

What is bruxism?

Bruxism (BRUK-siz-um) is a condition in which you grind, gnash, or clench your teeth when you are aware (awake bruxism) or asleep (sleep bruxism). Individuals with sleep bruxism are more likely to have other sleep disorders such as snoring or sleep apnoea where your breathing is repeatedly interrupted during sleep. Bruxism affects males and females equally. While peaking in adolescents and young adults, bruxism starts to decline after middle age and occurs less frequently among older adults. Sleep bruxism is common among children, which typically happens in the early hours of sleep.

Causes

The exact causes of bruxism are not fully understood. Below are some of the possible causes of bruxism:

- Stress and anxiety
- Abnormal tooth alignment (malocclusion)
- Medication use (such as selective serotonin reuptake inhibitors and tricyclic antidepressants)
- Neurological conditions (such as Parkinson's disease and Down's syndrome)
- Substance abuse including excessive alcohol consumption and smoking

Signs and symptoms

If you have bruxism, you may experience one or more of the following signs and symptoms:

- Grinding or clenching your teeth which may produce a loud enough noise to disturb your sleeping partner.
- Tooth wear - teeth may appear flattened/worn (Figure 1a), irregular, fractured, chipped, or loose. Teeth or dental fillings may break frequently.
- Increased generalised sensitivity in teeth.
- Temporomandibular joint (TMJ) - Pain and tenderness in your jaw joints and in the muscles that control jaw movement (i.e., uncomfortable feeling when opening your mouth too wide, clicking or popping sounds when moving the jaw) (Figure 1b).
- Dull headaches starting in the temples, recurrent migraines and pain resembling an earache.
- Discomfort or pain in the teeth while biting or chewing, mostly hard foods.
 - Frequent biting of your tongue or cheeks leaving marks/indentations (Figure 1c)
 - Poor sleep quality or feeling tired when you wake up.

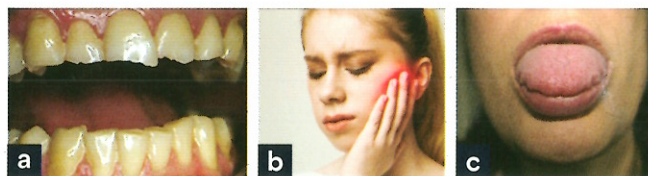


Figure 1: Signs and symptoms of bruxism (a) Tooth wear (b) Painful jaw joint (c) Tongue marks

When to see a medical or dental professional

While mild bruxism may not necessarily require treatment, severe cases can result in complications such as jaw problems, headaches and damaged teeth. It is crucial to recognize the signs and symptoms of bruxism and receive appropriate dental care since individuals, especially with sleep bruxism, may not be aware of their condition until complications arise. Consider consulting your medical or dental professional if you/your child have/has any signs and symptoms of bruxism or any concerns regarding your/your child's jaw or teeth.

Treatment

In most cases, bruxism can be successfully treated. Treatment may involve:

Symptomatic relief

- Applying heat packs or warm compresses to the muscles around your jaw can help reduce pain and discomfort associated with TMJ issues. Heat promotes relaxation and increases blood flow to the affected area which reduces muscle tension.
- Limiting extreme mouth movements, such as wide yawning or excessive gum chewing, can prevent further strain on the jaw joint and muscles. This precaution can assist in reducing pain and inflammation.
- Consuming foods that are soft and easy to chew can help minimize stress on the TMJ and prevent excessive symptoms. Avoiding tough or hard-textured foods can provide relief by reducing the need for extensive jaw movements when you eat.
- Physical therapy, also known as physiotherapy, can be beneficial if you are experiencing TMJ-related issues. It may involve exercises, manual therapy, and techniques aimed at improving jaw movement, reducing pain, and enhancing muscle strength and coordination in the jaw.

Psychotherapy

- Psychotherapy, particularly stress management and relaxation techniques, can play a crucial role in managing TMJ-related issues. Stress and anxiety often contribute to jaw clenching and teeth grinding, which can worsen TMJ-related issues. Psychotherapy can help you learn strategies to cope with stress and reduce these habits, ultimately providing relief from TMJ discomfort.

Bite guards/night guards or dental adjustment

- Your dentist may recommend the use of bite/night guards or splints, also known as occlusal appliances (Figure 2). These custom-made devices are designed to fit over the teeth and are worn during sleep. They help protect the teeth from the effects of grinding and clenching by reducing the strain on the TMJ and easing TMJ-related symptoms.
- In some cases, an improper bite may contribute to TMJ issues. Your dentist/orthodontist may recommend dental adjustments, such as reshaping or realigning the teeth to improve your overall bite and reduce stress on the TMJ.

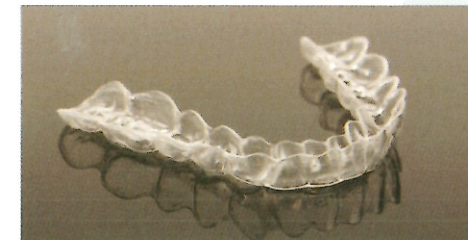


Figure 2: Night guard/Dental splint

Medications or treatment of underlying conditions

Your dentist or doctor may prescribe the following medications or treatments, depending on your bruxism situation.

- Anti-inflammatory drugs, such as nonsteroidal anti-inflammatory drugs (NSAIDs) or corticosteroids, to reduce inflammation and relieve pain associated with TMJ-related issues. These medications work by suppressing inflammation in the affected joint and the surrounding tissues. Muscle relaxants may also be prescribed to reduce muscle spasms and tension in the jaw.

- Antianxiety medications, including benzodiazepines or selective serotonin reuptake inhibitors (SSRIs), may be recommended for individuals with TMJ-related symptoms who experience anxiety or stress-related jaw clenching and teeth grinding. These medications can help manage anxiety and, as a result, reduce the frequency and intensity of these harmful habits, which can contribute to TMJ discomfort.
- Botox injections have emerged as a potential treatment option for TMJ disorders. When administered by a qualified healthcare provider, Botox can temporarily paralyse or relax the muscles involved in jaw movement. This relaxation of the jaw muscles can reduce the force exerted on the TMJ, resulting in pain relief and improved jaw function. Botox injections are typically considered for individuals who have not responded well to other treatment methods or who have persistent muscle-related pain/discomfort.

These approaches, when applied separately or in combination, can provide significant relief for individuals experiencing TMJ-related symptoms, improving their oral health and overall quality of life. It is important to consult your dentist/doctor/other healthcare professionals for a proper diagnosis and personalized treatment plan. Your healthcare professional should always monitor medication-based treatments for TMJ issues, as their usage and effectiveness can vary depending on individual factors and the specific nature of your TMJ condition. Also, medication may be used in conjunction with other therapies, such as physical therapy or dental interventions, to provide comprehensive relief and address the underlying causes of TMJ-related problems.

Remember...

- **Bruxism may have several underlying causes, including stress/anxiety, abnormal tooth alignment, use of particular medications, some neurological conditions and substance abuse**
- **Treating bruxism in its early stages is crucial in preventing potential dental complications, as there can be various underlying causes of this condition**
- **Generally, bruxism can be successfully treated. Consult your dentist/doctor if you have concerns with signs and symptoms of bruxism**
- **Avoid taking any medications for bruxism unless prescribed by your dentist/doctor**
- **Follow the instructions of your dentist/doctor when taking prescribed medications and/or wearing recommended bite appliances to manage bruxism**

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Bruxism

Information for Patients

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