Cerumen Impaction

Children's Mercy KANSAS CITY | Evidence Based Practice

Exclusion criteria:
- Visualized foreign body, refer to Ear Foreign Body Clinical Pathway

QR code for mobile view

Patient presents with cerumen impaction confirmed by otoscopic exam

Is the patient symptomatic, or does the impaction need to be removed to optimize the exam for another concern?

No → No intervention needed. Provide education on measures to control cerumen accumulation (*e.g., mineral oil drops, carbamide peroxide (Debrox) drops*)

Yes

Cerumen Impaction Symptoms
- Ear pain or discomfort
- Ringing in the ears
- Feeling of fullness or pressure
- Hearing loss
- Dizziness
- Cough
- Itching or irritation of the ear

Intervention
- Consider if Child Life consult or use of anxiolysis may be needed to complete the removal/irrigation
- Consider ***manual removal with instrumentation as initial extraction method***

Contraindications to Irrigation
- Tympanostomy tube
- Tympanic membrane perforation (*acute or chronic*)
- History of tympanoplasty
- Recent, major otologic surgery (*within 3 months*)
- Trauma (*e.g., known penetrating injury*)
- Presence of an expandable foreign body (refer to Ear Foreign Body Clinical Pathway)

Was the impaction resolved on post-treatment otoscopic examination?

Yes → No further intervention needed. Provide education on measures to control cerumen accumulation

No

Does the patient have a contraindication to irrigation?

Yes → Refer to ENT for further treatment (*or plan for ENT follow-up if patient is already established*)

No

Cerumenolytic Agent and Irrigation
(*link to cerumen removal guidance*)

***First Step*: Cerumenolytic**
- Use medicine cup to mix 3% hydrogen peroxide with tap water in equal parts to make half strength hydrogen peroxide and place in ear canal to soften the cerumen prior to irrigation (soak 5 minutes)
  Note: Hydrogen peroxide can stain clothing, use towel as barrier or remove shirt

***Second Step*: Irrigation**
- Use lukewarm, soapy (*minimal or very small amount of hand soap*) tap water
  - Avoid cold water to minimize risk of dizziness, nystagmus, and nausea
- **Device options:**
  - Large syringe with single-use otic tip
  - Commercially available ear lavage system with single-use otic tip and low pressure flow (*do **not** use high-pressure irrigation*)
- Discontinue procedure if child experiences pain or dizziness

Next Steps
- Instill cerumenolytic agent, followed by irrigation
- Number of cycles of hydrogen peroxide solution and irrigation depends on tolerance by the patient and rate of improvement, if any (*if not seeing improvement, discontinue*)
- Manual removal may also be reconsidered

Was the impaction resolved on post-treatment otoscopic examination?

No →
- Refer to ENT for further treatment (*or plan for ENT follow-up if patient is already established)*
- Instruct patient to use mineral oil drops for 7 days prior to ENT visit
- If ear infection is suspected, please refer to the Acute Otitis Media Clinical Pathway

Yes

- Monitor for bleeding, tinnitus, and vertigo
- Provide education on measures to control cerumen accumulation (*e.g., mineral oil drops, carbamide peroxide (Debrox) drops*)

Contact: EvidenceBasedPractice@cmh.edu

Link to: synopsis and references

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