

Content available at: <https://www.ipinnovative.com/open-access-journals>

IP Journal of Otorhinolaryngology and Allied Science

Journal homepage: <https://www.joas.co.in/>

## Editorial

# Ear complaints in the Geriatric population: Is it pathological?

Manish Gupta <sup>1\*</sup>

<sup>1</sup>Dept. of Otorhinolaryngology and Head Neck Surgery, Dr. B R Ambedkar State Institute of Medical Sciences (AIMS), Mohali, Punjab, India



## ARTICLE INFO

### Article history:

Received 19-09-2024

Accepted 22-09-2024

Available online 25-10-2024

This is an Open Access (OA) journal, and articles are distributed under the terms of the [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License](#), which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: [reprint@ipinnovative.com](mailto:reprint@ipinnovative.com)

There are a variety of ear disorders, which have increased prevalence in the elderly. However, there is difficulty in distinguishing those as changes due to normal aging or some pathological illness.<sup>1</sup> The elderly may present to the outpatient department with complaints like decreased hearing, ringing sensation, loss of balance, and itching in the ear. The changes that are completely physiological with increasing age in the ear are loss of fat causing the collapse of the cartilaginous external canal, atrophy of external auditory canal skin, dry cerumen impaction, thickening of the tympanic membrane with stiffening, sclerosis in ossicular chain joints limiting mobility, decreased number of functioning hair cells in cochlea and degeneration of neurons in the auditory nerve. There also occurs a reduction in vestibular hair cells and function. The calcification of the cartilaginous eustachian tube and atrophy of tensor veli palatini leads to eustachian tube dysfunction with middle ear fluid effusion.<sup>2</sup> The itching occurs due to decreased apocrine gland function, resulting in dryness in the canal and irritation.

Only the detailed history, examination and battery of tests will help the clinician rule out the pathology. If the hearing loss is due to aging (presbycusis) it is mostly bilateral, slowly progressive and causes symmetrical bone conduction loss in high frequencies on pure tone audiometry. The ringing sensation in the aged will be

subjective, bilateral and associated with sensorineural hearing loss. The loss of balance due to aging will be peripheral and can easily be differentiated from a central lesion by head impulse test etc. Impaction of cerumen in the external canal is more common in males due to the large size of the tragus and the presence of coarse long hair in the canal, blocking the natural dislodgement.<sup>3</sup> The self-manipulation of an external canal to clear wax may lead to trauma and recurrent otitis externa, the risk of which is further increased by the presence of atrophic skin lining in the elderly.

With increasing life expectancy, the pressure on healthcare is tremendous and insight into these physiological changes will help in proper counselling and management of the elderly.

## 1. Conflict of Interest

None.


## References

1. Liu XZ, Yan D. Ageing and hearing loss. *J Pathol.* 2007;211(2):17200945.
2. Mohanta GS, Behera SK, Mallik KC, Swain S, Rautray S, Baliarsingh P. An overview of Otorhinolaryngeal problems in geriatrics. *Int J Gerontol.* 2018;12(2):139–43.
3. Torchinsky C, Davidson TM. Cerumen impaction. vol. 10016. Karen HC, David EE, editors. Taylor & Francis Group; 2006. p. 43–55.

\*Corresponding author.

E-mail address: [manishgupta1217@gmail.com](mailto:manishgupta1217@gmail.com) (M. Gupta).

### **Author's biography**

**Manish Gupta**, Professor and Head  <https://orcid.org/0000-0001-7784-308X>

**Cite this article:** Gupta M. Ear complaints in the Geriatric population: Is it pathological?. *IP J Otorhinolaryngol Allied Sci* 2024;7(3):49-50.