

Temporo-Mandibular Joint (TMJ) Dysfunction

Approximately 60% of people develop problems with their temporo-mandibular joint at some point in their lives. This joint, the TMJ, is located where the mandible (the lower jaw) joins the temporal bone of the skull, immediately in front of the ear on each side of your head. You move the joint every time you chew or swallow. You can locate this joint by putting your finger on the triangular structure in front of your ear. Then move your finger just slightly forward and press firmly while you open your jaw all the way and shut it. The motion you feel is the TMJ. You can also feel the joint motion in your ear canal. These maneuvers can cause considerable discomfort to a patient who is having TMJ trouble. Additionally, the joint is controlled by four muscles, called the muscles of mastication (the chewing muscles). These muscles often get inflamed and tender. Two of these muscles are located deep to your ear and behind your cheek. Hence, they can cause deep seated ear pain (which can easily be confused with an ear infection) or pain behind the cheek (which can be confused with a sinus infection). Antibiotics will not improve the pain. Other areas of pain can be along the side of the head (over the temples) or along the jaw. Often, if TMJ dysfunction is severe, the pain will radiate into the neck and some of your neck muscles can become irritated and tender. The pain may be sharp and searing, occurring each time you swallow, yawn, talk, or chew, or it may be dull and constant.

TMJ Dysfunction can cause the following symptoms:

- Ear pain
- Sore jaw muscles
- Temple/cheek pain
- Jaw popping/clicking
- Locking of the jaw
- Pain with opening the mouth fully
- Frequent head/neck aches

A very common focus of pain is in the ear. Many patients come to the ear specialist quite convinced their pain is from an ear infection. When the earache is not associated with a hearing loss and the eardrum looks normal, the doctor will consider the possibility that the pain comes from a TMJ dysfunction.

If you habitually **clench, grit, or grind your teeth**, you increase the wear on the cartilage lining of the joint, and it doesn't have a chance to recover. Many people are unaware that they grind their teeth, unless someone tells them so. Chewing gum much of the day can cause similar problems. **Stress and other psychological factors** have also been implicated as contributory factors to TMJ dysfunction. Other causes include teeth that do not fit together properly (improper bite), malpositioned jaws, and arthritis. In certain cases, chronic malposition of the cartilage disc and persistent wear in the cartilage lining of the joint space can cause further damage.

What Can Be Done for TMJ?

- Rest the muscles and joints by eating soft foods.
- Do not chew gum.
- Avoid clenching or tensing.
- Relax muscles with moist heat (1/2 hour at least twice daily).

- Massage the muscles around the TMJ and ear.
- Anti-inflammatory drugs (Aspirin, Advil, Motrin, Ibuprofen, Aleve...). These medications are given both to relieve pain and to decrease inflammation. For this reason, your doctor might recommend taking the medication three to four times per day for up to one week. These medications can upset the stomach, so they should be taken with food. Stay hydrated and drink plenty of fluids. If you have a history of gastritis, an ulcer, or you take blood thinning medication (Coumadin, plavix, etc.), then you should talk to your primary care physician before taking high doses of these medications.

Other therapies may include **fabrication of an occlusal splint (bite guard)** to prevent wear and tear on the joint. Improving the alignment of the upper and lower teeth and surgical options are available for advanced cases. After diagnosis, your otolaryngologist may suggest further consultation with your dentist and oral surgeon to facilitate effective management of TMJ dysfunction.