

## Cerumen Impaction: An Updated Guideline from the AAO–HNSF

### Key Points for Practice

- Cerumen impaction should be diagnosed when an accumulation precludes an ear evaluation or when the accumulation is confirmed by otoscopy in a person who has symptoms.
- Each time a person with hearing aids presents to the office, otoscopy should be performed to evaluate for cerumen.
- Patients presenting with cerumen impaction should be appropriately treated with a cerumenolytic agent, irrigation, or manual removal.

From the *AFP* Editors

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Although there are benefits to cerumen, including cleaning and protecting the ear canal, it can also cause blockages that can lead to loss of hearing, tinnitus, otalgia, itching, and other symptoms. In the United States, approximately 12 million persons present for problems related to cerumen, with about 8 million removal procedures performed. This update from the American Academy of Otolaryngology–Head and Neck Surgery Foundation (AAO–HNSF) provides guidance for persons older than six months diagnosed with cerumen impaction.

### Recommendations

#### PREVENTION

For persons presenting with accumulated cerumen, physicians should discuss appropriate ear hygiene to prevent impaction. Many persons commonly perform ear hygiene measures; therefore, the discussion should be focused on safe and effective regimens that also avoid such harms as scrapes or unintended impaction caused by manipulation. Preventive methods may be needed for persons who have a history of impaction or greater likelihood of an occlusion, including children, older persons, persons with cognitive impairment, and persons who wear hearing aids. Options to limit accumulation include cerumenolytic drops

and irrigation. Patients should be advised against using cotton swabs or small objects to clean the ear.

#### DIAGNOSIS

Cerumen impaction should be diagnosed when an accumulation precludes an ear evaluation or when the accumulation is confirmed by otoscopy in a person who has symptoms. Persons who are at risk of impaction but are unable to indicate the presence of symptoms (e.g., older persons with possible dementia; persons who do not speak, but who have had a change in behavior; young children with fever) should be evaluated and the cerumen removed, if present. Impaction can also be diagnosed in any person with cerumen accumulation that could interfere with audiometric or vestibular assessment.

An evaluation for cerumen impaction can be done using a history and physical examination to identify issues that may affect management (i.e., anticoagulant use, immunocompromise, diabetes mellitus, previous radiation to the head or neck, ear canal stenosis, exostoses, and perforated tympanic membrane). If not recognized, these issues can result in substandard care, harm to the patient, or incorrect treatment.

Young children and persons with cognitive impairment are at higher risk of impaction, although they may not be able to report symptoms. Such persons should be assessed to determine whether treatment might be required. It should be noted that removing cerumen in this population may be difficult and may require assistance; rarely, the patient may need to be sedated.

Cerumen's typical cleaning process can be disrupted by such foreign items as hearing aids, putting users at greater risk of impaction. Impaction can affect how well the hearing aids work. For these reasons, each

time a person with hearing aids presents to the office, otoscopy should be performed to evaluate for cerumen.

### TREATMENT

When impaction is diagnosed, the patient should receive or be referred for treatment. Treatment should not be provided routinely, however, in persons without symptoms or whose ears can be effectively evaluated despite cerumen. Patients should be educated that cerumen is natural and often asymptomatic; therefore, it is not necessary for it to be removed every time. Impaction may resolve on its own, making watchful waiting an appropriate option. Education on how to manage cerumen (e.g., topical preparations, irrigation, cleaning hearing aids and the ear canal) can be provided to patients presenting with too much cerumen or impaction.

Patients with cerumen impaction should be appropriately treated with a cerumenolytic agent (e.g., water, saline), irrigation (via a syringe or electronic irrigator), or manual removal to improve symptoms, if present. In patients without symptoms, the goal is to allow for examination of the ear canal or tympanic membrane, or perform audiometric or vestibular testing. No particular treatment method has been shown to be superior to another. Adverse effects of cerumenolytic agents (e.g., transient hearing loss, discomfort, dizziness, skin irritation), irrigation (e.g., pain, skin injury, acute otitis externa), and manual removal (e.g., ear canal trauma,

tympanic membrane perforation, infection) should be considered. Because ear candling has not been proven effective and has associated risks, physicians should discourage its use.

If treatment is provided in the office, the patient should be evaluated after completion to document that impaction has been resolved, and if not resolved, additional measures should be undertaken. If the impaction cannot be safely resolved by the initial treating physician, referral to a subspecialist with specific training and the appropriate equipment is warranted. In addition, if the patient continues to experience symptoms after impaction has been alleviated, other causes of symptoms should be explored, such as sensorineural hearing loss, conductive hearing loss, otitis media, drug adverse effects, and head and neck tumors.

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