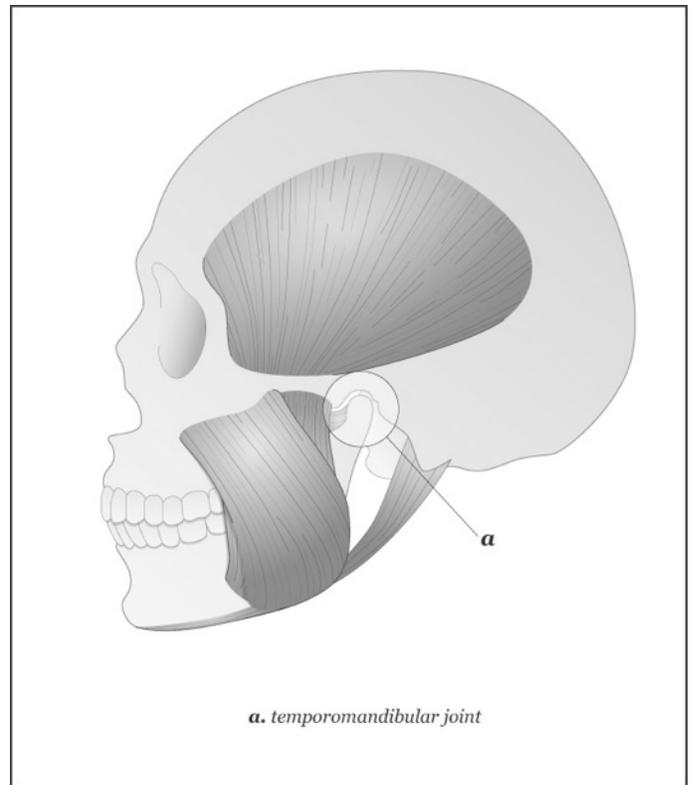


What is TMJ?

TMJ has become a catch-all term for multiple disorders of the jaw joint, but the truth is that TMJ simply stands for temporomandibular joint. We all have TMJs, but only some people develop disorders in those joints. These disorders can vary from mild clicking and popping with no pain to extremely painful conditions that make it nearly impossible to chew correctly or talk for any length of time without severe discomfort. But how are the TMJs supposed to function, and what happens to create a disorder?

The TMJs are actually a pair of joints that function together as the hinge that allows your lower jaw to move up and down, and side to side. Together with the teeth and the facial muscles, the TMJs join into a system that allows us to chew, swallow, talk, and yawn. The joints provide the mobility, the muscles fire the action, and the teeth dictate the landing place, or place of rest. When one element is out of balance, the other two are no longer able to function properly and pain, restricted movement, and/or locking and popping in the joint itself can develop. This is called a TMJ disorder, or TMD.



While it is true that TMD can be the result of congenitally malformed joints, those cases are extremely rare. More commonly, the cause is multifactorial. The TMJ's ability to move in multiple directions makes them more fragile than other joints in the body, and they can be very sensitive to imbalance and misalignment. Often tooth position is involved in TMD, but



trauma – even early trauma – can also be a cause or a significant contributing factor. Even something as simple as holding the teeth together too much of the time (clenching) can stress the joints and muscles. Normal tooth function (chewing and swallowing) should account for no more than 4 to 6 minutes of tooth contact per day. However, many people have an unconscious daytime or nighttime clenching habit that may keep their teeth in contact for hours at a time. This action can compress the joints, strain the muscles, and trigger significant pain.

In cases where tooth position is a primary component of the imbalance, the TMJs and the muscles surrounding them have the unique ability to adapt themselves to the best position for chewing and swallowing, even when that position is not ideal for the rest of the system. This kind of adaptation can cause pain and fatigue in the facial muscles, headaches, pain in the joints themselves, and even pain or ringing in the ears. If the imbalance remains unaddressed, over time the TMJs will eventually begin to remodel themselves into an adapted position. This is often when clicking, popping, locking, and grating may begin to occur.

Not everyone with a less-than-perfect bite will develop a TMJ disorder, and many disorders can be well-controlled with a few simple adjustments to daytime clenching and grinding habits and the use of a nightguard during sleep. For those individuals who require more treatment in order to stabilize the functional balance between the muscles, joints, and bite, functional orthodontics to realign the bite into a better supportive position for muscle and joint function can be very successful in resolving TMD. Surgery is only useful in the rarest of cases, and should be pursued only after less invasive treatment options have been explored.

For more information on TMD treatment in our office, please visit the *TMJ Dysfunction Treatment and Services* page on our website at www.drmartharich.com.