

Rapid recovery of tinnitus in a patient with anxiety and insomnia related to COVID-19

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Abstract

The global pandemic of new Coronavirus disease (COVID-19) is a grave threat to both physical and mental health. We must be mindful of the consequences of psychological effects that caused by COVID-19 in healthy population and people with psychiatric problems (Asmundson et al., 2020). In many countries, health anxiety was reported, which is characterized by catastrophic interpretations of bodily sensations and physical changes, which generates dysfunctional beliefs about health and illness, may lead to different clinical symptoms and disorders. Recently, the outpatient department of Xiangya, Changsha, received a couple of patients with tinnitus when onset is related to stress or anxiety due to COVID-19 pandemic. We report a case of tinnitus in a patient with anxiety and insomnia related to COVID-19 and recover rapidly after psychiatric intervention and therapy.

Dear Editor,

The global pandemic of new Coronavirus disease (COVID-19) is a grave threat to both physical and mental health. We must be mindful of the consequences of psychological effects that caused by COVID-19 in healthy population and people with psychiatric problems (Asmundson et al., 2020). In many countries, health anxiety was reported, which is characterized by catastrophic interpretations of bodily sensations and physical changes, which generates dysfunctional beliefs about health and illness, may lead to different clinical symptoms and disorders. Recently, the outpatient department of Xiangya, Changsha, received a couple of patients with tinnitus when onset is related to stress or anxiety due to COVID-19 pandemic. We report a case of tinnitus in a patient with anxiety and insomnia related to COVID-19 and recover rapidly after psychiatric intervention and therapy.

The patient, female, 64 year-old, without any known previous somatic or psychiatric diseases went to a local hospital for body check due to tinnitus in the first month. The physical test showed no significant abnormalities. The test of acoustic duct reveals no abnormality. The patient denied vertigo, otorrhea or otalgia and had no history of ear infections, otologic surgery or trauma, occupational or recreational noise exposure. The acoustic impedance test and electro-audiogram were normal. No abnormality was found on brain MRI. After a detailed review of past history, she recalled that tinnitus happened right after her travel during COVID-19 pandemic in Wuhan in February. She was extremely upset after knowing one of the neighbors living on the same apartment next-door contacted COVID-19 and could not fall asleep for the whole night, then she starts to feel tinnitus lasting constantly for several seconds or minutes like current sound, which makes her hard to focus during the day or fall asleep at night. She orally took prednisone and as a routine treatment of tinnitus for about a week and Apozolam or Zopiclone for a month and there was no improvement for symptoms. Test of anxiety inventory showed that the Zung Self-Rating Anxiety Scale (SAS) score was 56 while the Hamilton Anxiety Rating Scale (HAM-A) score was 22, both indicate mild to moderate anxiety severity. Test of insomnia inventory showed that Athens Insomnia Scale (AIS) score was 6 while the Insomnia Severity Index (ISI) score is 14, indicate sub-threshold or mild insomnia. The physicians considered that she was no organic disease, and gave her several psychiatric interventions and psychological

treatments such as suggestive therapy, psychological nursing, psychoeducation (typically called counseling in the context of tinnitus treatment in Xiangya) and tinnitus retraining therapy. After the outpatient visit and, telephone follow-up was conducted in the third week after the out-patient visit and the patient declared disappearance of tinnitus and improvement of sleep within the second week after the out-patient visit.

Previous studies revealed that tinnitus is associated with mental state (Karaaslan et al., 2020). Recently, psychosis is also reported due to COVID-19 (Huarcaya-Victoria et al., 2020). In these studies, a number of clinical disorders belong COVID-19 pandemic related psychosomatic disease due to its close relations with psychosocial factors. Generally, this case shows the following: psychosocial factors such as anxiety and insomnia related to COVID-19 can result in obvious and negative influence on tinnitus. Great attention must be paid to the whole process of diagnosis and course. Also, accumulating data and cases have begun to emerge suggesting psychiatric intervention and psychological treatments may serve as potential therapeutic modalities for treating tinnitus with psychiatric problems related to COVID-19 and its related complications.

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