

# Auditory musical hallucinations: When a patient complains, 'I hear a symphony!'

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**N**onpsychotic auditory musical hallucinations—hearing singing voices, musical tones, song lyrics, or instrumental music—occur in >20% of outpatients who have a diagnosis of an anxiety, affective, or schizophrenic disorder, with the highest prevalence (41%) in patients with obsessive-compulsive disorder (OCD).<sup>1</sup> OCD comorbidity with other psychiatric disorders increases the frequency of auditory musical hallucinations. Auditory musical hallucinations mainly affect older (mean age, 61.5 years) females who have tinnitus and severe, high-frequency, sensorineural hearing loss.<sup>1</sup> Auditory musical hallucinations occur in psychiatric diseases, ictal states of complex partial seizures, abnormalities of the auditory cortex, thalamic infarcts, subarachnoid hemorrhage, tumors of the brain stem, intoxication, and progressive deafness.<sup>1,2</sup>

## What patients report hearing

Some patients identify 1 musical instrument that dominates others. The musical tones are reported to have a vibrating quality, similar to the sound produced by blowing air through a paper-covered comb. Some patients hear singing voices, predominantly deep in tone, although the words usually are not clear.

Patients with auditory musical hallucinations associated with deafness may not have dementia or psychosis. Both sensorineural and conductive involvement indicates a mixed type of deafness. Pure tone audiograms show a bilateral loss of >30 decibels, affecting the higher and lower ranges.<sup>2,3</sup> Cerebral atrophy and microangiopathic changes are common co-occurring findings on MRI.

## Treatment options

Reassure your patient that the experience is not necessarily associated with a psychotic disorder. Perform a complete history, physical, and neurologic examination. Rule out unilateral symptoms, tinnitus, and hearing loss. If she (he) is experiencing unilateral symptoms, pulsatile tinnitus, unilateral hearing loss, and a constant feeling of unsteadiness, further evaluation is necessary to exclude underlying pathology. Treating concurrent insomnia, depression, or anxiety might resolve the hallucinations.<sup>4</sup>

Nonpharmacotherapeutic treatments include hearing amplification, and masking tinnitus with a hearing aid emitting low-volume music or sounds of nature (ie, rainfall).<sup>4</sup> Two cases have reported successful carbamazepine therapy; 2 other cases demonstrated success with clomipramine.<sup>5</sup> Frequently, symptoms spontaneously remit.

Consider electroconvulsive therapy (ECT) for patients with musical hallucinations that are refractory to medical treatment and cause distress; 3 patients with concurrent major depressive disorder showed improvement after ECT.<sup>6</sup> Antipsychotics are *not* recommended as first-line treatment.

## References

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## Disclosure

Dr. Jain reports no financial relationship with any company whose products are mentioned in this article or with manufacturers of competing products.