TEMPOROMANDIBULAR JOINT (TMJ) DYSFUNCTION

The temporomandibular joint (TMJ) is the jaw joint directly in front of the ear. Within the TMJ, there are moving parts that allow the upper jaw to close on the lower jaw. This joint is a typical sliding "ball and socket" that has a disc sandwiched between it. The TMJ is used throughout the day to move the jaw, especially in biting and chewing, talking, and yawning. It is one of the most frequently used joints of the body. If the joint or its attached muscles are damaged or inflamed, it can cause pain, limitation of jaw movement, muscle tenderness and joint clicking. There are many symptoms that can occur with this condition, and many patients with TMJ problems often have ear pain or fullness in the ear. Typically in these patients, examination of the ear usually shows normal ear canals and eardrums. Pressing a finger directly over the joint may recreate the pain and tenderness associated with this disorder.

TMJ dysfunction is often seen in younger and middle-aged women, however it can occur in all ages and in men as well. Sometimes it is seen in patients that have had injury to their jaw joint at some point of their life. Some conditions and behaviors that may contribute to TMJ dysfunction are listed:

1. Teeth grinding and teeth clenching (bruxism) increase the wear on the cartilage lining of the TMJ. Those who grind or clench their teeth may be unaware of this behavior unless they are told by someone observing this pattern while sleeping or by a dental professional noticing telltale signs of wear and tear on the teeth. Many patients awaken in the morning with jaw or ear pain.

2. Excessive gum chewing or fingernail biting

3. Dental problems and misalignment of the teeth (malocclusion). Patients may complain that it is difficult to find a comfortable bite or that the way their teeth fit together has changed. Chewing on only one side of the jaw can lead to or be a result of TMJ problems.

4. Trauma to the jaw: Previous fractures in the jaw or facial bones can lead to TMJ disorders.

5. Stress frequently leads to unreleased nervous energy. It is very common for people under stress to release this nervous energy by either consciously or unconsciously grinding and clenching their teeth.

6. Occupational tasks such as holding the telephone between the head and shoulder may contribute to TMJ disorders.
Treatment:

1. Jaw rest: Patients are recommended to eat only soft foods for a period of 4 weeks. It can be beneficial to keep the teeth apart as much as possible. It is also important to recognize when tooth grinding is occurring and devise methods to cease this activity. Patients are advised to avoid chewing gum or eating hard, chewy, or crunchy foods such as raw vegetables, candy, or nuts. Foods that require opening the mouth widely, such as a big hamburger, are also not recommended.

2. Heat and ice therapy: These assist in reducing muscle tension and spasm. However, immediately after an injury to the TMJ, treatment with cold applications is best. Cold packs can be helpful for relieving pain.

3. Medications: Anti-inflammatory medications such as Ibuprofen or Motrin help in decreasing the inflammation in the joint. Our recommended dose is 200-400 mg with food three times a day. Muscle relaxants, such as diazepam (Valium), aid in decreasing muscle spasms.

4. Occlusal therapy: A custom-made acrylic appliance which fits over the teeth is commonly prescribed for night but may be required throughout the day. It acts to balance the bite and reduce or eliminate teeth grinding or clenching (bruxism).

TMJ dysfunction can be very uncomfortable and quite worrisome for patients. This condition typically improves significantly if the above recommendations are adhered to. The discomfort can return at times when the joint becomes inflamed, but if you begin treatment as listed above this usually helps resolve the problem.

We hope this information is helpful.