



Letter to the Editor

# DOES A SECONDARY BURNING MOUTH SYNDROME EXIST?

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#### **ABSTRACT**

Burning mouth syndrome is characterized by the absence of signs but by the chronic persistent "burning" symptom. According to some authors, a distinction should be made between primary and secondary forms of BMS, thus eliminating the unknown aetiology of burning. The diagnosis of BMS is still a diagnosis of exclusion, and this excludes the possibility that a secondary BMS may exist.

**KEYWORDS:** burning, pain, discomfort, taste, sensation

# INTRODUCTION

Burning Mouth Syndrome (BMS) is a pathological condition defined according to the International Classification of Orofacial Pain Committee as "an intraoral burning or dysaesthetic sensation, recurring daily for more than 2 hours per day for more than 3 months, without evident causative lesions on clinical examination and investigation" (1).

Recent metanalytic data show that its prevalence in the general population is 1.73%, with a higher prevalence in females (1.15%) than males (0.38%). The age of onset is usually 50 years, especially in the peri-postmenopausal age (2).

The burning that characterizes this condition is chronic, assimilated to the sensation of ingesting the chilli pepper. Some patients report a feeling of sourness, similar to the sensation caused by eating an unripe lotus. The burning sensation can be associated with xerostomia and dysgeusia (3). The triad characterizes the "full-blown BMS": burning, xerostomia, and dysgeusia, while in the oligosymptomatic BMS, the burning is associated with one symptom (xerostomia or dysgeusia). In the monosymptomatic form of BMS, burning is the only symptom, usually localized at the tip of the tongue (4).

The burning sensation affects, in most cases, the tip of the tongue, the palate in the retro-incisive region and the labial vestibule. In rare cases, the BMS is localized to the gingiva, the buccal mucosa, or the soft palate. The anterior portion of the oral cavity is the most involved in the symptoms, and the reasons for this characteristic are not still understood. Some authors report BMS and associated vulvodynia, fibromyalgia, TMJ, and cutaneous disorders (5-7).

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#### DISCUSSION

The onset of burning symptoms differs in different patients. Some report an acute onset following dental treatments, ingesting particular foods or taking medications. Other patients, on the other hand, report a gradual, more nuanced beginning, not connected to events. Several authors have reported the importance of "life events" in initiating BMS. Bereavement, divorce and problems with children or elderly parents can trigger the burning sensation. Carcinophobia and/or previous cancer diagnosis are related to BMS (8).

Often defined as "enigmatic", the BMS still presents many aspects not clearly understood, such as the etiological origin. Psychological disorders such as depression and anxiety, neurological damages (alterations in the small-diameter nerve fibres -C fibres), reduction in estrogen and progesterone levels and salivary impairment are described as the "putative" cause of BMS, but a definitive and irrefutable etiological link has not yet been demonstrated (9-10).

# Primary and secondary BMS

Scala et al. introduced the concept of "primary" (idiopathic) and "secondary" (resulting from identified precipitating factors) BMS since this allows for a more systematic approach to patient management (11).

In the secondary BMS, well-known pathologies or deficiencies cause the burning sensation: diabetes, B12 vitamin, allergy, iron, zinc and folate deficiencies are the most frequent cause of burning that represents a symptom and not the syndrome (12). In fact, in our opinion, in these cases is not possible to diagnose BMS because the symptom belongs to the underlying disease.

Improving the diabetic status or replacing vit. B12, folate or iron, the burning sensation disappeared, and this confirms that it was only an oral symptom (13). Therefore, the secondary forms of BMS describe burning symptomatology of the oral cavity but not exclusive to the latter.

On the contrary, the true, idiopathic BMS persists even after administering estrogen, vitamins or antidiabetic drugs (14). Understanding the precipitating factors involved in secondary BMS would also be essential. Even stress or anxiety, trauma, parafunctions or subclinical candidiasis infection factors can be involved in the burning sensation (15).

Therefore, the "exclusion diagnosis" of BMS excludes any possibility that primary and secondary forms may exist. If all the potential causes determining oral burning have been excluded from the diagnostic process, it is possible to determine only "sine causa" BMS.

## CONCLUSION

BMS is considered an idiopathic and primary disease. Oral burning present in other known pathologies would not be included in the diagnosis of BMS but would represent a symptom of the underlying pathology.

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