

Chapter 54

Psychologic/Psychiatric Assessment

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Keypoints

1. Psychiatric comorbidity occurs frequently in patients with tinnitus, especially in moderate to severe forms.
2. Depression and anxiety are the most frequently found comorbid conditions.
3. Tinnitus severity and impairment in quality of life can be linked to psychiatric symptoms.
4. For every professional who treats tinnitus patients, it is important to recognize signs of potential psychiatric comorbidity.
5. Potential warning signs are high scores in tinnitus questionnaires. Screening instruments that are easy to use may help to identify comorbid psychiatric disorders such as depression or anxiety.
6. Further diagnosis and treatment should be done by specialists such as psychiatrists or psychologists.
7. Patients who appear suicidal should be promptly referred to a psychiatrist.

Keywords Psychiatric comorbidity • Quality of life • Suicidality • Diagnostic screening • Depression • Anxiety disorder

Introduction

Chronic tinnitus represents a frequent condition experienced by about 10–20% of the general population (see Chaps. 5 and 6). One to two percent of individu-

als with tinnitus have reduced quality of life [1]. Psychiatric comorbidity occurs especially in individuals with severe tinnitus [2]. Major depression, anxiety, and somatoform disorders are frequently reported as comorbid conditions to tinnitus [3–7]. However, psychosis and personality disorders may also be associated with tinnitus [8]. Major depressive disorder and anxiety disorder occur most frequently in individuals with chronic disabling tinnitus; a prevalence rate of 60% or more has been reported [5, 9, 10]. From a clinical point of view, it is important to note that chronic disability and suffering in tinnitus patients is frequently linked to concomitant depressive symptoms [11] and improvement of depression is paralleled by an improvement of functional disability [12]. Several studies have shown that tinnitus severity and tinnitus-related distress is correlated with depression [4, 6, 7]. Psychiatric comorbidity, especially depression and anxiety disorders, is a common phenomenon in tinnitus patients and adds considerably to the suffering and impairment in quality of life. It is, therefore, important that clinicians who treat tinnitus patients are observant to any comorbid psychiatric symptoms, especially depression and anxiety, and provide treatment of tinnitus that takes any affective symptoms into account. Effective treatment regimes for tinnitus aimed at the cause of the patient's symptoms are still missing, and treatment of comorbid psychiatric disorders can substantially reduce the burden of the disease and improve the quality of life of individuals with tinnitus. The difference between a severely suffering tinnitus patient and a well-compensated individual is sometimes adequate treatment of a psychiatric comorbidity. Thus, it is important that comorbid psychiatric disorders are diagnosed and efficiently treated.

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Management of Psychiatric Comorbidity

In this chapter, we will focus on the detection of comorbid psychiatric disorders; for the exact clinical description and the clinical management, we refer to Chaps. 62–64.

Detection of Psychiatric Comorbidity in a Nonpsychiatric Setting

The majority of tinnitus patients do not show any signs of psychiatric comorbidity, especially those who have mild forms of tinnitus, which are well managed. However, if tinnitus patients suffer from depression or anxiety, it is important to recognize and treat these disorders.

In clinical practice, patients primarily seek medical help for their tinnitus, not of their depression or anxiety. Depending on the health care system, patients with tinnitus seek help from a general practitioner, an otorhinolaryngologist, or an audiologist, but rarely from a psychiatrist. Patients seek help because of their tinnitus; additional symptoms, which may be present are only mentioned in passing. Most patients are reluctant to talk about affective symptoms such as mood disturbances or anxiety in a nonpsychiatric setting and that increases the likelihood that these symptoms are overlooked, as has been shown in large survey studies. In practitioner offices, correct diagnosis of a major depression represents a substantial problem; patients with mild to moderate depression are particularly at risk of being overlooked [13]. Clinicians who are not specialized in psychiatry yet caring for tinnitus patients should ask the questions: (a) What are the signs that a psychiatric comorbidity is likely when treating a patient with tinnitus? (b) What are reasonable screening instruments for psychiatric disorders? (c) What should be done if comorbid psychiatric disorders are suspected? (d) How patients with risk of suicide should be managed?

