

## **Bruxism**

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Involuntary, excessive grinding, clenching, or rubbing of the teeth during nonfunctional movements of the masticatory system. It refers to movements of the jaws that are outside of the normal functional activity of the teeth and jaws (eg, speaking, chewing, or swallowing). Types: day time /diurnal bruxism: it is the conscious or subconscious grinding of teeth usually during the day. It can occur along with parafunctional habits such as chewing pencils, nails, cheeks and lips. It is usually silent except patients with an organic brain disease. Nocturnal bruxism: it is the subconscious grinding of teeth characterized by rhythmic patterns of masseter activity. Pathophysiological factors are believed to play a role in the precipitation of bruxism. In younger children, bruxism may be due to the immaturity of the masticatory neuromuscular system. more than 80% of sleep bruxism episodes occur during sleep stages 1 and 2 of non rem (light sleep stages), and 5% to 10% in rem (deep stages). bruxism and habitual snoring are closely related. Obstructive sleep apnea causing sleep bruxism. Other pathophysiological factors, Psychological factors. Symptoms of bruxism.: anxiety, stress, and tension, depression, earache, eating disorders, headache, hot, cold, or sweet sensitivity in the teeth, insomnia, sore or painful jaw. In Diagnosis history is very important. Patient is asked about muscular tenderness in morning. Occasionally patient may not be aware of habit if only nocturnal bruxism in present. Examination: typical wear facets on occlusal table are evident. By using articulating paper, underlying occlusal disharmony may be find out. The signs and symptoms of bruxism depend on frequency of bruxism, intensity, age of patient associated with duration of habit. Clinical features are occlusal trauma: resulting in mobility (more in the mornings), tooth structure: results in nonfunctional occlusal wear, sensitivity; atypical shiny wear facet with sharp edges, pulpal exposure; crown restoration, muscular tenderness: lateral pterygoid, masseter on palpation; fatigue on waking, hypertrophy of masseter, TMJ disturbances: crepitation, clicking, restriction of mandible movement; deviation of chin; pain ( dull , unilateral ), headache : muscular contraction type. Other signs and symptoms: sounds-(grinding and tapping); soft tissue trauma ; small ulceration or ridging on buccal mucosa opposite the molar teeth. Treatment is occlusal splints and occlusal adjustments are usually sufficient to correct habit. Occlusal splints are indicated to reprogram the existing muscular pattern. Soft splints are advisable with flat occlusal surfaces so that mandibular movements will be free in all planes which breaks the reflex response of muscles established during habit. Restorative, severe abrasion, pulp therapy, stainless steel crown, psychotherapy, counseling, tension relief, habit awareness -increase voluntary control, relaxing training, voluntary relaxation, hypnosis, drugs, placebo, vapo coolants – ethyl chloride for pain –TMJ, local anesthetics – TMJ, tranquilizers, sedatives, muscle relaxants, diazepam – anxiety and alteration of sleep arousal\*/, tricyclic antidepressants, biofeedback, positive feedback for learning of tension reduction. By maxillofacial surgery is treated more severe bruxism, and many people with bruxism will not need surgery. In some cases bruxism can affect open extraction, but on the other hand crowns, inlays, and prostheses are sometimes used to correct the way the teeth fit together and to reshape worn teeth. Sometimes, further restorative surgery may be needed after more grinding and clenching occurs over time, destroying the overlays or crowns.

**Key Words:** *Bruxism, TMJ, Mandibular movement.*