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Review Article

Oral cenesthopathy: A dilemma to dentists: A review

Shaista Munir Haque^{1,*}, Rupam Sinha¹, Debarati Roy¹, Suman Sen¹, Subhadeep Maity¹, Harshvardhan Jha¹

 $^{
m 1}$ Dept. of Oral Medicine and Radiology, Haldia Institute of Dental Sciences and Research, Haldia, West Bengal, India



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ABSTRACT

Cenesthopathy is characterized by abnormal sensations at various parts of the body. When it occurs in the oral cavity it is termed as oral cenesthopathy. These patients complain of unusual sensations without corresponding abnormal findings, such as excessive mucus secretion, a slimy sensation, or a feeling of coils or wires being present within the oral cavity. They usually visit multiple dentists rather than psychiatrists and repeatedly pursue unnecessary surgical procedures to remove their 'foreign body' which sometimes creates a dilemma for the dentists. This review focuses on the various aspects of oral cenesthopathy.

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1. Introduction

Cenesthopathy is defined as any localized distortion of body awareness and is characterised by abnormal and strange bodily sensations. 1 It was introduced by Dupré and Camus in 1907 to explain the pathologic bodily sensations which results from certain psychological state instead of any underlying organic cause. The oral cavity is one of the frequent sites of cenesthopathy, hence the term "oral cenesthopathy". 2 Different names of the condition are "oral physical delusions," "oral dysesthesia," and "oraparasitosis". Patients suffering with oral cenesthopathy sometimes complain of abnormal sensations, like hypersalivation, a squeezing-pulling sensation, or a sense of coils or wires being present within the mouth. 1 They usually visit dental clinics seeking invasive treatment and demand unessential procedures to remove their "foreign-body" from the oral cavity as they are convinced that their annoying symptoms are real. This causes a dilemma to the dental specialist. Hence, in such cases correct identification and management by the dental

E-mail address: dr.shaistahaque@gmail.com (S. M. Haque).

practitioner is extremely important.²

2. Epidemiology

The prevalence of oral cenesthopathy is unknown due to the shortage of strict epidemical studies. Solely 3 Japanese papers have reported the calculable prevalence of cenesthopathy. Wake et al. diagnosed 18 patients (0.175%) as cenesthopathy⁴ and Yoshimatsu diagnosed 31 inpatients in 12 years (1.86%) and 37 outpatients in 3 years (0.24%) in different University Psychiatry Clinic in Japan.⁵ Among these cenesthopathy patients, around 85% have been reported to have oral cenesthopathy.⁶ Watanabe M et al. from 2009-11 diagnosed 332 outpatients in a psychosomatic dentistry clinic in a Japan (27.44%) as oral cenesthopathy.⁷

According to Hozaki (1960)⁸ and Yoshimatsu (1966)⁵ oral cenesthopathy is seen within the second to third decades and also during the fifth decade. Umezaki et al. (2017)⁹ reported 2 female patients of 70's age group suffering from oral cenesthopathy. According to Takahashi et al. (2013)¹⁰ oral cenesthopathy was seen more in female patients of older age group whereas non-oral cenesthopathy was more common in younger male patients. In addition, each of

^{*} Corresponding author.

the cases of oral cenesthopathy reported by Ruparelia PB, Shukla BA (2018) were also male patients.²

3. Etiology

The exact etiology of oral cenesthopathy remains unkown and controversial and it is said to be exacerbated by psychological factors. ¹

- 1. The relationship between cenesthopathy and psychiatric disorder has been reported in several papers, and it is said to develop even without any psychiatric disorders. However, a case control study reports that these patients maybe socially immature and are inept at responding to a Rorschach test. 11
- Few case reports have found that the condition sometimes developed after some dental treatment and is thought to arise due to some change within the oral environment.¹
- 3. Organic brain changes and toxic factors have conjointly been thought of as important factors. ¹

4. Clinical Presentation

Cenesthopathic symptoms usually seen in the head, abdomen, chest, limbs and oral cavity. The oral complaints are common in the buccal mucosa and associated with teeth whereas it is relatively less associated with gingiva. Umezaki et al. (2017) reported cases of oral cenesthopathy on palate and associated with teeth. There are numerous complaints of oral cenesthopathy as listed below in Table 1.

