

Burning Mouth Syndrome

What is burning mouth syndrome?

Primary 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 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. 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 (35%)
2. Continuous symptoms throughout the day from the time one awakes (55%)
3. Intermittent symptoms with some symptom-free days (10%)

What causes BMS?

No one really knows what causes BMS. However, it is believed to be a form of neuropathic pain. This means that nerve fibers in your mouth, for now, are functioning abnormally. It has been suggested that the nerves in your mouth that are responsible for feeling pain, are easily stimulated and excited. BMS is *not* caused by dentures or infections. In general, hormone replacement therapy is not effective in managing BMS in post-menopausal women. Contributing factors may include diabetes, menopause (although we do not know why), adverse life events (loss of job, death of family member or spouse), and anxiety and depression. Some patients will also report trouble going to sleep and staying asleep. However, it is clear that these factors are not present in all patients, although it is present in half to three-quarters of patients.

How do we know it is BMS?

There are many oral inflammatory conditions that may cause burning in the mouth such as iron deficiency anemia leading to a raw tongue, lichen planus, geographic tongue and yeast infections (especially if you wear dentures). If you have these conditions and burning, you are not considered to have primary BMS since treatment for those specific conditions will generally get rid of the burning symptoms.

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.

What to expect

One-half to two-thirds of patients will experience at least a partial improvement in symptoms within 6-7 years after symptoms begin. A small number of patients will return to normal with no residual burning. For those patients who do not experience a return to normal, symptoms tend to remain at about the same intensity. Patients who experience improvement with treatment can expect good control for years.

Treatment of BMS

There is no known cure for BMS. We can however, reduce some, if not most of your discomfort using a variety of medications, many of which are used to treat anxiety, depression, and other neurologic disorders. The medications help to reduce the activity of nerve fibers. At low doses (not normally used for treating anxiety or depression), such medications have been extremely effective in treating BMS. Since many patients also have difficulty sleeping and experience anxiety, these medications may help you to sleep and rest better, and feel less anxious.

One of the medications that you may be prescribed includes clonazepam (Klonopin), which is a relative of valium. This medication has a potential to cause dependency, so please make sure you take it in strict accordance with the way it is prescribed. If you have a substance dependence problem, please let your doctor know since there are other effective medications that do not have the potential to cause dependence. These include amitriptyline or nortriptyline and gabapentin (Neurontin). You may experience some drowsiness when you start taking these medications; however this usually goes away within 1-2 weeks. Furthermore, your prescription will be taken at night just before bedtime to minimize this side effect. Please do not drink alcohol or drive after taking your medications.

Another medication that may help you is capsaicin, an ingredient in hot chili peppers and Tabasco sauce, and is the active ingredient in a drug called Zostrix. Capsaicin has been scientifically proven to help reduce certain kinds of pain. You can try this to see if it will work. Dissolve 5-6 drops of Tabasco sauce in 1 teaspoon of water and rinse your mouth with it four times a day. The initial feeling is one of burning but within a few minutes, some patients report that the overall burning is much reduced.

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