



# the Trumpeteer

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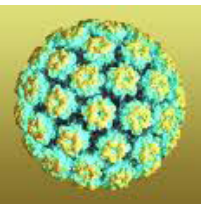
## Human Papillomavirus Causes Oropharyngeal Cancers

Doris Lin, M.D.



Human papillomavirus (HPV), the same virus that can cause cervical cancer, has been shown to cause oropharyngeal cancers especially in non-smokers. HPV is a double-stranded DNA virus that can cause benign and malignant neoplasms. Some benign lesions are small papillomatous “warts” that can show up at the tip of the uvula, along the tonsillar fossa (the walls around the tonsils), or even on the tongue. Another example is the papillomatous lesions that can show up on the vocal cords. The typical presentation is in a small child with hoarseness and some shortness of breath. These lesions are often transferred to the child from mother with an HPV infection in her cervix. Over the past decade, more and more cases of tonsil and tongue cancers in non-smokers have been shown to be associated with HPV, particularly HPV type 16 (also known to cause cervical cancer).

Patients with HPV-related cancers are typically male and usually younger than those presenting with tobacco-induced oropharyngeal cancers. The main risk factor is high-risk sexual activity. HPV may be transmitted to the oral cavity by oral sex or even open-mouth kissing with someone with an oropharyngeal HPV infection. The patient will frequently present with a neck mass. The main importance of this information is to be seen by the Otolaryngologist any time someone presents with a neck mass that does not go away or with an oropharyngeal lesion, even in a non-smoker. There have been studies that show that HPV-induced neoplasms respond better to treatments (including, surgery, chemotherapy and radiation) than the tobacco-induced neoplasms. One study showed that amongst oropharyngeal cancer patients treated with chemoradiation, those who were HPV-positive had an 83% overall survival compared with 57% for those with HPV-negative cancers. An interesting development will be to see if implementation of the HPV vaccines will decrease the incidence of oropharyngeal neoplasms as well.



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## When is The Best Time To Get Hearing Aids ?

By Ellen R. Wilson, Au.D.



The title of this article may seem puzzling. One would expect that a person should know they are having significant enough hearing difficulty to warrant the use of hearing aids, but this is typically not the case. As we age, there is a gradual decline of hearing by a few decibels a year, so gradually that over a period of many years it often goes unnoticed. This natural loss of hearing due to aging is called presbycusis. Some persons will just dismiss hearing loss as just a natural occurrence of aging and deny that it causes significant interference in their daily lives. At some point, however, they realize that they are missing (a) key word(s) in a sentence, thereby throwing off the whole context. They may answer inappropriately to a question, miss a punch-line of a joke, or not understand the concluding/closing remarks at the end of the minister's sermon. Such occurrences start to become more frequent. Over time the person may start to subconsciously withdraw from those situations where they no longer feel confident. They may let their spouse take phone calls, rely on someone to relay important information or in worse cases, just nod their head not knowing what they are responding to. Hearing loss often leads to social isolation.

Presbycusis affects almost all older adults to some degree, some only mildly, others more severely. Familial history of hearing loss (preceding generations) gives some indication of how our hearing loss might progress. This, of course, is variable by

genetic expression, but still a possible predisposition. Adding to that, noise induced hearing losses acquired in occupational or recreational exposures and hearing losses due to medical pathology of the ear can further increase the severity/degree of the hearing deficit.

Hearing aids are a form of rehabilitation for hearing loss that is not medically or surgically correctible. Hearing aids will not restore normal hearing, but will improve hearing significantly if properly selected, fit, and maintained for a patient's loss. The most common mistake of all with regard to hearing aids is waiting too long to get them. The ear is the transmitter, the brain is the interpreter. Over time, as

### Some Popular Hearing Instruments

Micro Behind The Ear



Completely In The Canal

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we lose more hearing whether from hair cell loss in the cochlea (sensory loss) or reduction of neural fibers among the auditory nerve/pathway (neural loss) and/or a combination of the two (sensorineural loss), there is a gradual deterioration in the ability to process speech signals. Lack of stimulation often leads to regression in the ability to process and comprehend speech information. This is referred to as auditory deprivation. Hearing aids will not retard the gradual loss of hearing due to presbycusis or halt medical pathology, but hearing aids do seem to help maintain word recognition by providing continual aural/acoustical stimulation. Remembering again that the brain is the interpreter, it is easier for the brain to understand the cues of a fuller speech signal than a partial speech signal. Also, many research articles discuss the idea of neural plasticity, the ability of the brain to retrain, refocus, or reacquire some loss of function. While some theories of this application to the auditory nervous system are still under debate, longitudinal studies showing benefits of binaural amplification (fitting both ears) over monaural amplification (fitting one ear) support the concepts of auditory deprivation, and while studies on cochlear implants support the concepts of neural plasticity.



For these reasons, binaural amplification (hearing instruments for both ears) is usually recommended over monaural amplification (one ear). Of course, there are exceptions to every rule, but the first step is to have a comprehensive audiological assessment to evaluate both ears and the need for hearing aid amplification. There are situations where one ear is not aidable either due to severe neural degeneration or at times a totally dead ear. Be assured that an audiologist would not recommend hearing aids to someone that cannot benefit from amplification and that always, you will have a trial period that must include successive follow-ups with hearing instruments to determine benefit and your satisfaction.

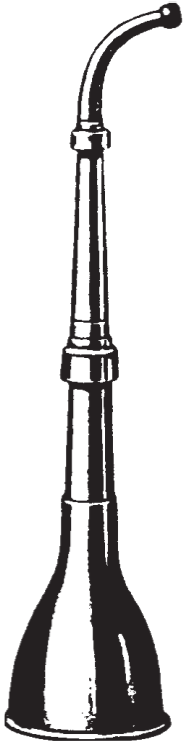
In summary, the answer to the initially stated question – when is the best time to get hearing aids? – when it starts to interfere with your daily enjoyment, function, and quality of life. This typically begins to occur in the mild range, but becomes more pronounced to the patient by the moderate range. Once a mild loss is diagnosed or identified, it is recommended that a patient begin having annual hearing tests to monitor progression of their loss, and determine together with the audiologist, their need for amplification.

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## “Akoulallion”, First Electric Hearing Aid BY: J.P. Miller, M.S. CCC-A

The first practical electric hearing aid was made by Miller Reese Hutchison of Mobile, Alabama in 1899. The device was called the “Akoulallion”, from the Greek verbs to hear, to speak. The first device was a table model with a carbon microphone and up to three pairs of earphones. A phonograph attachment was optional. The device sold for \$400.

Hutchison improved his hearing aid and one was used by Queen Alexandra of England during her coronation. Then in 1909, a new company was formed, but without Hutchison’s participation. But with his patents, the new company was called the Acousticon Systems, INC. Picture of the device, courtesy of the HearingAidMuseum.com.



Acousticon Model "A" Carbon Hearing Aid 1905

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## Our Website Services Have Been Expanded

Central Carolina ENT is now offering a secure web based patient portal of medical office resources. The system provides the following patient and physician resources:

- [Secure Online Patient Forms](#)
- [Lab/Test Results Request](#)
- [Patient Registration - Web based](#)
- [Pay Bill Online](#)
- [Health Forms - Web Based](#)
- [Physician Referral Request](#)
- [Online Appointment Request](#)
- [CCENT Careers](#)
- [Rx Prescription Refills](#)
- [Newsletter Sign-up](#)
- [Take Our Survey](#)

This patient and physician communication system creates better medical office efficiency and effective patient communications. Thank You! CCENT