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Case Report

Integrating dermatologic and psychiatric care in the treatment of glossodynia: A case report

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ABSTRACT

Glossodynia, or burning mouth syndrome (BMS), is a chronic pain condition characterized by intraoral burning sensation in the absence of identifiable clinical or laboratory abnormalities. Herein, we report a 64-year-old female patient who presented to dermatology with a six-month history of BMS. Dermatologic examination and extensive laboratory work-up were unremarkable, and a diagnosis of primary glossodynia was made. This case illustrates the value of an integrated dermatology-psychiatry approach within a psychosomatic framework.

Keywords: Burning mouth syndrome, glossodynia, psychodermatology, psychosomatic medicine.

Glossodynia, commonly referred to as burning mouth syndrome (BMS), is defined as a persistent burning or dysaesthetic sensation of the oral mucosa in the absence of clinically visible lesions or laboratory abnormalities.[1,2] It is largely a diagnosis of exclusion, established only after local oral diseases, systemic conditions, and medication side effects have been ruled out. Epidemiological data indicate that BMS affects predominantly peri- and postmenopausal women, with a mean age at diagnosis between 59 and 61 years.[1,3] Patients frequently report burning of the tongue, often accompanied by xerostomia and taste disturbance, despite normal clinical findings.[4,5]

Although the exact etiopathogenesis remains unclear, contemporary models integrate peripheral small-fiber neuropathy, alterations in transient receptor potential vanilloid-1 (TRPV1) channels, and central dopaminergic dysfunction with significant psychological and psychosocial factors such as anxiety, depression, health anxiety, and reduced resilience.[6-8] In this sense, BMS is increasingly conceptualized within a psychosomatic framework, where bodily sensations and emotional states are tightly intertwined.[8]

Dermatologists are often the first physicians consulted, which places them in a key position to recognize the syndrome, conduct appropriate exclusionary work-up, and initiate multidisciplinary management. Here, we present a case of glossodynia in a 64-year-old female patient, highlighting the successful clinical outcome achieved through a multidisciplinary approach grounded in coordinated dermatology-psychiatry collaboration.

CASE REPORT

A 64-year-old female patient presented to the dermatology outpatient clinic with a six-month history of burning sensation on the tongue. The burning was described as continuous throughout the day, with gradual intensification toward the evening. She denied any obvious triggering

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factor, recent dental procedures, or introduction of new oral hygiene products. Hot food and beverages aggravated the symptoms, while cold liquids provided partial relief. Her initial visual analog scale (VAS) score for pain was 8/10.

Oral mucosal examination demonstrated normal-appearing oral mucosa: the tongue, buccal mucosa, hard and soft palate, gingiva, and lips showed no erythema, ulceration, atrophy, leukoplakia, or lichenified plaques. There were no signs of candidiasis or geographic tongue. Dental prostheses were well-adapted, without sharp edges or evidence of chronic trauma.

Given the need to exclude common systemic and local causes of oral burning, a comprehensive diagnostic work-up was undertaken. Complete blood count, fasting glucose, HbA1c, liver and renal function tests, iron and ferritin, vitamin B12 and folate, thyroid-stimulating hormone, and inflammatory markers were all within normal limits, providing no evidence of diabetes mellitus, anemia, nutritional deficiencies, thyroid dysfunction, or systemic inflammatory disease. The patient was also not taking medications known to cause oral burning, including angiotensin-converting enzyme inhibitors or psychotropic agents.

In the absence of local or systemic causes, and based on the clinical pattern of tongue burning persisting for more than three months with normal mucosa, the patient was diagnosed with primary glossodynia in accordance with current criteria.[2]

Due to the chronic course of the symptoms and the marked level of distress, a psychiatric consultation was requested. During the psychiatric interview, the patient reported increased worry about the possibility of having a “serious illness,” a persistent sense that “something bad” was about to happen, difficulty concentrating, and sleep fragmentation related to ruminative thoughts about her symptoms. The patient reported long-standing trait anxiety characterized by pervasive and excessive worrying, and it was learned that she had no prior psychiatric diagnosis or treatment. Her somatic complaints involving the tongue and oral cavity were found to intensify, particularly in the periods following family-related stressors.

Mental status examination revealed an anxious mood accompanied by a marked preoccupation with bodily sensations; there was no evidence of suicidal ideation, psychotic symptoms, or cognitive impairment. According to the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, the patient was diagnosed with generalized anxiety disorder, and sertraline 50 mg/day was initiated. Psychiatric follow-up visits were scheduled at two-week intervals, incorporating supportive and psychoeducational components targeting health anxiety, catastrophizing tendencies, and sleep hygiene. During follow-up visits, the patient was systematically questioned about common sertraline-related adverse effects (e.g., gastrointestinal, sexual, and sleep-related side effects), and the patient's general clinical status was monitored. No adverse effects were reported or observed, and sertraline was well tolerated throughout the treatment period.

