# Never gonna give you up: Intrusive musical imagery as compulsions

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ntrusive musical imagery (IMI) is characterized by recalling pieces of music,1 usually repetitions of 15 to 30 seconds,2 without pathology of the ear or nervous system.1 Also known as earworm ohrwurm in German—or involuntary musical imagery, bits of music can become a constant cause of distress.1

IMI is prevalent in the general population; in an internet survey >85% of respondents reported experiencing IMI at least weekly.<sup>2</sup> IMI can be generated by:

- hearing music
- reading song lyrics
- being in contact with an environment or people who are linked to specific song, such as department stores that play holiday music.2,3

IMI also is associated with stressful situations or neurological insult.1

Any song or segment of music can be the basis of IMI. The content of IMI change over time (ie, a new song can become a source of IMI).3 The frequency of experiencing IMI is correlated to how much music a person is exposed to and the importance a person places on music.2 Most episodes are intermittent; however, continuous musical episodes are known to occur.3

Episodes of IMI with obsessivecompulsive features can be classified as musical obsessions (MO).1 MO may be part of obsessive-compulsive symptoms, including washing, checking, aggression, sexual obsessions, and religious obsessions or other obsessions.1

## Diagnosing musical obsessions

No current measures are adequate to diagnose MO. The Yale-Brown Obsessive Compulsive Scale does not distinguish MO from other intrusive auditory imagery.1

It is important to differentiate MO from:

- Musical preoccupations or recollections in which an individual repeatedly listens or recalls a particular song or part of a song, but does not have the urge to listen or recall music in an obsessivecompulsive pattern.1 These individuals do not display fear and avoidant behaviors that could be seen in patients with MO.1
- Musical hallucinations lack input stimulus and the patient believes the music comes from an outside source and interprets it as reality. Misdiagnosing MO as a psychotic symptom is common and can result in improper treatment.1

### Management

**Pharmacotherapy.** MO responds to the same medications used to treat obsessivecompulsive disorder, such as selective serotonin reuptake inhibitors and clomipramine.1

Cognitive-behavioral interventions could help patients address dysfunctional beliefs, without trying to suppress them.1

**Distraction.** Encourage patients to sing a different song that does not have obsessive quality<sup>1</sup> or engage in a task that uses working memory.3

Exposure and response prevention ther**apy.** Some case reports have reported efficacy in treating MO.1

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#### Disclosures

The authors report no financial relationships to any company whose products are mentioned in this article or with manufacturers of competing products.

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