

## Doctor, Please Explain

### Earwax

Insight into the proper care of the ears

- Why does the body produce earwax?
- What is the recommended method of ear cleaning?
- When should a doctor be consulted?
- and more...

Good intentions to keep ears clean may be risking the ability to hear. The ear is a delicate and intricate area, including the skin of the ear canal and the eardrum. Therefore, special care should be given to this part of the body. Start by discontinuing the use of cotton-tipped applicators and the habit of probing the ears.

Why does the body produce earwax?

Cerumen or earwax is healthy in normal amounts and serves to coat the skin of the ear canal where it acts as a temporary water repellent. The absence of earwax may result in dry, itchy ears. Most of the time the ear canals are self-cleaning; that is, there is a slow and orderly migration of ear canal skin from the eardrum to the ear opening. Old earwax is constantly being transported from the ear canal to the ear opening where it usually dries, flakes, and falls out.

Earwax is not formed in the deep part of the ear canal near the eardrum, but in the outer part of the canal. So when a patient has wax blockage against the eardrum, it is often because he has been probing the ear with such things as cotton-tipped applicators, bobby pins, or twisted napkin corners. These objects only push the wax in deeper.

What is the recommended method of ear cleaning?

Under ideal circumstances, the ear canals should never have to be cleaned. However, that isn't always the case. To clean the ears, wash the external ear with a cloth, but do not insert anything into the ear canal.

Most cases of ear wax blockage respond to home treatments used to soften wax. Patients can try placing a few drops of mineral oil, baby oil, glycerin, or commercial drops, such as Debrox® or Murine® Ear Drops in the ear. These remedies are not as strong as the prescription wax softeners but are effective for many patients. Rarely, people have allergic reactions to commercial preparations.

Detergent drops such as hydrogen peroxide or carbamide peroxide may also aid in the removal of wax. Rinsing the ear canal with hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>) results in oxygen bubbling off and water being left behind—wet, warm ear canals make good incubators for growth of bacteria. Flushing the ear canal with rubbing alcohol displaces the water and dries the canal skin. If alcohol causes severe pain, it suggests the presence of an eardrum perforation.

Why shouldn't cotton swabs be used to clean earwax?

Wax blockage is one of the most common causes of hearing loss. This is often caused by attempts to clean the ear with cotton swabs. Most cleaning attempts merely push the wax deeper into the ear canal, causing a blockage.

The outer ear is the funnel-like part of the ear that can be seen on the side of the head, plus the ear canal (the hole which leads down to the eardrum). The ear canal is shaped somewhat like an hourglass—narrowing part way down. The skin of the outer part of the canal has special glands that produce earwax. This wax is supposed to trap dust and dirt particles to keep them from reaching the eardrum. Usually the wax accumulates a bit, dries out, and then comes tumbling out of the ear, carrying dirt and dust with it. Or it may slowly migrate to the outside where it can be wiped off.

What are the symptoms of wax buildup?

- Partial hearing loss, may be progressive
- Tinnitus, noises in the ear
- Earache
- Fullness in the ear or a sensation the ear is plugged

Are ear candles an option for removing wax build up?

No, ear candles are not a safe option of wax removal as they may result in serious injury. Since users are instructed to insert the 10” to 15”-long, cone-shaped, hollow candles, typically made of wax-impregnated cloth, into the ear canal and light the exposed end, some of the most common injuries are burns, obstruction of the ear canal with wax, or perforation of the membrane that separates the ear canal and the middle ear.

Even though ear candling is an ancient practice with the intent to treat a wide variety of ear maladies including cerumen impactions, ear infections, hearing loss, tinnitus, Ménière’s disease, sinusitis, headaches, inhalant allergies, and many other conditions, the FDA has never cleared or approved marketing the products as a medical treatment.

Are ear candles approved by the U.S. Food and Drug Administration?

The U.S. Food and Drug Administration (FDA) became concerned about the safety issues with ear candles after receiving reports of patient injury caused by the ear candling procedure. Although there are proponents who argue in favor of the use of ear candles, the FDA is unaware of any controlled studies or other scientific evidence that support the safety and effectiveness of these devices for any of the purported claims or intended uses as contained in the labeling.

Based on the growing concern associated with the manufacture, marketing, and use of ear candles, the FDA has undertaken several successful regulatory actions, including product seizures and injunctions, since 1996. These actions were based, in part, upon violations of the Food, Drug, and Cosmetic Act that pose an imminent danger to health.

When should a doctor be consulted?

If the home treatments discussed in this leaflet are not satisfactory, or if wax has accumulated so much that it blocks the ear canal (and hearing), a physician may prescribe eardrops designed to soften wax, or he may wash

or vacuum it out. Occasionally, an otolaryngologist (ear, nose, and throat specialist) may need to remove the wax using microscopic visualization.

If there is a possibility of a hole (perforation or puncture) in the eardrum, consult a physician prior to trying any over-the-counter remedies. Putting eardrops or other products in the ear with the presence of an eardrum perforation may cause an infection. Certainly, washing water through such a hole could start an infection.