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**urning Mouth Syndrome**


### **What is Burning Mouth Syndrome?**

Burning mouth syndrome (BMS) is a chronic intra-oral burning sensation that has no identifiable medical or dental cause either local or systemic condition or disease. BMS usually lasts for more than six months with no visible signs of oral mucosa pathology. It is also known as glossodynia, glossopyrosis, stomatodynia or oral dysesthesia.

### **Who does it affect?**

The lack of universally consistent on BMS diagnostic criteria, the epidemiology data collected are of poor quality. Prevalence of BMS in general populations varies from 1% to 15%. BMS affects more on women and usually at menopause or post-menopause age (5th to 7th decade of age).

### **What causes BMS?**

The aetiology of BMS remains not fully understood. However, studies have been showing increasing evidence of BMS as neuropathic pain with central and peripheral nervous system involvement. BMS may be associated with systemic factors such as diabetes, hormonal changes, nutritional deficiencies and psychological disorders; or local causes including oral infections, allergies, salivary gland dysfunction, dental treatment and ill-fitting dentures, are known as secondary BMS and is not true BMS.

### **What kind of problems might I have?**

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| **Location** | Usually bilateral burning oral mucosal pain |
| Affects commonly on the tongue, followed by palate, lips and oropharynx |
| **Onset**  | Spontaneous with continuous gradually continuous increasing of burning pain  |
| **Character** | Burning pain  |
| **Severity**  | Moderate to severe intensity that may vary during the day. It is usually at the lowest heat upon awake, worsening after the first meal and reach maximum intensity in late evening.  |
| **Associated features**  | Altered taste (bitter, metallic taste, ‘supertaster’) and dry mouth Psychology disorders such as anxiety, irritability and depression  |

### **How is it diagnosed?**

The diagnose of BMS is by exclusion of local or systemic conditions or diseases. Based on history and detailed clinical examination, the burning sensation secondary to a primary cause is differentiated from a true BMS.

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Among the most common contributing factors are:

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| **Local** | **Systemic** |
| Oral candidiasis  | Nutritional deficiency associated neuropathy |
| Mucosal lesions | Endocrine disorders such as diabetes mellitus, hypothyroidism, menopause |
| Xerostomia  | Psychological disorders such as anxiety or depression  |
| Trauma Mechanical (e.g., ill-fitting denture, parafunctional oral habit)Chemical (e.g., mouth rinse)Thermal (e.g., burn) | Gastrointestinal disease such as gastro-oesophageal reflux and gastritis.  |
|  | Autoimmune diseases |
|  | Allergic reaction  |
|  | Side effect of medication (e.g., ACE inhibitors) |

**What will happen to me during the appointment?**

* Detailed history taking on medical history, medications, symptoms and oral habit

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* Examination of mouth
* Routine blood test screening should include exclusion of nutritional neuropathies (e.g., serum Fe, ferritin, vitamins B1, B6 & B12, folate and zinc), blood dyscrasias (FBC, WBC, RBC, MCV, ESR), liver disease (LFT), renal disease (renal function test), thyroid function and autoantibody profile (ENAs, ANAs) and diabetes (HBA1c).
* Additional investigations may be performed such as cytological smears for candidiasis, allergy test, salivary flow measurements, hormonal examinations and gastrointestinal diseases, imaging, medication adjustment and psychological questionnaires.

**How may BMS affect my life?**

BMS may cause or be associated with quality of life which are mainly related to discomfort.

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**Behaviour and Moods**

* Anxiety; Depression, Frustrated, Fearful
* ****Difficulty to fall asleep

(e.g., cancer worry, will it get worse)



 **Lifestyle medication**

* + - Alters eating & drinking
		- Affects ability to socialise /talking
		- Impact on work.

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### **What treatments are there?**

BMS management remains a challenge. Treatment for BMS aims to alleviate the symptom and is primarily via pharmacology for neuropathic pain such as antidepressant, anticonvulsant and benzodiazepines. Several literatures reported the use of topical clonazepam, cannabidiol or capsaicin to relieve the burning pain.

Cognitive behavioural therapy may be helpful to improve BMS symptoms. Trying not to focus on the feeling, learning to live with the sensation, and remembering that no severe disease has been found can sometimes be the best way of managing this common problem.

Alternative medicine options such as acupuncture and nutritional supplement (alpha-lipoic acid, vitamins) can be offered to BMS patients.

If you developed symptoms of depression, anxiety or other mental health conditions related to BMS, you are advised to see psychological support

**How long could I have BMS?**

As no known exact causes of BMS, it is hard to plan a correct course of treatment. BMS is a long-term condition that could affect you for months, years or perhaps the rest of your life. Two-thirds of BMS patients reported to has improvement of symptoms within 6 to 7 years of onset and spontaneous remission rates of 20%.

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**How can I ease the symptoms myself?**

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| AVOID Exacerbating factors  | * Hot and spicy (e.g., chilly, curry), citrus and acidic foods and juices (e.g., tomatoes, orange juice, carbonated beverages, coffee
* Alcohol and smoking/tobacco
* Mouth rinses with alcohol
* Toothpaste abrasive substances
* Cinnamon or mint flavour
* Stress
* Fatigue
 |
| MAY HELPRelieving factors  | * Eating or drinking specific blend diets
* Sucking on crushed ices or a sugar-free candy
* Chewing sugar-free gums
* Sipping water often
* Sleep or rest
* Relaxation or recreation time & distraction activities (e.g., hobbies, exercise
 |

**Where can I get more information?**

* McMillan R, Forssell H, Buchanan JAG, Glenny AM, Weldon JC, Zakrzewska JM. Interventions for treating burning mouth syndrome (Review). Cochrane Database of Systematic Reviews. 2016 (11).
* Tara Renton. Burning mouth syndrome. Reviews in Pain. 2011; 5 (4): 12-17.
* [www.iasp-pain.org](http://www.iasp-pain.org) > Burning\_ Mouth \_ Syndrome

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