



Burning Mouth Syndrome: A Brief Overview



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Abstract

Burning Mouth Syndrome (BMS) is a condition that is often challenging to manage and can result in a poor quality of life for the patient. The exact pathophysiology is unknown and multiple factors have been implicated in its etiology. The diagnosis of primary BMS is a diagnosis of exclusion. Clinical features vary widely among the middle-aged female population. Burning is also usually exacerbated by anxiety and fatigue. Women with hormonal imbalances or severe menopause symptoms are greatly affected. There is no targeted treatment for BMS. A multifactorial approach is needed for the holistic health management of patients suffering from this condition complex.

Keywords: Pain management; Stress; Oral dysesthesia

Background

Burning Mouth Syndrome (BMS) is a medical condition that is characterised by a chronic burning sensation in the mouth especially the tongue and lips. It is also known as glossodynia, oral dysesthesia, glossopyrosis, or stomatodynia. No lesions or macroscopic changes are seen on the oral mucosa. Patients usually suffer from a poor quality of life. BMS is often accompanied by dysgeusia and xerostomia, thus the inclusion of the word syndrome. It can develop suddenly or gradually over time.

Diagnostic criteria and classification

Oral burning or pain will be experienced deep within the oral mucosa, constant for at least 4–6 months, and continuous throughout the day [1]. This excludes signs of oral mucosal pathology, such as white lesion, erythema, atrophy, erosion, ulcer, or stomatitis [2]. BMS is subclassified into primary (also known as essential or idiopathic) BMS, for which a neuropathologic cause is likely, and secondary BMS, resulting from a number of possible local or systemic conditions [2].

Clinical features

BMS usually develops in middle aged and elderly women and is extremely rare in men and women under the age of 30 [3]. It has an overall prevalence ranging from 0.7% to 7% and a prevalence up to 12% to 18% for post-menopausal women with BMS [1-6]. Burning pain is usually bilateral in distribution most frequently involving the anterior two-thirds of the tongue, the dorsum and lateral borders of the tongue, the anterior hard palate, and the mucosa of the lower lip

[7,8]. The burning sensation is usually moderate to severe. Burning sensation is of least intensity upon awakening, worsening after the first meal of the day and reaching maximum intensity late evening [3]. It can be aggravated by stress and fatigue and eating can reduce symptoms, drinking, having a chewing gum or anything sweet or by sleeping or resting [4].

Management of BMS

Before starting the patient on a treatment plan, it is vital to review the patient's medical and dental history. There is no targeted treatment of BMS. It is also necessary to investigate whether the patient's symptoms are caused by parafunctional habits, galvanic current, mechanical irritation, allergic reaction, infection, anemia, mineral or nutritional deficiencies, medication as well as gastrointestinal, urogenital, psychiatric, neurologic, and metabolic disorders to determine whether the patients have either primary or secondary BMS. After identification of these systemic, local or any other primary cause for the burning, treatment or management of that usually results in relief from the symptoms. On persistence of the burning symptoms, the patient is a candidate for drug therapy.

Drug therapy can be local or systemic. Systemic drugs include capsaicin 0.25%, clonazepam 0.25mg, alphalipoic acid and SSRIs [1,9]. Clonazepam and alphalipoic acid provide sustainable pain relief with minimal side effects. Studies have indicated that appropriate zinc replacement therapy in BMS patients who are zinc deficient is effective in relieving oral burning symptom [5].

Amisulpride is very effective and has minimal side effects especially as a short-term treatment [10]. Paroxetine, an SSRI, has been shown to reduce symptoms in upto 80% of patients [11]. The results of another study suggest that amisulpride, paroxetine, and sertraline may be effective for treatment of BMS especially in the short term treatment [12].

Local drug therapy involves the application of drugs like capsaicin, clonazepam, lidocaine, aloe vera, benzydamine hydrochlorate to the site of burning. Capsaicin provides good pain relief but has unacceptable side effects and increases the burning sensation at the start [1,13]. Having the patient suck on clonazepam 3 times a day for 14 days provides a greater degree of pain relief compared to placebo [14]. Combined topical and systemic clonazepam therapy, which involves swishing an orally dissolvable tablet followed by swallowing, has been found to be an extremely effective treatment protocol for BMS [15]. Lidocaine can help reduce the pain and burning, however, it is not a drug of choice owing to its short duration of action [16]. Application of aloe vera gel to the affected area of the tongue helps reduce the pain when coupled with a mechanical protector [17].

Cognitive behavioural therapy and psychotherapy are also efficacious for managing symptoms as reduction of stress and anxiety are associated with lower pain levels [13,18,19]. Previous literature states that the prevalence of oral symptoms is significantly higher in perimenopausal and post-menopausal women than in pre-menopausal women [20,21]. Almost two-thirds of menopausal women show relief of oral symptoms after hormone replacement therapy [1].

Conclusion

A multifactorial approach is needed for the holistic health management of patients suffering from this condition complex. Local, systemic and/or psychological factors play a role in the genesis of the burning pain symptoms in most patients. It is vital to rule out an identifiable cause for the burning symptoms prior to initiation of medical therapy. Till date BMS presents a challenge to physicians. It is important to manage patient expectations as well and counsel the patient that long term medical management is needed and that some symptoms may persist even after that. The main aim of therapy is improvement of quality of life. An interdisciplinary effort between a team of physicians is needed to effectively alleviate the suffering of patients.

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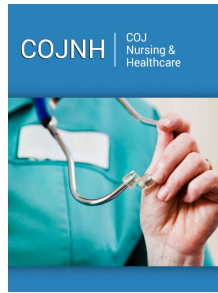
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