

## Neuromuscular Bite Splints

There is a large portion of the populace that at some point in their lifetime, will develop a clenching or grinding habit and most will never be able to recognize it until their oral health care provider suggests it or a loved one picks up on it first.

Clenching is classified as a disorder and involves the teeth coming together or being held together for extended periods of time, resulting in muscle fatigue, headaches usually located in the temporal region of the forehead, and sometimes minimal to moderate wear of the tooth enamel on the back molars. Clenching can occur at any time night or day and is often associated with increased stress in the life of the patient.

Grinding of the teeth known as bruxism more often occurs at night when the patient sleeps and consequently may go unnoticed. However, grinding is often accompanied by somewhat loud noises which can be heard by others. Tooth grinding tends to bring an outcome of moderate to severe wear on the enamel of the teeth, as well as chipping or cracking of the teeth. Both issues can cause a recession of the periodontal tissues and subsequent bone loss, which then exposes the sensitive tooth roots and may lead to needed oral treatments.

Continual long term clenching or grinding can cause pain in the temporomandibular joint (TMJ), it can limit movement in the joints, may cause joint noises such as popping and clicking, especially when opening your mouth wide or during eating, may cause erosion of the surface bones within the joint space that may precipitate osteoarthritis and muscle spasms if left untreated. The most used method for treating temporomandibular disorders are to construct a custom-fitted bite splint which can either be worn solely at night or during the daytime as well. Bite splints help to evenly distribute the forces and pressure of bruxism over all of the patients teeth preventing a recession of the periodontal tissues. In addition, bite splints work to prevent damage to the teeth and joint spaces, and help alleviate annoying and painful symptoms such as headaches, muscle spasms, tooth pain, and joint noises.