

Burning Mouth Syndrome and Prosthetic Dentistry: General Data, Epidemiology, Clinical Picture

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Abstract: *Burning mouth syndrome, or stomatodynia, is ongoing (chronic) or recurrent burning sensation in the mouth without an obvious cause. It may affect the tongue, gingiva, lips, palate or widespread areas of the oral mucosa. The true prevalence of BMS remains unknown. It is divided on three subtypes depending on the clinical picture.*

Keywords: burning mouth syndrome, BMS, stomatodynia, stomatopyrosis, glossopyrosis, glossodynia, glossalgia, sore mouth, sore tongue, oral dysesthesia

1. Introduction

Burning mouth syndrome (BMS) is ongoing (chronic) or recurrent burning sensation in the mouth without an obvious cause. It mainly affects middle-aged/elderly women with hormonal changes or psychological disorders. This condition is probably of multifactorial origin, often idiopathic, and its etiopathogenesis remains largely obscure. Various synonyms like stomatodynia, stomatopyrosis, glossopyrosis, glossodynia, glossalgia, sore mouth, sore tongue, and oral dysesthesia emphasize the quality and/or the location of pain in the oral cavity.

2. General Data

Burning mouth syndrome (BMS), or stomatodynia, is defined as a complex of symptoms in those patients with oral pain who have a clinically healthy mucosa on examination. Many mucosal diseases occur with pain in the mouth; several examples include lichen planus, infections caused by recurrent herpes simplex, recurrent aphthous stomatitis, denture stomatitis after a prosthetic treatment, etc. (Chapanov, 2020) (Chapanov, 2020) (Dimitrova, 2019) (Kazakov, 2019) (Kazakova, 2019) (Kazakova, 2019) (Kazakova, 2019) (Kazakova, 2019) (Kazakova, 2019). A complete examination of the oral cavity should be performed to rule out these or other diseases before diagnosing BMS. Synonyms of BMS are glossodynia, glossopyrosis, glossalgia, stomatodynia, stomatopyrosis, inflamed tongue and mouth, burning tongue, oral or lingual paresthesia, oral dysaesthesia. (Kazakov, 2018) (Vasilev, 2012)

Burning mouth syndrome is often defined as a purely psychosomatic disorder that occurs in postmenopausal women who are resistant to therapy. Although BMS is often a diagnostic and therapeutic challenge, numerous studies have linked it to real organic and psychiatric illnesses; empirical treatment shows improvement in symptoms in about 70% of patients with prescribed therapy. Faced with a patient with BMS, dermatologists and other clinicians should be aware of its manifestations and control, and be optimistic about its outcome. (Patton, 2007)

3. Epidemiology

Due to the variability in the diagnostic criteria, as well as the difficulties in diagnosis, the true prevalence of BMS remains unknown. An appropriate, universally accepted definition of the syndrome is needed, with well-defined diagnostic criteria, in order to take into account the epidemiology and to carry out the treatment. According to a 1989 study by the National Health Interview. In more than 45,711 households, the prevalence of BMS in the US population was 0.7% of adults (0.8% women and 0.6% men). The target groups were asked: 'Have you had a prolonged, unexplained burning sensation in the tongue or other part of the oral cavity more than once in the last 6 months?'. Studies in Finland (431 adults) showed a 15% prevalence; however, half of them had candidiasis or a lesion in the mouth. Among 2112 patients examined from December 1995 to December 2000. In the Department of Oral Pathology at the Second University of Naples, there was a significant prevalence of BMS (284; 13%). They exceeded the cases of leukoplakia (218) and aphthous lesions (258). (Bergdahl, 2007) (Grushka, 1987) (Laskaris, 2006) (Lamey PJ, 1988) (Lamey, 1996) (López-Jornet, 2010) (Volpe, 1991)

4. Clinical Picture

The BMS patient describes in different ways a burning, stinging, tingling, painful, painful, scalding, or stiff sensation in the oral cavity. The degree of pain can be compared in intensity to tooth ache. This sensation occurs most often in the front two thirds and the tip of the tongue. Many oral areas can be affected, such as the upper alveolar ridge, the palate, the lips, and the lower alveolar ridge. Less commonly, the buccal mucosa, the floor of the oral cavity or the throat are affected. There is dysgeusia. It manifests itself as a constant taste in the mouth or altered taste sensations. In addition to dry mouth, there are complaints such as thirst, headache, temporomandibular joint pain, tenderness or pain in m. Masseter, neck muscles, shoulder muscles, suprahyoid muscles. BMS affects even times more often women than men—in particular middle-aged and adults (60 years), and is not registered in children. The average duration of BMS is 2 to 3 years, except in some cases that lasts for decades. Most patients with BMS have been consulted and treated by many dentists and physicians, but without success. More than half

received insufficient and in accurate information about their problem. (Gurvits, 2013)(Scala, 2003)

Burning mouth syndrome is divided into three subtypes, depending on the daily variation of symptoms (**Table 1**). BMS type 1 (35%) is characterized by day time pain that is not present on awakening but progresses during the day, with the greatest problems in the evening. Patients with BMS type 2 (55%) wake up with continuous daily pain, while those with type 3 (10%) have intermittent pain with periods of rest; the pain occurs in unusual places, such as the buccal mucosa, the floor of the mouth and the throat. Type 1 is associated with non- psychiatric factors, type 2 –with chronic anxiety, and type 3 –with dietary supplements and allergies. Type 2 patients respond best to therapy.(Riley, 1998) (Grushka, 2002)

Table 1: BMS types

	Clinical Manifestation	Factors
Type 1	Daily pain, not present on waking, increases with the progress of the day	Non-psychiatric
Type 2	Daily pain, continuous	Psychiatric, mostly chronic anxiety
Type 3	Intermittent pain, unusual places (buccal mucosa, floor of the mouth)	Allergic contacts to matitis to essences, additives

5. Conclusion

Burning Mouth Syndrome remains a poorly understood condition in the field of oral medicine. New evidence for the neuropathic basis of this syndrome is emerging. As a result, a subgroup of BMS cases may fall into the category of nigrostriatal dopaminergic disorder. Research in this area is much needed, considering the different causes. In-depth studies for a clear definition of the associations between burning mouth syndrome and systemic diseases, universal diagnostic criteria, and proper patient selection are also essential.

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