

Recognizing autophonia in patients with anorexia nervosa

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Anorexia nervosa can affect a number of systems of the body, including the otolaryngologic presentation of *autophonia*^{1,2}—a rare hyperperception of an abnormally intense hearing of one’s own voice and respiratory sounds.² The most common cause of autophonia in patients with anorexia is a patulous (patent) eustachian tube, which can be caused by extreme weight loss.^{2,3}

Significant reduction in the quantity of fat tissue at the location of the eustachian tube can cause patency.³ This creates an abnormal connection between the nasopharynx and tympanic membrane, in which sounds are transmitted directly from the oral cavity to the middle ear, causing autophonia, tinnitus, or sound distortion.⁴

What are the symptoms?

Patients often report hearing their own voice more loudly in the affected ear. This can be distressing, and they might become preoccupied with the sound of their voice—thus affecting quality of life.^{2,4}

The intensity of symptoms varies: from a mild sensation of a clogged ear to extremely bothersome discomfort much like a middle-ear infection.^{2,4} Autophonia, however, cannot be relieved by conventional therapies for those conditions.^{2,3}

A patulous eustachian tube is difficult to detect and can be misdiagnosed as another condition. Pregnancy, stress, fatigue, radia-

tion therapy, hormonal therapy, and dramatic weight loss also can cause a patulous eustachian tube.²

How is the diagnosis made?

The diagnosis of autophonia is clinical and begins with a detailed history. Symptoms often appear within the time frame of rapid weight loss and without evidence of infection or other illness.^{2,3} The clinical examination is otherwise unremarkable.^{2,4}

Is there treatment?

To improve the patient’s comfort and quality of life, intervention is required, best provided by an integrated team of medical specialists. Weight gain, of course, is the treatment goal in anorexia, but this is a complex process often marked by relapse; a detailed discussion of treatment strategies is beyond the scope of this “Pearl.” Symptoms usually diminish as fatty tissue is restored upon successful treatment of anorexia, which closes the abnormal eustachian tube opening.^{2,3}

References

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