

## Signs of bruxism

We present basic information about the signs and symptoms of bruxism.

Bruxism is the habit of grinding or clenching one's teeth. It can occur during the day or at night, so some people may not be aware that they suffer from it. Grinding of the teeth may produce a characteristic noise. Clenching of the teeth does not.

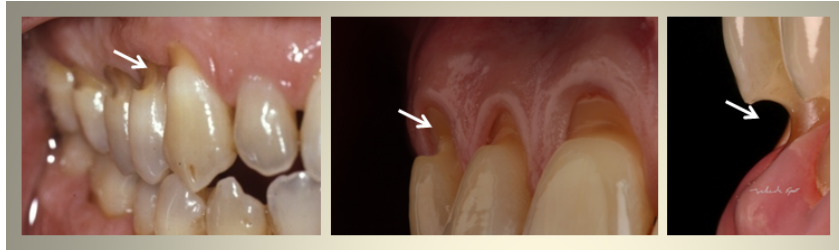
Bruxism creates an excessive force that leads to tooth wear. Grinding wears them even more. Not only does clenching wear the teeth, it can also affect other tissues that support them. If these tissues have been reduced as the result of periodontal disease, the teeth may not withstand such excessive force.

### **The first sign: excessive tooth wear.**

The following picture shows the wear as the result of grinding in the occlusion region of the anterior teeth (white arrows), and the molars and premolars (green arrow).



The wear of the tooth neck next to the gum, more commonly the result of clenching, is shown in the following photo. It creates notches (abfractions) that look like tooth decay, but are not (white arrows). The gums are also lost (gingival recession).



It is common to find both types of wear in people with severe bruxism, as shown in the following photographs. 20 years have passed between A and B.

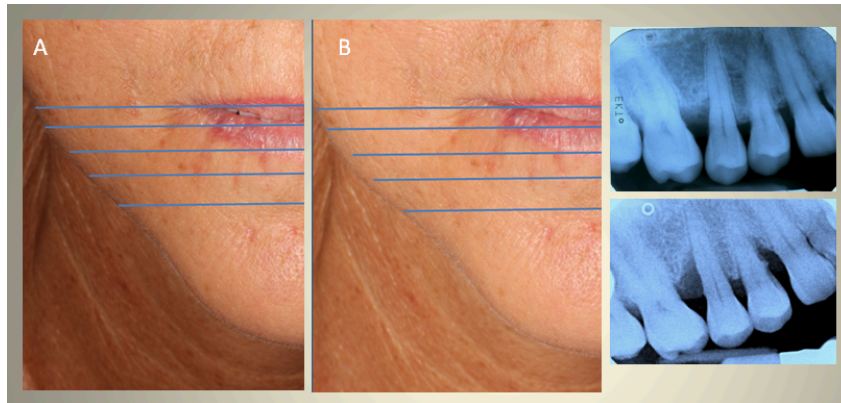


### **The second sign: fatigue, muscle contracture and pain.**

The excessive effort of the closing muscles is reflected by their hypertrophy, which makes them appear more developed. This excessive force can lead to episodes of muscle pain and contracture, which is greater in the area of the bone, where these muscles are attached. The neighboring muscles of the head, neck and back are

sometimes also involved. Pain may radiate to the jaw joint, which can be confused with earache.

The woman in the following picture has highly developed jaw muscles. When she closes her teeth tightly, you can see how the muscles contract. If the force is excessive, some teeth can lose their hold, as seen in the x-rays.



### **The third sign: sensitivity and toothache.**

The extreme force of bruxism can cause sensitivity and even severe pain of the molars receiving the greatest load, without any other reason for dental pain. This pain may not be clearly associated with a single tooth, but instead radiates to several different teeth, affecting the areas where the closing muscles are attached. People who suffer from this condition indicate the location of the pain by holding their jaw in their hand, rather than pointing to a particular tooth. These episodes may recur and may occur in other teeth.

### **The fourth sign: the feeling of "padding" or loose teeth**

This occurs more frequently with clenching, particularly when the teeth that have lost part of their hold receive excessive force. It is usually described as a feeling of having loose teeth, in a padded space or with a certain degree of elasticity.

### **Other signs**

Another sign of bruxism is limited opening of the mouth and being unable to keep it open for long, due to muscle pain. In the absence of bruxism, two and a half or three fingers together fit inside the open mouth. Two or fewer fingers are more characteristic of bruxism.



In some patients with bruxism, especially those who clench their teeth, the bone in some areas of the mouth overdevelops, forming bumps called tori.

The picture below shows these tori (with arrows) and excessive bone growth of the lower teeth.



### Combination of signs

The diagnosis of bruxism is usually clear when the tooth wear is extreme (especially as the result of grinding) or when the patient is aware of the issue. When this is not the case, the presence and degree of the above-mentioned signs should be evaluated.

The following picture shows the combined signs in the same patient. There are no clear signs of tooth wear due to grinding. Only slight abfractions on the neck of the teeth (white arrow) are evident. If this were a case of bruxism, it would be due to clenching. The patient is partially aware that she sometimes clenches her teeth. Her closing musculature is well developed (blue arrows).



### Some interesting observations

Most people have clenched their teeth at one time or another. True bruxism exists when this happens intensely and over time.

Bruxism is dynamic. It goes through stages and is related to our environment. Some mothers grind their teeth when bringing up their children. It is common among teachers, people with stressful jobs and those who are going through difficult times.

Some people have bruxism and do not even know it. If your teeth are very sensitive, you wake up with lockjaw and it is difficult for you to open your mouth, you have problems with neck spasms, your head aches when you notice the contracted muscles or your teeth sometimes hurt, but you do not have any cavities, you may have bruxism.

It is curious to note that some people go to the dentist because their teeth hurt, saying that toothache was the

last thing they needed on top of all their other problems. It may be these problems that are causing the bruxism and toothache.