Musical Hallucinations: Case Report and Review of the Literature

Musical hallucinations (MH) are a rare subtype of complex auditory hallucinations, linked to a disorder of the processing of complex sounds. The abnormal perception is formed by music, instrumental sounds or songs.[1] Typically there is some insight for the nature of the hallucination.[2]

Case report

The patient was a 75-year-old woman with medical history of mild hypertension and hypercholesterolemia, medicated with sinvastatine, carvedilol, omeprazole, triflusal and betahistine dihydrochloride. There was an otorhinolaryngology consultation in 2008 for hypoacusis, tinitus and dizziness without rotatory vertigo, with years of evolution.

Oriented for psychiatric observation in 2010, for suspected anxious symptomatology. Complained of hearing Portuguese popular music bilaterally, since the previous month. Could identify the lyrics and sing the songs heard. Allocated the sounds out of her head, although having doubts about their reality. Absence of other auditory or visual hallucinations. No cognitive impairment.

Audiogram showed sensorineural hearing loss, bilateral, moderate and asymmetrical (medium loss of 26,5 dB at the right and 40dB at the left). Tympanogram was type A1. Electrocochleography revealed endolymphatic hidropsis on the left. MRI of the internal auditory canals was normal. Anti-68 Kd antibody were positive but there was no response to glucocorticoid therapy. Otoscopic examination was normal. Rinne test was positive bilaterally. Weber test without lateralization. Psycho active were proposed but refused.

Discussion

Chronic auditory impairment seems to be the main aetiological factor of MH, but other causes like psychiatric disorders (depression, schizophrenia, obsessive-compulsive disorder), social isolation, epilepsy, focal brain lesions (vascular, infectious, tumors, etc.) and the use of some drugs and substances have also been described as important factors in the generation and persistence of MH.[3, 4] The relative importance of each factor remains unclear.[4]

It affects mainly female gender and older people.[2] Patients whose hallucinations are caused by focal brain lesion are usually significantly younger than those suffering from hypoacusis.[2]

The sound heard is frequently familiar to the patient and the perception bilateral.[2] Reaction of patients to the sounds and the existence of insight is variable. When they are totally aware of nonreal nature of the perception it should be considered an hallucinosis.

Some authors defend that MH may be an auditory form of the Charles Bonnet Syndrome (sensory deprivation leads to "release phenomenon").[1, 2, 5]

Treatment of MH is not completely agreed-upon. When an underlying cause is identified, it should be treated. In other cases, reassurance that hallucinations are due to hearing loss might be enough.[3] Medication management can also be considered. Depending on the cause, antipsychotics, antidepressants, benzodiazepines, and anticonvulsive drugs might be successful.[3, 5] A single case of MH where donepezil was effective has been reported.[5] In some cases, MH disappear after the underlying hearing defect is cured.[2]

Conclusion

The case presented supports the findings in literature. However, there are still many doubts about classification and pathophysiology of musical hallucinations, so more studies are needed.

Altough MH are a rare phenomenon, psychiatrists should try to evaluate its existence more often, as patients are frequently too embarrassed to refer to them freely.

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