

National Institute of Dental and Craniofacial Research

# **Burning Mouth Syndrome**



Improving the Nation's Oral Health

Burning mouth syndrome (BMS) is a painful, frustrating condition often described as a scalding sensation in the tongue, lips, palate, or throughout the mouth. Although BMS can affect anyone, it occurs most commonly in middle-aged or older women.

BMS often occurs with a range of medical and dental conditions, from nutritional deficiencies and menopause to dry mouth and allergies. But their connection is unclear, and the exact cause of burning mouth syndrome cannot always be identified with certainty.

#### SIGNS AND SYMPTOMS

Moderate to severe burning in the mouth is the main symptom of BMS and can persist for months or years. For many people, the burning sensation begins in late morning, builds to a peak by evening, and often subsides at night. Some feel constant pain; for others, pain comes and goes. Anxiety and depression are common in people with burning mouth syndrome and may result from their chronic pain.

Other symptoms of BMS include:

- tingling or numbness on the tip of the tongue or in the mouth
- bitter or metallic changes in taste
- dry or sore mouth.

## **CAUSES**

There are a number of possible causes of burning mouth syndrome, including:

- damage to nerves that control pain and taste
- hormonal changes
- dry mouth, which can be caused by many medicines and disorders such as Sjögren's syndrome or diabetes
- nutritional deficiencies
- oral candidiasis, a fungal infection in the mouth
- acid reflux
- poorly-fitting dentures or allergies to denture materials
- anxiety and depression.

In some people, burning mouth syndrome may have more than one cause. But for many, the exact cause of their symptoms cannot be found.

### **DIAGNOSIS**

A review of your medical history, a thorough oral examination, and a general medical examination may help identify the source of your burning mouth. Tests may include:

- blood work to look for infection, nutritional deficiencies, and disorders associated with BMS such as diabetes or thyroid problems
- oral swab to check for oral candidiasis
- allergy testing for denture materials, certain foods, or other substances that may be causing your symptoms.

# **TREATMENT**

Treatment should be tailored to your individual needs. Depending on the cause of your BMS symptoms, possible treatments may include:

- adjusting or replacing irritating dentures
- treating existing disorders such as diabetes, Sjögren's syndrome, or a thyroid problem to improve burning mouth symptoms
- recommending supplements for nutritional deficiencies
- switching medicine, where possible, if a drug you are taking is causing your burning mouth
- prescribing medications to
  - relieve dry mouth
  - treat oral candidiasis
  - help control pain from nerve damage
  - relieve anxiety and depression.

When no underlying cause can be found, treatment is aimed at the symptoms to try to reduce the pain associated with burning mouth syndrome.

#### **HELPFUL TIPS**

You can also try these self-care tips to help ease the pain of burning mouth syndrome.

- Sip water frequently.
- Suck on ice chips.
- Avoid irritating substances like hot, spicy foods; mouthwashes that contain alcohol; and products high in acid, like citrus fruits and juices.
- Chew sugarless gum.
- Brush your teeth/dentures with baking soda and water.
- Avoid alcohol and tobacco products.

Talk with your dentist and doctor about other possible steps you can take to minimize the problems associated with burning mouth syndrome.

# U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

#### **National Institutes of Health**

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