# Bruxism

#### What is bruxism?

Bruxism is the technical term for grinding and clenching that abrades teeth and may cause facial pain. People who grind and clench, called bruxers, unintentionally bite down too hard at inappropriate times, such as in their sleep. In addition to grinding teeth, bruxers also may bite their fingernails, pencils and chew the inside of their cheek. People usually aren't diagnosed with bruxism until it is too late because so many people don't realize they have the habit. Others mistakenly believe that their teeth must touch at all times. About one in three people suffer from bruxism, which can easily be treated by a dentist.

## Can bruxism cause harm?

People who have otherwise healthy teeth and gums can clench so often and so hard that over time their teeth become sensitive. They experience jaw pain, tense muscles and headaches along with excessive wear on their teeth. Forceful biting when not eating may cause the jaw to move out of proper balance.

### What are the signs?

When a person has bruxism, the tips of the teeth look flat. Teeth are worn down so much that the enamel is rubbed off, exposing the inside of the tooth which is called dentin. When exposed, dentin may become sensitive. Bruxers may experience pain in their temporomandibular joint (TMJ)-the jaw-which may manifest itself as popping and clicking. Women have a higher prevalence of bruxism possibly because they are more likely to experience tissue alterations in the jaw resulting from clenching and grinding. Tongue indentations are another sign of clenching.

Stress and certain personality types are at the root of bruxism. For as long as humankind has existed, bruxism has affected people with nervous tension. Anger, pain and frustration can trigger bruxing. People who are aggressive, competitive and hurried also may be at a greater risk for bruxism.

# What can be done about it?

During regular dental visits, the dentist automatically checks for physical signs of bruxism. If the dentist or patient notices signs of bruxism, the condition may be observed over several visits to be sure of the problem before recommending and starting therapy.

The objective of therapy is to get the bruxer to change behavior by learning how to rest the tongue, teeth and lips properly. When some people become aware of their problem, simply advising them to rest their tongue upward with teeth apart and lips shut may be enough to change their behavior and relieve discomfort. However, the dentist can make a plastic mouth appliance, such as a night guard that's worn to absorb the force of biting. This appliance can prevent future damage to the teeth and helps change the patient's destructive behavior.

Biofeedback is used to treat daytime clenchers by using electronic instruments to measure muscle activity and to teach patients how to reduce muscle activity when the biting force becomes too great.

Researchers are looking for other ways of treating bruxism, especially for those who tend to clench in their sleep. One

researcher developed an experimental lip simulator that electrically stimulates the lip when a person bites down too hard while sleeping. However, that method is being refined because the stimulation can wake sleepers several times in a night.

Sources: "A double night guard retainer," NYS Dental Journal, "Bruxism January 1986; Clenching - Preventing Tooth Destruction," Clinical Research Associates Newsletter, August 4, 1992; "Lip stimulator stops bruxing during sleep," Dental Office, June 1992; "Bruxism and its affect on teeth," Journal Rehabilitation, 1977, Vol. 4; "Effects of EMG biofeedback training upon nocturnal and diurnal bruxing responses," International Journal of Orofacial Myology, November 1992; "Clinical strategies to help patients reduce jaw clenching and bruxing behaviors," International Journal of Orofacial Myology March 1990; "Tongue indentations as an indicator of clenching," Clinical Preventive Dentistry, March/April 1992.