

Auditory Hallucination in Hearing Loss Patient: A Case Report

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Abstract

Hallucination occurs in different modalities (olfactory, tactile, gustatory, visual, and auditory). Auditory hallucination is the most common among them. It is a form of hallucination that involves perceiving sounds without external auditory stimulus. It is most common among people with psychotic disorder (schizophrenia). It is also seen in people with hearing impairment. Hallucinations may also be present in 10–15% of normal healthy individuals. This case study discuss about an adult female of 88 years who reported with a complaint of auditory hallucination for the past 2 years and focuses on the rehabilitation provided and highlights the use of amplification devices on tinnitus and similar disorders.

Keywords: Auditory hallucination, Hearing Impaired, Pure Tone Audiometry

Introduction

Auditory hallucination is defined as auditory complex perceptions that may include music, people talking, or other sounds which occur in the absence of external stimulation and which are perceived temporarily as real⁽²⁾.

Studies done on Auditory Hallucination reveal that it is also common in people with hearing loss and increase with the hearing loss severity. The prevalence of Auditory Hallucination in the general population is 13.2% .The management for auditory hallucination depends on the etiology of it, which varies widely. Different etiologies require different form of treatment approach. So it is crucial for the patient to receive an correct diagnosis. This case report describes auditory hallucinations in an 68-year-old female and the management for auditory hallucination in such patients.

Case Presentation

A 68 year old woman was referred to the Department of Audiology with the chief complaint of hearing speech sounds that leads to sleep disturbances and daily activities which affects her quality of life. A detailed case history was taken. The patient complained

of reduced hearing since 7 years and was using hearing aids for the past 5 years in both ears. But now she uses hearing aid in the left ear which benefits her better than the other ear. The patient hears the voice sounding “ram,ram,ram” frequently, added to a constant repetition of sentences/questions that the patient was engaged in. This was seen only in the Right ear. A Pure Tone Audiometry (PTA) was carried out. The PTA result reveals Right ear - Profound hearing loss and Left ear - Severe mixed hearing loss. Tinnitus matching and masking test was carried out. The Tones presented did not mask the voice that was heard inside the ears. Aided audiometry was done by testing bilaterally using Hansaton Flow UP hearing aids (clinical hearing aid) and also the patient’s own hearing aid. It reveals trial hearing aids were better the patient’s own hearing aid, Left ear had more benefit than the right ear. Benefit was better in bilateral fitting.

A portable cassette tape player with intra-aural headphones was used, allowing continuous play for two hours. The tape consists of pure music. Hallucinations are stopped temporarily during and after she listened to the cassette player.

Cassette tape recorder with pure music



Amplification devices

Discussion:

The prevalence of auditory hallucination ranges from 12% in the group with unilateral hearing impairment and 24% in the most severely impaired group. This first comprehensive overview the literature highlights is the fact that hallucinations occur in a substantial minority of healthy older adults in the general community⁽³⁾. The group with hallucinations had significantly increased percentage of tinnitus in comparison to the non-hallucination population. Hallucination is hearing voices that affect the day-to-day life activities. Epidemiology studies reveal that about 50% of individuals with hearing loss also have tinnitus. It can be permanent or temporary. There always lies confusion between hallucination and tinnitus. Tinnitus is a kind of continuous tone heard in the ear which is generated by the outer hair cells present in the inner ear which is heard as a ringing sound, buzzing sound etc... Hallucination is repeated hearing of any experienced words, phrases or even sentences such as 'hello', 'tell me, what is your name? Etc... Management for hallucination could be Tinnitus Retraining Therapy where the gain in amplification devices is increased such as hearing aids. Cassette tape recorder can be given with pure music where the patient should listen to it for a certain period of time which can lead to reduction in hallucination. We have tried giving various therapies regarding auditory hallucination but patient did not follow-up regularly.

Competing Interests: No competing interests between the authors.

Ethical Clearance: MERF-ISH

Self-funded

Acknowledgement: We thank Jerusha Biju for the motivation and carry out the study.

Ethical Clearance – Not required since it is a case report

Source of Funding – Nil

Conflict of Interest – nil

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ACCURACY OF GOODSALL'S RULE IN PERIANAL FISTULAS – CORRELATION WITH MR FISTULOGRAM

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