**

Rita R. Chaiken, Au.D.

## I. Overview of the Workshop

Why should audiologists perform cerumen management?

## II. Case History for Cerumen Management

A. Ear Pathology Hx

B. General Health Hx

C. Medications

Herbal supplements and OTC interactions:

**[http://faculty.ksu.edu.sa/hisham/Documents/Pharmacy\\_Docs/herbal\\_drug\\_interactions.pdf](http://faculty.ksu.edu.sa/hisham/Documents/Pharmacy_Docs/herbal_drug_interactions.pdf)**

**[www.inetce.com/articles/pdf/221-999-05-056-H01.pdf](http://www.inetce.com/articles/pdf/221-999-05-056-H01.pdf)**

For drug-drug interactions go to: **[www.drugs.com/drug\\_interactions.php](http://www.drugs.com/drug_interactions.php)**

D. Ooscopic Examination

## III. Anatomy and Physiology of the External Ear.



Fig. 2

1. Helix	8. Auricle	15. Stirrup
2. Opening of the ear canal	9. Lobulus	16. Vestibule
3. Anthelix	10. Cartilaginous ear canal	17. Cochlea
5. Radix helix	11. Bony ear canal	18. Balance nerve
7. Cavum conchae	12. Eardrum	19. Acoustic nerve
	13. Hammer	20. Eustachian tube
	14. Anvil	

#### A. External Ear Canal Structure:

1. Anteroinferior wall - approximately 6 mm longer than posterosuperior wall
2. Anterior and superior walls - less sensitive than the posterior and inferior walls
3. Isthmus
4. Fissures of Santorini

#### B. Cranial Nerve Innervation

Arnold's Reflex

#### C. Blood Supply

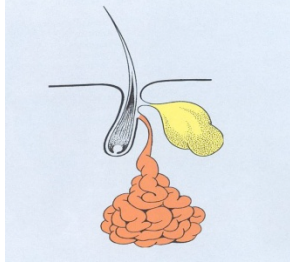
### IV. Conditions of the Outer Ear

rcsullivan.com Video Otoscopy in Audiology Practice

### V. Cerumen Production

#### A. Types of Glands

Ceruminous



Sebaceous

B. Cerumen Migration

C. Causes of cerumen build-up

D. Problems caused by cerumen impaction

E. Effects and causes of cerumen insufficiency

F. Incidence of cerumen impaction

G. Cerumen color variance

## VI. Otoscopy/Lighting



A. Types of otoscopes

B. Video otoscopes

C. Oto-microscopes (see additional instruction handout)

D. Binocular loupes (see additional instruction handout)

E. Head lamps/ magnified binocular head lamps

## VII. Furniture requirements

A. Professional seating

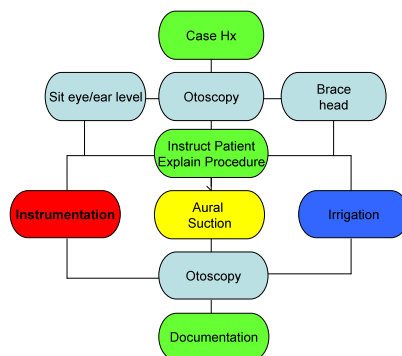
B. Patient Seating

C. Housing of instruments and equipment

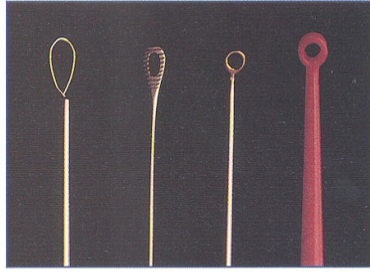
## VIII. Methods of Cerumen Management

Softening agents

Debrox toolkit: 866.646.7787

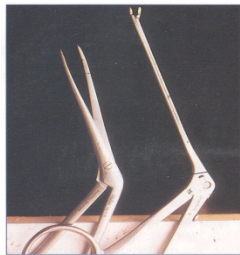


A. Instrumentation



*Figure 1. Four commonly used types of currette are, from left, the Billeau loop, the Shapleigh curette, the Buck curette, and a disposable curette.*