Warning Signs of Potential Psychiatric Comorbidity

Most individuals with tinnitus do not suffer substantially and have little or no impairment of their quality

of life. They are also typically able to work and are not restricted by their tinnitus in their everyday life. Some patients with tinnitus seek medical help because they are concerned their tinnitus may be a sign of a dangerous disease such as a brain tumor. Information about the pathophysiology of tinnitus, counseling (see Chap. 70), and a suitable test to rule out a vestibular schwannoma is sufficient, and any psychiatric comorbidity appears to be unlikely in these cases. Severe and disabling tinnitus, however, is often accompanied by symptoms such as depressed mood and anxiety. Tinnitus severity can be assessed either by scales, which are easy to perform [14], or by a validated questionnaire (see Chap. 42). Patients with grade III and IV of Biesinger (Table 54.1) or high scores in tinnitus questionnaires (i.e., a total score of more than 47 in the tinnitus questionnaire of Goebel and Hiller [15] or more than 37 in the Tinnitus Handicap Inventory) should be examined with focus on signs of depression or anxiety [16].

What are Reasonable Screening Instruments for Psychiatric Symptoms?

The most frequent symptoms of depression are depressed mood, loss of interest, and sleep disorders. However, in a nonpsychiatric setting, circumstances such as time limitations often do not allow an extensive interview to specifically explore all potential symptoms of depression or anxiety. Also, specific training and experience is required for assessing affective signs and should be done by a psychiatrist or psychologist. However, everybody who treats tinnitus patients should be familiar with screening instruments for frequent psychiatric disorders, which are based on a few key questions and are easy to perform.

Table 54.1 Tinnitus grading according to Biesinger et al. [14]

Grade I	Tinnitus is well compensated. No psychological strain
Grade II	Tinnitus appears only in silence and is disturbing during periods of stress and pressure
Grade III	Tinnitus interferes continuously in the private and professional area. Emotional, cognitive and physical disturbances occur
Grade IV	Tinnitus leads to the complete decompensation in the private area; disability

Table 54.2 Screening questions for different forms of anxiety disorders according to the MINI International Neuropsychiatric Interview (M.I.N.I.; Sheehan et al. [18])

Disorder	Screening question
Panic disorder	Have you, on more than one occasion, had spells or attacks when you suddenly felt anxious, frightened, uncomfortable or uneasy, even in situations where most people would not feel that way? Did the spells surge to a peak, within 10 min of starting?
Agoraphobia	Do you feel anxious or uneasy in places or situations where you might have a panic attack or panic-like symptoms, or where help might not be available or escape might be difficult: like being in a crowd, standing in a line (queue), when you are away from home or alone at home, or when crossing a bridge, traveling in a bus, train or car?
Social phobia	In the past month were you fearful or embarrassed being watched, being the focus of attention, or fearful of being humiliated? This includes things like speaking in public, eating in public or with others, writing while someone watches, or being in social situations
Specific phobia	In the past month have you been bothered by recurrent thoughts, impulses, or images that were unwanted, distasteful, inappropriate, intrusive, or distressing? (e.g., the idea that you were dirty, contaminated or had germs, or fear of contaminating others, or fear of harming someone even though you didn't want to, or fearing you would act on some impulse, or fear or superstitions that you would be responsible for things going wrong, or obsessions with sexual thoughts, images or impulses, or hoarding, collecting, or religious obsessions

For depression, the following two questions have been proposed:

1. During the past month have you often been bothered by feeling down, depressed, or hopeless?
2. During the past month have you often been bothered by little interest or pleasure in doing things [17]?

