
Tinnitus: Clinical Overview

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Tinnitus is a symptom and not a disease. It is important for the physician to understand this and to impart this to the patient. Victor Goodhill in 1950¹ said "Any management which is based upon a single panacea for the treatment of a symptom and not a disease will result in failure." The important steps in the management of the patient with tinnitus are the evaluation, the examination, and the explanation. About 95% of the patients seen in my office who have tinnitus are not particularly bothered by it. On the other hand, five percent of our patients are driven to distraction by their tinnitus. These patients require a great deal of our time and effort. They are very concerned about the tinnitus and are focusing on it. Many have been to multiple physicians searching for a cure.

The history is an important aspect of the evaluation. The patient is asked when the tinnitus was first noticed and were there any precipitating factors such as noise exposure, infection, barotrauma, stress, trauma, or emotional upsets. The patient is also asked to describe the tinnitus. Is it constant or intermittent, pulsatile or steady state? They are asked to briefly describe the sound with regard to frequency and other characteristics. An important aspect of the history is asking the patient to rate the severity of the tinnitus and how it interferes with concentration during the day and sleep at night. If the tinnitus interferes with sleep, do they have trouble going to sleep or are they awakening in the middle of the night and having problems going back to sleep. The latter is more common with tinnitus patients and can be a sign of depression which is often associated with severe tinnitus.

The examination includes inspection of the ears, nose, throat, and neck. Palpation of the ears, temporal mandibular joint, jaw, and neck are important to rule out tenderness or masses. If the patient describes pulsatile tinnitus, the Toynbee tube is placed in the patient's ear with the opposite end in the examiner's ear. In cases of a venous hum or carotid bruit, the examiner may be able to hear the sound. If the sound goes away with light pressure over the jugular vein, this indicates a venous etiology. When the objective tinnitus is described as a popping or clicking sound, the palate is inspected with the mouth barely open to observe for palatal myoclonus.

Audiometry is important in all cases of tinnitus to determine whether there is some degree of hearing loss. We routinely perform air conduction, bone conduction, and speech audiometry. Further tests, such as MRI, CT scan or auditory brainstem evoked response are ordered in selected cases to better delineate the underlying cause of the tinnitus.

The most important step in the treatment of the patient with tinnitus is comprehensive explanation of the problem and reassurance that the symptom does not represent serious pathology (if ruled out after the evaluation). Many patients are concerned that the tinnitus is a first indication that they are going to become deaf. In the vast majority of cases, they will not become deaf and they can be reassured of this fact.

In my experience, the evaluation and subsequent explanation with reassurance is adequate treatment. If the patient requires additional treatment, there is much which can be offered. These treatments include hearing aids (for those with any degree of hearing loss), medications, surgery if indicated, biofeedback training, and in some cases tinnitus maskers or instruments. The medication which I find most helpful is low doses of the antidepressant, amitriptyline. Dobie² found similar results using nortriptyline. These have a sedative effect and are given at night in patients whose tinnitus is interfering with their sleep. It is not given as a sleeping pill, but helps both sleep and the severity of the tinnitus.

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In summary, all patients with tinnitus need an evaluation, including history, physical examination, audiometric tests, and other special tests as necessary. Following the evaluation they are given a complete explanation with appropriate reassurance. Other treatments are available for the more severely disturbed patients.

REFERENCES

1. Goodhill V: The management of tinnitus. *Laryngoscope* 1950;60:442-450.
2. Dobie RA, et al: Antidepressant treatment of tinnitus patients: Report of a randomized clinical trial and clinical prediction of benefit. *Am J Otol* 1993;14:18-23.