Table 1: Various complaints of patients with oralcenesthopathy ¹

- 1. A wire is coming out of my gum
- 2. There are coils around my teeth
- 3. Something slimy is always in my mouth
- 4. Gas is blowing up in my teeth
- Something like a thread is coming out from between my teeth
- 6. I have a squeezing sensation in my mouth
- 7. My gum is twisting
- 8. Excessive saliva and bubbles are in my mouth

Some patients complain of bizarre oral sensations, like excessive mucous secretion or a slippery sensation. They also complain of an abnormal oral sensation, like a sense of coils or wires or some variety of foreign body within the oral cavity. They usually spend hours on a daily basis examining their mouth and generally attempt to catch the foreign body. To prove the abnormal sensations to be real, they often show "the specimen sign" by taking specimens like spit or plaque and collecting them in a bottle or plastic case. Sometimes the patients with oral cenesthopathy had different comorbid psychosomatic oral symptoms including burning mouth syndrome (BMS). However, unlike BMS, oral cenesthopathy does not typically induce pain. These patients

tend to avoid seeing psychiatrists even though the dentists recommend to visit them, since they have a firm conviction that the foreign body is real. ¹²

5. Classification

- Diagnostic and Statistical Manual of Mental Disorders, fifth edition (DSM 5), classified oral cenesthopathy as a 'delusional disorder, somatic type (DDST)'. 1,2
- Inthe ICD-10 Classification of Mental and Behavioral Disorders (ICD-10), it is categorized as a 'persistent delusional disorder' or 'other schizophrenia.
- On the basis of etiology or clinical symptoms, two classification systems have been proposed for cenesthopathy. But these are currently just conceptual and are as follows
 - a. Hozaki classified cenesthopathy into 2 groups, primary and secondary, based on the etiology. The primary group is monosymptomatic, and the secondary group is that which appears secondary to a psychiatric disorder such as schizophrenia or depression. ⁸
 - b. Yoshimatsu classified it into 5 groups based on the features of mental manifestation, details of complaint, and attitude. The first group is related to disruption of self-consciousness or depersonalization. The second group is related to a slight sickness. The third group patients complain of bizarre sensations as if they are real experiences. The fourth group patients are those who are selfish, and have exaggerated complaints. The fifth group includes others. These five groups are not divided clearly but can be considered as a spectrum classification. ⁵

6. Diagnosis & Investigations

identification and correct diagnosis of cenesthopathy continues to be controversial, and modern medication does not provide any properly outlined diagnostic criteria for it.1 However, recently the Oral Dysesthesia Rating Scale (Oral DRS) was developed to reorganize and objectify the complicated symptoms of oral cenesthopathy. The Oral DRS comprises of a Symptom Severity Scale (SSS), a Functional Impairment Scale (FIS), and a Visual Analog Scale (VAS). The SSS [A] consists of seven categories: feeling a foreign body [A1], exudation [A2], squeezing-pulling [A3], movement [A4], misalignment [A5], pain [A6], and spontaneous thermal sensation or tastes [A7]. The FIS [B] evaluates the severity of impairment of eating [B1], articulation [B2], work [B3], and social activities [B4]. The VAS [C] assesses the overall subjective severity of the symptoms [C1] and changes in the severity of the symptoms [C2]. ¹

Investigations like single-photon emission CT (SPECT) showed asymmetrical regional cerebral blood flow (rCBF)

pattern (right > left) in an exceedingly broad space of the brain, as well as the frontal and temporal lobes of patients with oral cenesthopathy.²

7. Treatment

If the patient is experiencing an acute phase of depression during dental treatment, they are at a risk of developing oral cenesthopathy. Therefore, to prevent trouble concerning psychosomatic oral symptoms, adequate informed consent is required. Some case reports suggested antidepressants, antipsychotic drugs and electroconvulsive therapy (ECT) are effective. When only oral symptoms are present, paroxetine, fluvoxamine, amitriptyline, sulpiride, risperidone, olanzapine, perospirone, aripiprazole, and ECT, are effective. Umezaki Y et al. after conducting a study suggested low doses of aripiprazole as the most effective. 1,2,12

8. Conclusion

Cenesthopathy is characterised by abnormal and strange bodily sensations and is assessed as a 'delusional disorder, physical type' or 'somatoform disorder' according to DSM 5. Patients with oral cenesthopathy complain of bizarre sensations without any corresponding abnormal findings within the oral space. They typically visit multiple dentists instead of psychiatrists since they are convinced that their problem is genuine. They repeatedly pursue unessential surgical procedures to get rid of their 'foreign body'. Any dental treatment done during the acute phase of depression may pose as a risk factor of oral cenesthopathy, and hence comprehending the psychiatric disorder and getting adequate information of the same may well be needed to stop the difficulty regarding oral cenesthopathy. Not only dentists but the psychiatrists as well ought to bear in mind of this. Further research studies using brain imaging and reliable assessment tools are required in the future.

9. Source of Funding

None.

10. Conflict of Interest

None.

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Author biography

Shaista Munir Haque, Post Graduate Student

Rupam Sinha, Professor and HOD

Debarati Roy, Post Graduate Student

Suman Sen, Associate Professor

Subhadeep Maity, Assistant Professor

Harshvardhan Jha, Assistant Professor

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