

Burning Mouth Syndrome

Burning mouth syndrome (BMS) is a benign condition that presents as a burning sensation in the absence of any obvious findings in the mouth and in the absence of abnormal blood tests. BMS affects around 2% of the population with women being up to seven times more likely to be diagnosed than men.

Female patients are predominately post-menopausal, although men and pre/peri-menopausal women may also be affected. For most patients, burning is experienced on the tip and sides of the tongue, top of the tongue, roof of the mouth, and the inside surface of the lips, although the pattern is highly variable and burning may occur anywhere in the mouth. A patient may feel he/she has burnt the mouth with hot food and there may be a sour, bitter, or metallic taste in the mouth. The mouth may also feel dry and food may have less flavor. Some patients may also report a “draining” or “crawling” sensation in the mouth. The onset of BMS is usually gradual with no known precipitating factor or event. Three clinical patterns have been well characterized:

1. No or little burning upon waking in the morning, with burning developing as the day progresses, and worst by evening.
2. Continuous symptoms throughout the day from the time one awakens.
3. Intermittent symptoms with some symptom-free days, least commonly observed presentation

QUESTIONS AND ANSWERS ABOUT BURNING MOUTH SYNDROME

Q: What causes BMS?

A: No one really knows what causes BMS. However, it is believed to be a form of neuropathic pain. This means that nerve fibers in the mouth, for now, are functioning abnormally and transmitting pain despite the fact that there is no painful stimulus. It has been suggested that the nerves in the mouth that are responsible for feeling pain are easily stimulated and excited. Contributing factors may include menopause (although we do not know why), adverse life events (loss of job, death of family member or spouse), psychiatric disorders (such as anxiety, depression, and post-traumatic stress disorder), TMJ problems, chronic fatigue syndrome and fibromyalgia. Some patients will also report trouble going to sleep and staying asleep throughout the night. Patients also often report other symptoms such as headache, fatigue, shoulder pain, back pain, irritable bowel syndrome, burning of the skin or genital area, panic attacks, palpitations and ringing in the ears. BMS is not caused by dentures or infections

although wearing dentures sometimes makes the burning worse. In general, hormone replacement therapy is not effective in managing BMS in post-menopausal women.

Q: How do we know it is BMS?

A: There are many oral inflammatory conditions that may cause burning in the mouth such as lichen planus, geographic tongue and yeast infections (especially if you wear dentures) (see PATIENT INFORMATION SHEETS – [Oral Yeast Infections](#) , [Oral Lichen Planus](#) , [Geographic Tongue](#)). If a patient has these conditions and burning symptoms, treatment for the specific conditions will generally get rid of the burning symptoms and as such, should not be diagnosed as having burning mouth syndrome. It is important to have an experienced dentist or oral specialist rule out any other potential causes of burning or discomfort that may include oral mucosal diseases, infections, and dental pathology among many others.

Q: What is the prognosis of BMS?

A: One-half to two-thirds of patients will experience at least a partial improvement in symptoms within a few weeks to a few months of treatment. For those with long-term symptoms (that may last 6-7 years or longer), the intensity of burning tends to remain fairly stable at a manageable level, although some patients will return to normal without any residual burning. Patients who experience improvement with treatment can expect good control for years. There is no association of BMS with development of oral cancer.

Q: How is BMS treated?

A: There is no cure for BMS. Some, if not most, of the discomfort can be alleviated using a variety of medications, many of which are used to treat anxiety, depression, and other neurologic disorders although at lower doses. The medications help to reduce the activity of nerve fibers. Since many patients also have difficulty sleeping and experience anxiety, these medications may help you to sleep and rest better, and feel less anxious. These drugs are sometimes used as individual agents or in combination to achieve the desired benefit.

These medications include clonazepam either as a mouth rinse or in dissolvable wafer or pill form. Others include amitriptyline, nortriptyline doxepin and gabapentin. These medications can cause drowsiness and dry mouth but they are usually taken at night and this may help you to sleep. However, be careful because you may run the risk of falling, especially if you are already taking other medications with a similar side effect. Please do not drink alcohol or drive after taking these medications. Over-the-counter medications such as alpha lipoic acid may be useful as well as topical capsaicin.

Because BMS is a chronic problem, non-pharmacologic approaches to management used alone or in addition to the above medications may be helpful. These include stress management/reduction, meditation, yoga, exercise, psychotherapy and cognitive behavioral therapy.. If stress, anxiety and/or depression are contributing to BMS, regular use of these techniques or regular counseling may help to reduce symptoms and keep drug dosages low. With any therapy for BMS, it may take several weeks or even months before maximum benefits are achieved.

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