An extreme physical reaction in misophonia: stop smacking your mouth!

Serhat Tunç a and Hamit Serdar Başbuğ b

aDepartment of Psychiatry, Faculty of Medicine, Kafkas University, Kars, Turkey; bDepartment of Cardiovascular Surgery, Faculty of Medicine, Kafkas University, Kars, Turkey

ABSTRACT
Misophonia is described as a condition in which negative emotions and negative physical reactions are triggered by particular sounds. The patients with misophonia demonstrate hatred and extreme intolerance against specific non-dominant and repetitive sounds. It is a severe psychiatric disorder rather than a mere obsession. Its symptoms may vary from mild to severe. Although some patients can dissemble and passed out, some may lose their control. In severe cases, involuntary physical violence may be observed. Although it is usually perceived as a spoil by the society, it may cause the patient’s life become unbearable. In this paper, the physical violence of a misophonia patient directed to a dinner guest who smacks his mouth during eating was reported. Unfortunately, the patient could not achieve to exclude himself from the source of disturbance before exhibiting the adverse physical reaction. Therefore, this case becomes important in demonstrating the extreme involuntarily reactive nature of misophonia.

ARTICLE HISTORY
Received 30 April 2017
Accepted 9 July 2017

KEYWORDS
Misophonia; sound; hatred; physical reaction

Introduction
Misophonia is described by extreme feelings or aggressive behaviour in response to specific sounds [1]. These negative emotions include anxiety, distress, disgust, irritability, and occasionally anger, rage, hatred, and behavioural reactions. The patients with misophonia demonstrate subsequent aggressive urge to scream and insult or may present with violent physical reactions to interfere or terminate the disturbing sound [2]. Although misophonia is considered as a potential pathophysiological state among the population, it also occurs with a comorbid psychiatric state. It may also emerge as a significant expression of an underlying mental disorder [3]. It also leads to functional impairment in almost all daily life activities. The incidence, prevalence, and the aetiology of misophonia are currently unknown [4].

In this paper, an unfortunate aggressive outburst in a misophonia patient directed to the dinner guest who smacks his mouth during eating was reported. The patient was unable to exclude himself from the source of disturbance before exhibiting this exaggerated physical reaction. This case is significant in terms of introducing the uncontrollable responsive nature of misophonia, which is a rarely encountered disorder in the available literature.

Case presentation
A 22-year-old male university student presented to the psychiatry outpatient clinic with his parents. According to the history taken from his parents and himself, he had irritating and disturbing emotions against some sounds and voices. He described these feelings as disgust, hatred, or extreme intolerance. He especially notified the disturbance of mouth smacking of others during the meals. He also defined these sounds trigger his uncontrollable mental and physical reactions. Upon investigation for the willingness of his reactive attitudes, he described that these behavioural responses were unplanned and involuntary. The symptoms existed for the last three years with an acute exacerbation since two months. However, the reason for the urgency of parents to refer the patient to a psychiatry clinic was significant. They gave two days of history in which the patient physically attacked a relative for smacking his mouth during a dinner invitation with no warnings. He also confirmed this history. He also expressed a compunction with a regretful affect. Although he had developed a constant attitude of immediate abandoning the disturbing environment so far, he was unable to inhibit his irresistible urge for intervention during this recent event. According to the social and personal history, he is a university student living with his parents. He reported no previous medical or psychiatric history. No smoking, alcohol, or illicit drug use was reported. The family history was insignificant.

The physical and neurological examination revealed no remarkable pathologies. The magnetic resonance imaging (MRI) of the brain was unremarkable. The biochemical tests showed no abnormalities. On
psychiatric examination, the patient was conscious, and well oriented to time, place, person, and situation. He was eager to the meeting with a deliberate manner. His affect was negative with regrets, and the mood was euthymic. His thought content was constricted and ruminating on his over-reactive attitude and the recent unfortunate event through the guest. He was moderately upset and anxious with no depressive signs. The memory and intelligence were within the normal limits. The reality testing and judgment were intact. The Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-I) was administered [5]. No diagnostic criteria for Axis I disorder were found. No complaints of an eating disorder and no fear of weight gain was described. The Beck Anxiety Inventory (BAI) score was 9 and Hamilton Depression Rating Scale (HDRS) score was 4. The Amsterdam Misophonia Scale (A-Miso-S) which was adapted from the Yale-Brown Obsessive Compulsive Scale in order to measure the symptomatic severity of misophonia was found as 23 (range: 0 to 24) [6]. On the other hand, the Misophonia Activation Scale (MAS-1) that assess the severity and intensity of the patient’s condition was 10 (range: 0 to 10) [3]. Global Assessment of Functioning (GAF) Scale score was 60 indicating moderate levels. The reality testing and judgment were intact. The memory and intelligence were within the normal limits. The patient away from the causative stimuli. An anxiolytic agent alprazolam (0.5 mg/day) was started and then discontinued after three days due to well response to treatment. Psychoeducation was given. The coping strategies such as using ear plugs and leaving the disturbing environment were further recommended. Although the misophonia persists, the asymptomatic status was maintained by keeping the patient away from the causative stimuli.

