

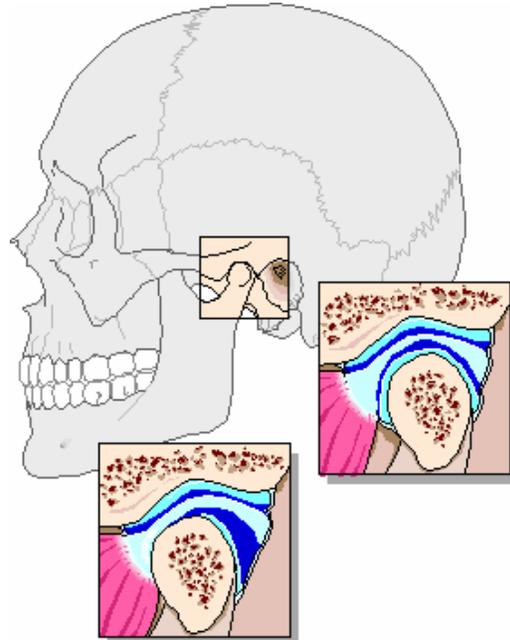
Temporomandibular Joint Dysfunction

What is the TMJ?

One of the most important joints in the body is the temporomandibular joint or TMJ. This joint is located where your jawbone joins your skull just in front of your ear. While it is small in size, the symptoms that can be created by imbalances in its function can wide reaching and sometimes debilitating.

How common are problems with this joint?

Experts cannot agree on the prevalence of TMJ problems due to their definition of what constitutes TMJ imbalance. If the definition is limited to only those people who have clicking and localized pain in the TMJ, then this is found in 4% of the general population. However, if you consider that a person has a TMJ imbalance if it causes symptoms like headache, dizziness, muscle pain, etc., then **the estimates start at 20% of the population and go up.**



What causes problems?

The most common causes of TMJ problems include **stress, bruxism or clenching of the teeth, malocclusion due to your teeth not meeting properly when you bite, and trauma.** Trauma can be from an accident or from repetitive disuse of the joint. An example would be chewing only on one side of your mouth.

What symptoms can be attributed to imbalances in this joint?

As was stated above, the symptoms that can be created from an imbalance in this joint are very far reaching. A general statement is that **almost any symptom of head and neck pain** could have as at least part of its cause an imbalance in this joint. These include **pain and ache in the jaw, teeth, sinuses, behind the eye, in the ear, on the side and back of the head.** In addition to this, you can have pain and **restriction in your shoulder** and even changes in how you walk. A study published in the late 1970's showed that there was a correlation between many causes of **scoliosis** and TMJ problems. The author's summary, a dentist, was that a chiropractor and a dentist should examine every scoliosis patient.

The major signs and symptoms of TMJ dysfunction consist of pain, tenderness, joint noise and limitation in opening your mouth. Pain occurs in almost all patients. It is usually one sided, and may be localized or wide spread and may be referred to any area of the head. The **pain is often worse after eating or upon awakening** if you clench or grind your teeth at night. Tenderness, in the muscles of chewing or at the back of the head, is found in the vast majority of patients

How is it treated?

To understand how we treat the TMJ, you need some basic background knowledge on how the joint functions and is formed. First, **a muscular sling on each side supports your jaw**. This sling consists of a muscle on the outside and inside of your jawbone. There is a large flat muscle on your skull that lies above your ears on each side over your temple. This is one of the major clenching muscles and is used in chewing your food. Inside your mouth, there is a muscle that controls a disc, just like in your back, that is a spacer between the top of your jawbone and your skull. Your jaw is kept closed by the continuous contraction of these major muscles. As you can imagine, you should have light equal contraction and not severe over contraction of the muscles. In order for these muscles to be evenly contracting, your head must be level with the ground. If you have a tipped head, you will have over contraction of the muscles on one side of your skull causing an uneven tracking of your jaw when you open and close.

To feel the action of the jaw when it opens, place your index finger under the bony ridge that is in front of your ears. Keep light pressure pushing inwards and slowly open your mouth. You should feel the top of the jaw, the condyle, moving forward evenly on both sides. The jaw doesn't just pivot it also moves forward as you open your mouth. While the condyle is moving forward that small muscle inside your mouth is pulling the disc forward. If the muscle is functioning properly, you will not have any popping or clicking. **Balancing of the muscles corrects many of the TMJ problems** that have not progressed to the point where severe damage to the joint has occurred. When this happens, a dentist, specially trained in TMJ disorders, has to make a device to control the positioning of the jaw. This is similar to casting a broken bone so that it will heal properly.

How is the joint examined?

The examination of a person with potential TMJ problems begins with **watching how you talk and open your mouth**. You can spot this in others by seeing if their jaw moves to one side when they open their mouth, or if they talk out of one side of their mouth. Then the **muscles of the jaw are palpated or felt for areas of tenderness** or over contraction. The overall postural balance must be examined. Testing helps to reveal which muscles are over contracting or under contracting. We also need to find out why the muscles are reacting the way that

they do. Over contraction can be caused by your **teeth hitting improperly**, spinal imbalances especially in the upper neck, food sensitivities, stress and even falling arches.

The treatment of a TMJ imbalance may be simple or complex. A complex case involves joint degeneration due to abnormal chewing patterns that has gone on for years. The longer a person has a TMJ imbalance, the more severe the symptoms can become. In some cases, we will need to work with a dentist trained in the treatment of TMJ imbalances to stabilize the joint and allow it to heal.

What can I do to help yourself?

To help reduce muscle tenderness, rub ice over the jaw muscles for 20 – 30 seconds and then put a wet warm face cloth over the muscles for 2 minutes.

What should I avoid doing?

First, try and not break things with your teeth. This sounds funny, but breaking an ice cube or a nut can create tremendous stress on the jaw joint.

Gum chewing is another activity that may make you temporarily feel better but aggravates the joint.

Biting on objects like pencils also stresses the joint.