



BEG YOUR PARDON?

Why do we lose our sense of hearing as we get older?
And are hearing aids and surgery sound options?

PHOTOS: CORBIS

As people age, it is inevitable that the senses start to lose their sharpness. And of these, the weakening of the sense of sight and hearing are the most common complaints among the silver community, who are most susceptible to the effects of wear and tear.

According to Associate Professor (A/Prof) Lynne Lim, a Consultant at the Department of Otolaryngology, Head & Neck Surgery, and a Director at the National University Hospital's Centre for Hearing Intervention and Language Development, presbycusis or age-related hearing loss sets in at about 50 years of age. The condition is the result of

progressive degeneration of the inner ear cochlear hair cells in both ears with age.

Inner ear cochlear hair cells, she explains, are sensory cells that pick up sound waves that reach the inner ear cochlear. When these cells degenerate with age or degenerate earlier due to loud noises or toxins, they cannot regenerate. Age-related hearing loss, also known as presbycusis, cause high-frequency sounds (examples are high-pitch mosquito sounds or voices of young girls) to be lost first. Consequently, a person still hears louder sounds but cannot discriminate the actual words

LISTEN UP!

Hearing loss is an affliction that can hit not just the baby boomers, but youth and working adults.

Unhealthy lifestyle habits have led to the deterioration of hearing among the youth and young adults. This can start as early as 18 years of age. With today's increasingly urban noise exposure from home entertainment, theatre and MP3 players, the incidence of hearing loss is on the rise.

In fact, teenagers and young adults may already have high frequency hearing loss but may not be aware of it. It is advised that you get a hearing test once a year, even if you find your hearing is stable. Here are some common reasons for hearing loss and what you can do to tune out the noise:

- ▶ **CAUSE:** Listening to loud MP3 music. If the music can be heard by someone sitting next to you, it can be up to 115 decibels loud — which can cause permanent hearing loss in 15 minutes!
- CURE:** Wear hearing protectors or take breaks from the noise.
- ▶ **CAUSE:** Working in or living near loud environments like construction sites.
- CURE:** Get yourself ear muffs or ear plugs and wear them.
- ▶ **CAUSE:** Rock or music concerts.
- CURE:** When buying tickets, it may be better not to sit right next to the amplifiers. If it is unavoidable, or if the concert is going to be very loud or on for a long duration, consider ear plugs, or take breaks in between.

that are spoken. In comparison, the vowels a, e, i, o, u constitute lower frequency sounds and can continue to be heard comparatively better.

"Forty per cent of the population above 65 years old will have presbycusis," points out A/Prof Lim. "In Singapore, 10 per cent of the current population is above 60 years old. By 2020, this will have doubled to 20 per cent!"

CAN WHAT I'M HEARING BE TRUE?

It's easy to think that just because you can hear sounds, you do not have hearing loss. But the opposite can be

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IF WE CANNOT HEAR WELL, WE USE HEARING AIDS. HEARING LOSS IS A NORMAL PART OF LIFE, IT IS NOT A STIGMA. HEARING WELL ALLOWS ONE TO OPTIMALLY PARTICIPATE IN SOCIAL, FAMILY, WORK AND LEARNING LIFE."

true. Hearing loss from presbycusis can be very easily missed, and the best way to determine this is through a formal hearing test in a sound-proof room, following the confirmation from an Ear, Nose, Throat (ENT) specialist, excluding other treatable causes of hearing loss.

In the same vein, people usually associate the word "deafness" with total hearing loss. However, there are different grades of deafness — mild, moderate, severe or profound. Whatever the initial stage, gradual hearing loss can lead to total deafness.

And because there is no pain, numbness, nor giddiness linked to presbycusis, many adults do not know they have hearing loss, even if it's at a moderate level. Sometimes, there is a ringing sound in the ears (tinnitus) associated with hearing loss, or preceding hearing loss. Tinnitus is usually worse at night when all is quiet; it can also be a humming, clicking or buzzing sound, which gets more manageable with time.

