



TMJ DYSFUNCTION

The Temporomandibular joint (TMJ) is one of the most commonly used joints in the body. We use the TMJ or jaw for eating, talking, yawning, coughing, sneezing and any other activities using the mouth. The TMJ and its associated musculature are commonly implicated in facial pain and headaches. The TMJ is the jaw joint and is formed between the skull and the mandible or jaw bone. It has an intra-articular disc that is connected to the joint capsule. The front of the disc is attached to muscle, and the back of the disc is attached to the skull via the retrodiscal tissues.

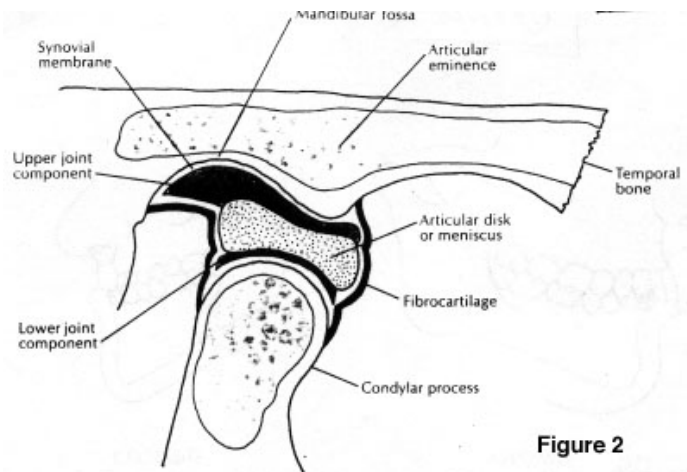


Figure 2

The muscles that work on the TMJ are known as the muscles of mastication. They normally move the jaw for chewing and speaking. The main muscles are the temporalis, masseter, medial and lateral pterygoids. The muscles of the left and right TMJ must work together, as movement at one joint affects the other TMJ.

CAUSES

TMJ dysfunction can generally be broken down into disorders of the muscles, disc or joint structures.

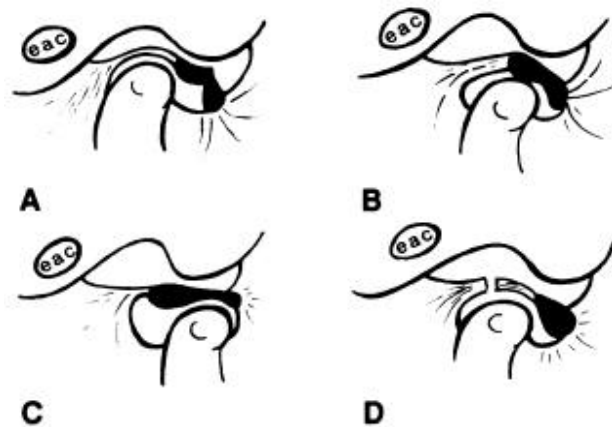


Fig. 2.—Disk position in internal derangement. eac = external auditory canal.

A, Anteriorly displaced disk with both anterior and posterior bands in front of condyle.

B, Disk reduces to normal position as mouth opens. Friction between condyle and posterior band passing in opposite directions is one cause of audible click.

C, Disk after reduction to normal position when mouth is completely open.

D, Displaced disk with perforated bilaminar zone.

Muscular Pain

The most common dysfunction around the TMJ is muscle imbalance or overuse associated with bruxism. Bruxism is excessive clenching or grinding of the teeth that is not part of the normal chewing or talking movements of the jaw. People often have no idea they clench or grind as much as they do, especially if it happens overnight while they sleep. Bruxism overworks the facial musculature and can lead to pain as the muscles fatigue. There can be some pain from other structures, but the majority of the pain is usually muscular in origin.

Discogenic Pain

The intra-articular disc can sublux or move out of its normal position. Usually the disc moves too far anteriorly and may restrict mouth opening. This can occur as a result of an acute trauma or prolonged bruxing. When the teeth are clenched there is tension on the retrodiscal tissues which gradually overstretch as time goes on.

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There are three levels of disc subluxing – subluxing with relocation of the disc on mouth opening, subluxing without relocation of the disc on opening without disc damage and subluxing without relocation of the disc on opening with disc damage. Often patients progress through the stages over time of their condition if left untreated.

Other Causes

Less commonly the joint structures can be irritated. This can happen with osteoarthritis, rheumatoid arthritis or infection.

SYMPTOMS

Pain is the most common symptom of TMJ problems, although not everyone gets pain. Symptoms can include:

- Facial pain
- Pain in or around the jaw joints or ear
- Being unable to open the mouth comfortably
- Clicking, popping, grating sounds in the jaw joint
- Headaches
- The bite feeling uncomfortable
- Swelling on the side of the face
- Neck, shoulder and back pain

Occasionally symptoms can include ringing in the ears, reduced hearing, dizziness and visual problems. These symptoms should be investigated further to exclude other sources of the symptoms as they are not the most common presentation.

ASSESSMENT & TREATMENT

At The Physiotherapy Clinic we take a thorough history of your problem and do a thorough physical assessment. This allows us to understand your symptoms and to formulate an appropriate treatment plan.

Treatment addresses what we find in your assessment. It may involve massage to tight muscles, mobilisation of the TMJ itself, exercises to improve the co-ordination of your muscles of mastication and techniques to improve your postural habits. You may be taught to position your tongue in a different position at rest and to become aware of your jaw position throughout the day. Education regarding your mouth habits such as chewing gum or biting nails is an important part of your treatment.

The success of your treatment relies heavily on you becoming aware of your poor postural and jaw habits and changing them as needed. The manual therapy we use with you (massage etc) affects what is there at the time of your treatment, what you do at home helps the pain stay away.

SUMMARY

TMJ problems are often related to the way you move your jaw. A combination of manual therapy and self-management techniques (exercises, posture correction, jaw and tongue position awareness) is usually very successful in reducing symptoms associated with TMJ dysfunction.