Discussion

Misophonia is etymologically derived from Greek words “misos-hate” and “phone-voice or sound”, which thus means “strong hate of sound” [7]. It is characterized by intense emotional and behavioural responses to specific sounds [4]. The term “misophonia” was first introduced by audiologists Margaret Jastreboff and Pawel Jastreboff in 2001 [1]. Triggering sounds display a constant feature that is mostly produced by other people in daily social life. These particular sounds may include eating, smacking, gum chewing, breathing, nose sniffing as well as tapping, and pen clicking. Many other physical symptoms may also coexist with these psychological reactions. These symptoms include chest pain, headache, or pain in the entire body. Also, increased muscular tone, diaphoresis, dyspnoea, tachycardia, hypertension, and hyperthermia may also associate the misophonic symptoms [4]. Instead of current nomenclature, some other names such as the Select (or Soft) Sound Sensitivity Syndrome (4S), Decreased Sound Tolerance, and the Sound Rage are also used for misophonia [6]. The prevalence and incidence of misophonia are not well known [8]. Although the gender or age involvements are not yet clearly specified, it is typically reported among the prepubescent girls [9].

Misophonia is a new diagnosis without any formal diagnostic criteria. Schröder et al. [6] have reported some diagnostic criteria for misophonia. These criteria firstly include the existence (or expectation) of a particular human-originated sound that provokes an automatic and aversive physical response. The criteria then consist of a strict sense of lacking self-control, extreme rage or disgust, and avoidance attempt from the extreme conditions [6]. These specific significant distresses, and complaints do not exist at any other disorder. Misophonia has not yet been identified in the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) nor in the tenth revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10) [5]. Moreover, it is neither classified as a hearing and neurological nor a psychiatric disorder in the available literature [8]. Misophonia is thus reported as a possible unknown condition of psychiatric prevalence. It is reported as symptomatically related to obsessive-compulsive disorder and anxiety disorders. It is also considered as a kind of sound-emotion synaesthesia and having some similarities with anxiety disorders [10]. Misophonia may accompany in individuals with Tourette’s syndrome, obsessive-compulsive disorder, generalized anxiety disorder [4]. According to a study, misophonia patients have a lower prevalence of most psychiatric disorders than the average population. However, the obsessive-compulsive personality disorder seems to be an exception with an incidence of 52.4% among the misophonics [6].

The aetiopathology and the mechanism behind the misophonia are still unknown. It may be caused by a dysfunction of the central auditory system in the brain instead of the ears as in the tinnitus and hyperacusis [9]. Misophonia is differentiated from the hyperacusis that is not unique to a particular sound or incapable of initiating the same robust response [8]. It is also differentiated from phonophobia, which is a fear (rather than a hatred) of a particular sound [10]. However, misophonia may also present with these two disorders, making the diagnosis more complicated [9]. It is not a sensory disorder caused by any anatomical anomaly [7]. Instead, the symptoms of misophonia arise from an enhanced sensitized functional connections or shortcuts between the limbic, auditory, and autonomic nervous system [9]. A possible hereditary component is also suggested due to the existence of the symptoms in at least one close relative misophonics have determined the same case [2].
The treatment of misophonia is not well-confirmed [10]. The coping strategies, as well as cognitive behavioural exposure therapies, are used as a treatment. There is no evidence-based research available on this issue, but many people are suffering from misophonia who are seeking help [9]. The aetiology, pathophysiology, related complaints, possible genetic tendency, and other issues that might present as misophonia should be identified by research [6].

In conclusion, misophonia is a profoundly disturbing disorder for a patient which might exhibit spontaneous unwanted physical reactions as in this case. There is no surgical or pharmacological treatment. It has a devastating effect on the patient’s quality of life. The primary strategy for the palliation should be directed to learning how to cope and live with this problem. Misophonia is not classified among the current disorders in DSM-5 and ICD-10. Therefore, it should be considered as a distinct psychiatric disorder within the forthcoming editions. Unique diagnostic criteria should also be constituted to improve the recognition of this disorder by the health professionals as well as to encourage further scientific studies.

Disclosure statement
No potential conflict of interest was reported by the authors.

ORCID
Serhat Tunç © http://orcid.org/0000-0002-2057-4074

Hamit Serdar Bağbuğ © http://orcid.org/0000-0002-1363-6783

References
[1] Jastreboff MM, Jastreboff PJ. Components of decreased sound tolerance: hyperacusis, misophonia, phonophobia. ITHS News Lett. 2001;2:5–7.
[2] Edelstein M, Brang D, Rouw R, et al. Misophonia: physiological investigations and case descriptions. Front Hum Neurosci. 2013;25:3–11.
[3] Kluckow H, Telfer J, Abraham S. Should we screen for misophonia in patients with eating disorders? A report of three cases. Int J Eat Disord. 2014;47:558–561.
[4] Cavanna AE, Seri S. Misophonia: current perspectives. Neuropsychiatr Dis Treat. 2015;18:2117–2123.
[5] First MB, Spitzer RL, Gibbon M, et al. Structured clinical interview for DSM-IV-TR Axis I disorders, research version, patient edition. (SCID-I/P). New York (NY): Biometrics Research: New York State Psychiatric Institute; November 2002.
[6] Schröder A, Vulink N, Denys D, et al. Misophonia: diagnostic criteria for a new psychiatric disorder. PLoS One. 2013;8:e54706.
[7] Jastreboff PJ, Jastreboff MM. Tinnitus retraining therapy for patients with tinnitus and decreased sound tolerance. Otolaryngol Clin North Am. 2003;36:321–336.
[8] Duddy DF, Oeding KA. Misophonia: an Overview. Semin Hear. 2014;35:84–91.
[9] Schwartz P, Leyendecker J, Conlon M. Hyperacusis and misophonia: the lesser-known siblings of tinnitus. Minn Med. 2011;94(11):42–43.
[10] Bruxner G. “Mastication rage”: a review of misophonia – an under-recognised symptom of psychiatric relevance? Australas Psychiatry. 2016;24(2):195–197.