

THE SOUND OF SILENCE: HEARING *LOSS* IN THE ELDERLY

Hearing impairment comes in a spectrum, from the very mild to complete deafness, with the prevalence of hearing impairment increasing with age. Left untreated, hearing impairment can lead to disability and handicap.

There are various causes of hearing impairment, with presbycusis (age-related hearing loss) and excessive noise exposure being the commonest ones. Other contributory factors include genetic conditions like otosclerosis, Meneire's and recurrent ear infections.

In Singapore, half of 80-year-olds will have experienced significant hearing loss. As most hearing impairment develops slowly, many patients and their families choose to ignore or deny the problem. The perceived cost and stigma of wearing hearing aids add to the problem. Seeking late treatment is also common.

Beyond a certain point, hearing impairment can reduce normal human activity and function within society.

GET CHECKED

If one suspects a hearing impairment, this can easily be checked by arranging a hearing test. This test is provided by ENT & Audiology departments in hospitals and also private providers in the community. Community screening programs would be another option.

A joint ENT and audiology hospital review is highly advantageous in providing a holistic approach to the management of hearing impairment, especially where there are co-existing ear problems.

A historical medical examination will be performed followed by a hearing test. Patients will be counselled appropriately should a significant hearing impairment be diagnosed. Following this, a session to trial the use of hearing aids would usually be recommended. Family members will also be educated on how communication can be enhanced, such as looking at a person in her eyes during a conversation.

PREVENTION AND TREATMENT OPTIONS

Lifestyle and Well-being

Whilst hearing loss is not entirely preventable, we can delay its onset by looking after our ears. There is a need to be mindful of excessive loud noise exposure. Excessive loud noise is not entirely avoidable if one works in shipbuilding and certain manufacturing industries, but turning down the volume of portable music devices will help. Ear infections also need to be managed promptly.

Acoustic Hearing Aids

Conventional acoustic hearing aids come in many shapes, sizes and designs. Hearing aids that sit completely in the ear canals are available for those who are conscious of their appearance.

Surgical Implants

A Bone Anchored Hearing Aid (BAHA) is useful for anyone who is unable to wear a conventional hearing aid due to recurrent infections or problems with the ear canal. The BAHA is also useful for someone who has lost all hearing

in one ear only, with good hearing in the remaining ear. Middle ear Implants can be considered for certain types of hearing loss. For someone who has completely lost all hearing in both ears, a Cochlear Implant would enable the patient to hear again. There are also implants that would allow the hearing portion of the brain to be directly stimulated, bypassing the ear and its nerve supply completely.

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IMPORTANCE OF EARLY TREATMENT

Hearing Normality

Sound deprivation, where the ears and brain of a hearing impaired person 'forgets how to hear' from lack of sound stimulation can occur. The longer this is left untreated, the harder it would be for the person to get used to 'amplified' hearing in the future. In a person who can hear normally, he is able to distinguish useful sounds from background noise for such as the humming of an air conditioner. The brain is able to 'shut off' the background noise and focus on the useful sounds like speech. A person with a prolonged period of deafness prior to amplification may not be able to do that effectively and will complain of the hearing aids picking up a lot of unwanted sounds.

Successful Hearing Aid Use

Additionally, many people will experience some cognitive decline as they age. Take the example of two individuals, X and Y, who are of the same age and experience the same rate of hearing and cognitive decline. Person X starts using a hearing aid from the moment significant hearing loss is experienced. Person Y, however, ignores hearing loss and only decides to



start wearing a hearing aid twenty years later when hearing is almost gone. Assuming that Persons X and Y have the same hearing impairment with the same rate of hearing and cognitive decline, Person X is far likelier to be a successful hearing aid user.

Tinnitus Treatment

Many patients with hearing impairment also suffer from tinnitus. Hearing aid usage can significantly reduce the level of unwanted sound being heard.

CONCLUSION

Whilst age-related hearing impairment is still largely unpreventable, the technology and expertise currently available means that we should be able to keep the majority of patients in the hearing world. **GPBUZZ**



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