If the patient answers with “yes” to one of the both questions, depression is likely and referral to a psychiatrist or psychologist should be made. Similar screening questions for anxiety disorders are used in standardized, semi-structured diagnostic interviews like the MINI International Neuropsychiatric Interview (M.I.N.I.; [18]; see Table 54.2) and can be used for screening for anxiety disorders.

What to Do if a Patient with Tinnitus is Suspected to also Have Depression and Anxiety

A patient who is suspected of suffering from depressive symptoms, anxiety, or any other psychiatric disorder should be referred to a psychiatrist for further diagnostic and therapeutic management. In clinical practice, this may sometimes be difficult, since patients may interpret the referral to a psychiatrist as a sign they are not taken seriously or are considered to be “crazy.” This can be easily avoided by careful explanation that tinnitus can cause a high amount of distress and that the

treatment concept will include approaches for reducing tinnitus (e.g., hearing aids, noise generators). However, the patient should understand that the amount of suffering induced by tinnitus should be treated by specialists (e.g., by some form of cognitive behavioral therapy or by pharmacologic treatment). Also, a close collaboration with psychiatrists and psychologists, which are interested in tinnitus and have experience with diagnosis and management of tinnitus patients, will make it easier for otologists or audiologists to refer their patients for psychiatric diagnosis and therapy.

How to Manage a Suicidal Patient?

The suicidal patient is a rare but clinically important issue in the management of tinnitus patients. Signs of suicidal thoughts must always be taken serious. Individuals with chronic, severe tinnitus have an increased risk of suicide, especially when comorbid depressive disorders are present [19–21]. The important questions in this context are first, how to find out if a patient is at risk of suicide and second, how to find out whether asking about the patient’s suicidal thoughts may prompt the patient to commit suicide. The most prominent risk factor for suicide and suicidal ideas is a depressive disorder [22, 23]. Hence, a severe depressed mood, which cannot be modulated and is accompanied by social withdrawal, is an important warning sign of high risk of suicide. If one suspects that a patient is at

Table 54.3 Screening questions and assessment of suicidality according to the MINI International Neuropsychiatric Interview (M.I.N.I.; Sheehan et al. [18])

Question	Score if “Yes”
Think you would be better off dead or wish you were dead?	1
Want to harm yourself?	2
Think about suicide?	6
Have a suicide plan?	10
Attempt suicide	10
<i>In your lifetime</i> : Did you ever make a suicide attempt	4

Suicide risk current: 1–5 points=low; 6–9 points=moderate; 10 or more points=high

risk of suicide, the seriousness of the patient’s suicidal thoughts should be evaluated by directly asking the patient about suicidal ideations or even asking if the patient has concrete plans of how to commit suicide. Discussing the issue of suicide with a patient should not increase the risk of them actually committing suicide. On the contrary, most patients feel relieved to have the opportunity to talk about their thoughts. Although there is no general rule of how to manage patients who are suicidal, one possible approach to this sensitive area is to first talk about passive suicidal ideas. This may be introduced by asking, for example, “In the past month did you think that you would be better off dead or wish you were dead?” Further screening questions to estimate the risk that the patient will actually commit suicide are given in Table 54.3. If it becomes clear from the clinical interview that the patient is suffering from suicidal ideas, the patient should be immediately referred to a psychiatrist. A patient with serious suicidal and concrete plans of how to commit suicide is an emergency, in which many physicians would recommend hospitalization for treatment.