- a. Currettes
- b. Loops
- c. Spoons
- d. Hooks
- e. Earlights
- f. Lighted Currettes
- g. Video otoscope attachments
- h. Forceps



*Figure 2. Pictured are the Harriman dressing forceps (left) and the alligator style forceps.*

## B. Suction

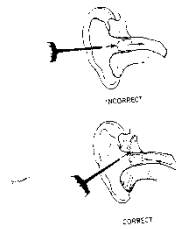
1. Contraindications
2. Equipment
3. Suction tubes



4. Protocol

### C. Irrigation

1. Contraindications
2. Equipment
3. Protocol



IX. Post Cerumen Management Problems

X. Counseling Patients

XI. Scope of Practice

XII. Liability

XIII. Charges/Claims

A. Medicare

69210

92700

Voluntary ABN

GY/GX modifiers

G0268

B. Other Insurances

XIV. Infection Control

A. Cleaning

B. Disinfecting

## C. Sterilizing

Autoclave

Gluteraldehyde

Hydrogen peroxide

### **Instructions for Setting Loupes/Microscopes**

Seiler/Jedmed  
Sport Loupe:

Set intraocular distance: loosen screws under eye piece  
Focus on object 10" away and turn knob moving eye pieces laterally until one image viewed  
Press blue switch on black power supply to turn unit on  
Change distance to the object (closer or farther away) as needed for clarity  
Turn light off when not using.

Heine/Jedmed  
Loupe:

Set optics assembly as close to the eyes as possible  
Center the light beam to the visual field  
Set intraocular distance: loosen screws under eye piece  
Focus on object 10" away and move eye pieces laterally until one image viewed  
Change distance to the object (closer or farther away) as needed for clarity  
Turn LED lamp on with switch  
Turn light off when not using

Prescotts  
Otomicroscope:

Sit at eye/ear level  
Turn light on and adjust brightness  
Center the light beam to the visual field  
Look thru binocular lens and focus at .6  
Set pupillary distance (binocular lens) – see one ear in both eyes  
Use fine focus to control depth perception field of vision  
Change distance to the object (closer or farther away) as needed for clarity

### **Audiological Consent Form**

(This is a sample form which may not suffice in your jurisdiction)

Patients Name: \_\_\_\_\_

I have been given information about my condition and consent is here by voluntarily given for:

- € Lyric Instrument Extended Wear Fitting and Sizing
- € Cerumen (Earwax) Removal

The procedure, alternatives, potential gains and risks have been explained to my satisfaction.

- Lyric extended wear fitting and sizing risks are rare and include: abrasion, discomfort, soreness, bleeding, infection and pain.
- Cerumen removal risks are rare and may include: abrasion, discomfort, soreness, bleeding, infection and pain.

Patients Signature \_\_\_\_\_

Date \_\_\_\_\_

Witness Signature \_\_\_\_\_

Date \_\_\_\_\_

### **Cerumen Management Course Glossary of Terms**

Actinic Lesion- precancerous lesion

Acute Otitis Externa (Bacterial) - inflammation of the skin and sub epithelial tissue

Acute Otitis Externa (Localized) - abscess of the hair follicle that occurs from obstruction of the apo-pilosebaceous unit.

Basal Cell Carcinoma- uncommon in the EAC

Cerumenoma- benign growth of the apocrine and sebaceous glands within the cartilaginous canal

Cholesteatoma of the EAC- accumulation of exfoliated keratin from the external canal

Exostoses- multiple boney lesions in the EAC

Hematoma- blood tumor

Keratinosis Obturans- keratin debris accumulation within the external canal - may cause erosion of the bony canal

Melanoma- tumor of the melanocytes in the skin which should always be regarded as systemic illness

Osteoma- unilateral bony tumor

Otorrhea- odorous discharge from the ear

Otalgia- ear pain

Otomycosis- infection of the EAC caused by fungus and yeast

Papilloma- DNA virus usually appearing in the pinna and entrance of the EAC

Squamous Cell Carcinoma- most common malignant tumor of the EAC

Source:Canalis, Rinaldo, Lambert, Paul R, THE EAR, Lippincott, Williams & Wilkins 2000, Philadelphia, PA