



Temporomandibular Joint Disorders

What is the Temporomandibular Joint (TMJ)?

The TMJs, commonly known as the jaw joints, are the two "hinges" between the jawbone (mandible) and the temporal bone at the sides of the skull. To feel where they are, put an index finger on each side of your face just in front of your ears and gently open and close your mouth.

What is TMJ Disorder?

TMJ Disorder or **TMD** is not just one disorder but a broad range of conditions, often painful, that affect the jaw system. The jaw system is composed of the two TM joints, the muscles that control jaw movements and the teeth. The discomfort from TMD may come from any or all of these components. Discomfort from the muscles is the most common form of the disorder and it often is the result of overuse. Loss of structural integrity within the joint is usually evidenced by clicking or grating sounds during jaw movements. But joint sound alone is usually NOT an indication there is a need for treatment. Finally, the position and health of the joint and muscles can be significantly influenced by the fit of the teeth. A poor bite may lead to muscular or joint symptoms as well as to sensitive teeth.

What are the symptoms of TMD?

One or all of these symptoms may be noted:

- Pain in the muscles of the face and neck. This pain may come in the form of: headaches, pain around one or both ears, in the temple region, or along the jaw and cheek bones.
- Restricted movement or locking of the jaw.
- Painful clicking, popping or grating sounds while opening or closing the mouth.
- A sudden and major change in the way the upper and lower teeth fit together.
- Difficulty or discomfort during chewing.

The symptoms of TMD may develop slowly or come suddenly as a result of a traumatic injury. They often come and go in cycles. The good news is that for most people, discomfort in the area of the jaw joint or the jaw muscles is not a signal that a serious problem is developing. Generally, the symptoms from TMD are occasional and temporary and only a small percentage of people with TMD develop significant, long-term symptoms.

What causes TMD?

Many times a combination of factors will trigger symptoms:

- A traumatic injury may damage the ligaments that hold the TMJ together creating a laxity within the joint. Trauma may also injure the shock-absorbing disc, which is positioned between the bones of the joint. The disc may be displaced or ruptured which impedes smooth motion of the jaw.
- The joint may be injured suddenly such as sustaining a blow to the face, or strained over time due to overuse (such as a professional singer may experience).
- Oral habits such as clenching or nail biting over work the joint and muscles. Postural habits such as cradling a phone between the head and shoulder or bearing down on your teeth during heavy exertion have a long-term impact on the health of the jaw system.
- Malocclusion (a poor bite) or missing teeth may cause strained jaw movements while chewing.
- Rarely are TMD symptoms a sign of systematic disease such as arthritis.
- The role of stress as a major cause of TMD disorders is unclear.

How is TMD diagnosed?

There is no widely accepted, standard test now available to correctly diagnose TMD. A description of symptoms, a thorough medical and dental history and an examination are necessary for initial evaluation. Imaging studies (such as x-rays) may also be recommended.

How is TMD treated?

Treatment for TMD varies but usually begins with simple self-care measures. Because most TMD symptoms are temporary and do not get worse, conservative treatment is often all that is needed to relieve the discomfort. Your health care provider may recommend an oral appliance called a splint, which is a plastic guard that fits over the teeth. This can reduce muscle tension and correct the position of the mandible. Medications, which relieve pain and reduce inflammation (such as ibuprofen) may be recommended. Physical therapy is often helpful. The small subset of people with chronic or severe problems may require more involved treatment. Orthodontics (braces), occlusal equilibration (bite adjustment), restorative dentistry or surgery may sometimes be necessary.

What can I do?

The most important therapies may be those you can do for yourself. Because TMD discomfort is often the result of overworked or strained jaw joints, decreasing use of these is very important for managing painful symptoms. Habits such as clenching, grinding or nail biting are a primary cause of jaw strain. Monitor your habits and try to remember - your teeth should not come together except while swallowing or chewing. Avoid extreme jaw movements (such as wide yawning) and **DO NOT CHEW GUM**. Improving your sleep by getting frequent physical exercise and avoiding caffeinated beverages will help. You may need to avoid tough, crunchy or chewy foods. Many people need to initially eat only very soft foods and take tiny bites during painful episodes. Moist heat, massage and gentle stretching exercises often help. Pay attention to your posture! Short-term use of over the counter analgesics (Advil, Motrin, Aleve) will help when taken in moderation.