Over the subsequent six months, the patient remained adherent to pharmacotherapy and follow-up appointments. During follow-up, the patient reported a gradual reduction in burning pain intensity and an improvement in sleep quality. At the six-month visit, her VAS score had decreased from 8/10 to 2/10, and she no longer avoided eating or social situations due to fear of symptom exacerbation.

The patient continued under joint care of dermatology and psychiatry, with an agreed plan for slow antidepressant dose tapering only after sustained symptom stability. A written informed consent was obtained from the patient for the publication of this case report and any accompanying clinical information.

DISCUSSION

This case illustrates several key aspects of glossodynia relevant for both dermatologists and psychiatrists: the importance of systematic exclusion of organic disease, the role of psychosomatic mechanisms, and the clinical benefits of a multidisciplinary approach.

As emphasized in the literature, BMS is primarily a symptom-based diagnosis, and other

causes of oral burning must be excluded, including mucosal disease (lichen planus, candidiasis, leukoplakia), contact stomatitis, poorly fittwcies, endocrine disorders, diabetes, and medication side effects.[2,5,9]

Our patient underwent a thorough dermatologic, oral, and laboratory evaluation consistent with these recommendations, thereby supporting the diagnosis of primary glossodynia. The absence of visible pathology can be frustrating for both patient and clinician and sometimes leads to repeated consultations and unnecessary procedures. Clear communication that "the pain is real, although the mucosa looks normal" is a central component of care and prevents the invalidation of the patient's experience.

Current models conceptualize BMS as a multifactorial disorder in which peripheral neuropathic changes (small-fiber neuropathy, TRPV1 upregulation) and central pain modulation abnormalities interact with psychological factors such as anxiety, depression, and health-related fears.[1,2,9-12] The patient described here fits well into this model: she had no structural pathology, but significant symptom-related worry and ruminative attention to bodily sensations.

From a psychosomatic perspective, the oral burning can be understood as an expression of heightened interoceptive focus and dysregulated stress response, which amplifies normal sensory input into persistent pain.[8,13] In a recent systematic review, BMS-associated extraoral symptoms and comorbidities were reported to include sleep disturbances (71.8%), anxiety (65.7%), depression (60.6%), alexithymia (6.1%), tinnitus (5.9%), low back pain (45.3%), and headache (4.4%).[14] The patient's improvement following selective serotonin reuptake inhibitor (SSRI) treatment and regular psychiatric follow-up is consistent with studies showing that antidepressants and psychotherapeutic approaches can reduce symptom burden and improve quality of life in BMS.[1,3,8,15,16]

Although several studies have suggested that different antidepressants may be effective in the treatment of BMS, sertraline was initiated in our case and was observed to be an effective and safe option.[16,17] Evidence for the use of sertraline in BMS is limited to small studies and case reports. Van Houdenhove and Joostens[18] described successful remission of BMS with combined sertraline and psychodynamic psychotherapy, and an 8-week single-blind trial by Maina et al.[19] reported that sertraline, alongside other SSRIs, significantly reduced pain intensity in patients with BMS. In our patient, sertraline was preferred due to the presence of comorbid generalized anxiety disorder and its recommendation as a first-line SSRI in the treatment of this condition, particularly in the National Institute for Health and Care Excellence (NICE) guidelines.[20] No adverse effects were observed during the course of treatment.

In many cases, patients with glossodynia initially consult dermatologists, dentists, or otolaryngologists. How these specialties frame the problem and initiate referral to psychiatry may strongly influence treatment adherence. An approach that emphasizes shared ownership of the problem (for example, dermatology and psychiatry working together on a single disorder) is preferable to implying that the symptoms are "only psychological".

In the present case, the dermatologist validated the patient's complaints despite normal clinical findings, explained that the symptom pattern was consistent with a recognized condition-BMS-and presented the psychiatric referral as a therapeutic extension aimed at modulating pain pathways and stress, rather than as a dismissal of her physical symptoms. This respectful, collaborative stance likely facilitated the patient's acceptance of psychiatric care and consistent clinic attendance.

The marked reduction in VAS score from 8 to 2 over six months underlines that, even though BMS is often chronic and difficult to treat, meaningful improvement is achievable when dermatologic assessment, psychosomatic understanding, and psychiatric treatment are integrated.

In conclusion, glossodynia is a diagnostically and therapeutically challenging syndrome situated at the intersection of dermatology, oral medicine, neurology, and psychiatry. This case illustrates that establishing the diagnosis requires

a careful exclusion of local and systemic causes, that understanding the condition through a psychosomatic and broader biopsychosocial framework helps explain the contrast between normal mucosal findings and marked subjective distress, and that early, well-structured psychiatric referral alongside antidepressant treatment and supportive follow-up can lead to substantial symptom reduction. Dermatologists, as frequent first contact for these patients, are in a key position to initiate such multidisciplinary care, ensuring that mind and body are addressed together rather than in isolation.

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