How does one know it's time to get his or her ears checked? A/Prof Lim advises that a senior citizen who turns the TV or radio volume up, asks people to repeat what they say and cannot hear in noisy places like wet markets may already have a significant hearing loss. A yearly formal hearing test (not the average screening test at health fairs or with use of rattles and bells) is important, so make that appointment or speak to a family doctor for a referral. Tumours of hearing nerves, while rare, need to be excluded as well.

PRESERVE YOUR HEARING

To an extent, maintaining a good sense of hearing boils down to taking care of your general health. A/Prof Lim says some people are genetically programmed to be more susceptible to early degeneration or are more prone to hearing loss after certain drug insults. Cardiovascular insults from diabetes, hypertension and smoking will accelerate this degeneration.

And the time-honoured adage "prevention is better than cure" rings true, because there is no simple drug or lifestyle change that can reverse hearing loss. Hair cells that have degenerated in the inner ear cannot re-grow. Thankfully, hearing aids can save the day, and allow people to listen to their favourite sounds again — be it chirping birds, a grandchild's laugh or Frank Sinatra's greatest hits. ➤

BY MICHELLE BONG



WHERE TO GET HELP

NATIONAL UNIVERSITY HOSPITAL
Ear Nose Throat — Head & Neck Surgery Clinic
Kent Ridge Wing 2, Level 3
Tel: 6772-2002

TAN TOCK SENG HOSPITAL
Clinic 1B (ENT)
Level 1, TTSH Medical Centre
Tel: 6357-8007 (Enquiry)
Tel: 6357-8384 (GP)

Central Appointment Lines
Tel: 6357-7000
Tel: 6357-8000 (for non-subsidised appointments only)

Such aids have become very sophisticated and also increasingly cosmetic and comfortable, offering various programmes to be used in quiet and in noisy situations. The purchase of these devices can cost up to a few thousand dollars per side. It is important to have your hearing aids fitted by professionals, and not buy it over the counter. If it is not fitted or tuned correctly, there will be little benefit for the patient, which unfairly gives hearing aids a bad name.

DEALING WITH TABOO

Despite the availability of advanced hearing aids, A/Prof Lim concedes that they remain a taboo subject for some, who are embarrassed to wear them. She stresses how important it is that hearing aids be viewed in the same light as spectacles.

"If we cannot see well, we use spectacles. If we cannot hear well, we use hearing aids. Hearing loss is a normal part of life, it is not a stigma. Hearing well allows one to optimally participate in social, family, work and learning life. Hearing well allows better quality of life, better cheer, memory and cognition," she highlights.

For those who simply cannot accept wearing a hearing aid, there are other alternatives. Hearing implants may be inserted internally into the ear, via surgery. A/Prof Lim says she may consider middle ear implants or cochlear implants when the users have failed to get clearer hearing from hearing aids, if there is persistent feedback, ear block or ear infection problems

due to hearing aids. The middle ear implants can give clearer hearing for appropriate patients, and are easily hidden under hair, as they are not sited behind the ear lobe and do not have a ear mould in the canal.

Some middle ear implants can also be implanted totally under the scalp, with nothing visible from the outside. A/Prof Lim shares that in June 2008, the first patient with this totally implantable middle ear implant done in Singapore was an Australian home-maker. After the procedure, she was able to go about daily life without having to think about her hearing aid falling off or being damaged when she was swimming or exercising. She also liked that the implant was not visible to others.

BE SAFE, NOT SORRY

It's easy to miss hearing loss, so be sure to undergo a formal hearing test for an accurate prognosis. There are hearing tests online, but these may not be accurate enough. When you think you have a problem hearing, it may already be at an advanced stage.

Other simple ways to prevent worsening hearing loss involves proper ear care and cleaning. Avoid cleaning your ears with anything smaller than a cotton bud; reduce ear infections by treating throat or nose infections quickly; and dry your ears after bathing. These can go a long way in ensuring all your most-loved sounds continue to be music to your ears. ➤