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THE WOMEN WHO HEARD FOLK PORTUGUESE MUSIC IN THE RIGHT EAR: A CASE OF UNILATERAL MUSICAL HALLUCINOSIS

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Introduction: Although probably underreported, musical hallucinosis is very rare and usually bilateral. It refers to auditory complex hallucinations, for which the patient has full insight, and includes melodies, tunes, rhythms and timbres.

Clinical case: A 71-year-old woman was seen for a history of hearing music in the right ear. She had mild hypertension and auricular fibrillation, being chronically medicated with aspirin, bisoprolol and hydrochlorothiazide. Three months previously she started hearing some popular folk Portuguese songs in the right ear. She could identify the lyrics and sing the songs she heard. Weeks later fado and classical music were added to the repertoire, and later on she started hearing less well-formed sounds like "dlam... dlam" or "uhh... uhh". There were no other auditory or visual hallucinations. She was seen by an otorhinolaryngologist, and made an audiogram showing bilateral, right-predominant, pre-cochlear deafness with normal evoked brainstem auditory potentials. An MRI showed small deep subcortical lacunar lesions. EEG was normal. PET scan showed left temporal hypometabolism. On benzodiazepines she had discrete improvement.

Conclusion: Musical hallucinosis has been found mainly in deaf patients, and a similar mechanism to that of Charles-Bonnet syndrome has been proposed. Sensory deprivation of primary auditory cortex would "release" the secondary auditory cortex, to produce complex auditory hallucinations with full insight. In our patient we were able to demonstrate the integrity of the brainstem pathway, supporting a direct link between diminished right ear sound transmission and left temporal lobe diminished activation as ascertained by the PET scan.