References

1. Axelsson, A, Ringdahl, A Tinnitus – a study of its prevalence and characteristics *Br J Audiol*, 1989;23(1):53–62
2. Hiller, W, Goebel, G A psychometric study of complaints in chronic tinnitus *J Psychosom Res*, 1992;36(4):337–48
3. Belli, S, Belli, H, Bahcebasi, T, Ozcetin, A, Alpay, E, Ertem, U Assessment of psychopathological aspects and psychiatric comorbidities in patients affected by tinnitus *Eur Arch Otorhinolaryngol*, 2008;265(3):279–85
4. Unterrainer, J, Greimel, KV, Leibetseder, M, Koller, T Experiencing tinnitus: which factors are important for perceived severity of the symptom? *Int Tinnitus J*, 2003;9(2):130–3
5. Zoger, S, Svedlund, J, Holgers, KM Psychiatric disorders in tinnitus patients without severe hearing impairment: 24 month follow-up of patients at an audiological clinic *Audiology*, 2001;40(3):133–40
6. Zoger, S, Svedlund, J, Holgers, KM Relationship between tinnitus severity and psychiatric disorders *Psychosomatics*, 2006;47(4):282–8
7. Konzag, TA, Rubler, D, Bandemer-Greulich, U, Frommer, J, Fikentscher, E [Psychological comorbidity in subacute and chronic tinnitus outpatients] *Z Psychosom Med Psychother*, 2005;51(3):247–60
8. Marciano, E, Carrabba, L, Giannini, P, Sementina, C, Verde, P, Bruno, C, et al. Psychiatric comorbidity in a population of outpatients affected by tinnitus *Int J Audiol*, 2003;42(1):4–9
9. Harrop-Griffiths, J, Katon, W, Dobie, R, Sakai, C, Russo, J Chronic tinnitus: association with psychiatric diagnoses *J Psychosom Res*, 1987;31(5):613–21
10. Sullivan, MD, Katon, W, Dobie, R, Sakai, C, Russo, J, Harrop-Griffiths, J Disabling tinnitus Association with affective disorder *Gen Hosp Psychiatry*, 1988;10(4):285–91
11. Dobie, RA Depression and tinnitus *Otolaryngol Clin North Am*, 2003;36(2):383–8
12. Katon, W, Sullivan, M, Russo, J, Dobie, R, Sakai, C Depressive symptoms and measures of disability: a prospective study *J Affect Disord*, 1993;27(4):245–54
13. Wittchen, HU, Pittrow, D Prevalence, recognition and management of depression in primary care in Germany: the Depression 2000 study *Hum Psychopharmacol*, 2002;17 Suppl 1:S1–11
14. Biesinger, E, Heiden, C, Greimel, V, Lendle, T, Hoing, R, Albegger, K [Strategies in ambulatory treatment of tinnitus] *HNO*, 1998;46(2):157–69
15. Goebel, G, Hiller, W [The tinnitus questionnaire A standard instrument for grading the degree of tinnitus Results of a multicenter study with the tinnitus questionnaire] *HNO*, 1994;42(3):166–72
16. Crocetti, A, Forti, S, Ambrosetti, U, Bo, LD Questionnaires to evaluate anxiety and depressive levels in tinnitus patients *Otolaryngol Head Neck Surg*, 2009;140(3):403–5
17. Whooley, MA, Simon, GE Managing depression in medical outpatients *N Engl J Med*, 2000;343(26):1942–50
18. Sheehan, DV, Lecrubier, Y, Sheehan, KH, Amorim, P, Janavs, J, Weiller, E, et al. The Mini-International Neuropsychiatric Interview (MINI): the development and validation of a structured diagnostic psychiatric interview for DSM-IV and ICD-10 *J Clin Psychiatry*, 1998;59 Suppl 20:22–33
19. Jacobson, GP, McCaslin, DL A search for evidence of a direct relationship between tinnitus and suicide *J Am Acad Audiol*, 2001;12(10):493–6
20. Lewis, JE, Stephens, SD, McKenna, L Tinnitus and suicide *Clin Otolaryngol Allied Sci*, 1994;19(1):50–4
21. Turner, O, Windfuhr, K, Kapur, N Suicide in deaf populations: a literature review *Ann Gen Psychiatry*, 2007;6:26
22. Hawton, K, van Heeringen, K Suicide *Lancet*, 2009;373(9672):1372–81
23. Lejoyeux, M, Leon, E, Rouillon, F [Prevalence and risk factors of suicide and attempted suicide] *Encephale*, 1994;20(5):495–503