

# Bruxism

Bruxism is when you clench (tightly hold your top and bottom teeth together) or grind (slide your teeth back and forth over each other) your teeth.

## Alternative Names

Teeth grinding and clenching

## Causes

People can clench and grind without being aware of it during both the day and night, although sleep-related bruxism is often the bigger problem because it is harder to control.

The cause of bruxism is not completely agreed upon, but daily stress may be the trigger in many people. Some people probably clench their teeth and never feel symptoms. Whether or not bruxism causes pain and other problems may be a complicated mix of factors:

- How much stress you are under
- How long and tightly you clench and grind
- Whether your teeth are misaligned
- Your posture
- Your ability to relax
- Your diet
- Your sleeping habits

Each person is probably different.

## Symptoms

Clenching the teeth puts pressure on the muscles, tissues, and other structures around your jaw. The symptoms can cause temporomandibular joint problems (TMJ).

Grinding can wear down your teeth. Grinding can be noisy enough at night to bother sleeping partners.

Symptoms include:

- Anxiety, stress, and tension
- Depression
- Earache (due in part because the structures of the temporomandibular joint are very close to the ear canal, and because you can feel pain in a different location than its source; this is called referred pain)
- Eating disorders
- Headache
- Hot, cold, or sweet sensitivity in the teeth
- Insomnia
- Sore or painful jaw

## Exams and Tests

An examination can rule out other disorders that may cause similar jaw pain or ear pain, including:

- Dental disorders
- Ear disorders such as ear infections
- Problems with the temporomandibular joint (TMJ)

You may have a history of significant stress and tension.

## Treatment

The goals of treatment are to reduce pain, prevent permanent damage to the teeth, and reduce clenching as much as possible.

To help relieve pain, there are many self-care steps you can take at home. For example:

- Apply ice or wet heat to sore jaw muscles. Either can have a beneficial effect.
- Avoid eating hard foods like nuts, candies, steak.
- Drink plenty of water every day.
- Get plenty of sleep.
- Learn physical therapy stretching exercises to help restore a normal balance to the action of the muscles and joints on each side of the head.
- Massage the muscles of the neck, shoulders, and face. Search carefully for small, painful nodules called trigger points that can cause pain throughout the head and face.
- Relax your face and jaw muscles throughout the day. The goal is to make facial relaxation a habit.
- Try to reduce your daily stress and learn relaxation techniques.

To prevent damage to the teeth, mouth guards or appliances (splints) have been used since the 1930s to treat teeth grinding, clenching, and TMJ disorders. A splint may help protect the teeth from the pressure of clenching.

A splint may also help reduce clenching, but some people find that it makes their clenching worse. In others, the symptoms go away as long as they use the splint, but pain returns when they stop or the splint loses its effectiveness over time.

There are many different types of splints. Some fit over the top teeth, some on the bottom. They may be designed to keep your jaw in a more relaxed position or provide some other function. If one type doesn't work, another may.

For example, a splint called the NTI-tss fits over just the front teeth. The idea is to keep all of your back teeth (molars) completely separated, under the theory that most clenching is done on these back teeth. With the NTI, the only contact is between the splint and a bottom front tooth.

As a next phase after splint therapy, orthodontic adjustment of the bite pattern may help some people. Surgery should be considered a last resort.

Finally, there have been many approaches to try to help people unlearn their clenching behaviors. These are more successful for daytime clenching, since nighttime clenching cannot be consciously stopped.

In some people, just relaxing and modifying daytime behavior is enough to reduce nighttime bruxism. Methods to directly modify nighttime clenching have not been well studied. They include biofeedback devices, self-hypnosis, and other alternative therapies.

### **Outlook (Prognosis)**

Bruxism is not a dangerous disorder. However, it can cause permanent damage to the teeth and uncomfortable jaw pain, headaches, or ear pain.

### **Possible Complications**

- Depression
- Eating disorders
- Insomnia
- Increased dental or TMJ problems

Nightly grinding can awaken roommates and sleeping partners.

### **When to Contact a Medical Professional**

There is no recognized TMJ specialty in dentistry. See a dentist immediately if you are having trouble eating or opening your mouth. Keep in mind that a wide variety of possible conditions can cause TMJ symptoms, from arthritis to whiplash injuries. Therefore, see your dentist for a full evaluation if self-care measures do not help within several weeks.

Grinding and clenching does not fall clearly into one medical disciplines. For a massage-based approach, look for a massage therapist trained in trigger point therapy, neuromuscular therapy, or clinical massage.

Dentists who have more experience in evaluating and treating TMJ disorders will typically take x-rays and prescribe a mouth guard. Surgery is now considered a last resort for TMJ.

### **Prevention**

Stress reduction and anxiety management may reduce bruxism in people prone to the condition.