

Temporomandibular Joint and Muscle Disorders

Temporomandibular joint and muscle disorders, commonly called “TMJ,” are a group of conditions that cause pain and dysfunction in the jaw joint and muscles that control jaw movement. Some estimates suggest that TMJ disorders affect more than 10 million Americans; the conditions appear to be more common in women than men.

Causes

Trauma to the jaw or temporomandibular joint plays a role in some TMJ disorders. But for most jaw joint and muscle problems, scientists don't know the causes. For many people, symptoms seem to start without obvious reason. Research disputes the popular belief that a bad bite or orthodontic braces can trigger TMJ disorders.

There is no scientific proof that clicking sounds in the jaw joint lead to serious problems. In fact, jaw clicking is common in the general population. Jaw noises alone, without pain or limited jaw movement, do not indicate a TMJ disorder and do not warrant treatment.

The roles of stress and tooth grinding as major causes of TMJ disorders are also unclear. Many people with these disorders do not grind their teeth, and many long-time tooth grinders do not have painful joint symptoms. Scientists note that people with sore, tender chewing muscles are less likely than others to grind their teeth because it causes pain. Researchers also found that stress seen in many persons with jaw joint and muscle disorders is more likely the result of dealing with chronic jaw pain or dysfunction than the cause of the condition.

Signs and symptoms

A variety of symptoms may be linked to TMJ disorders. Pain, particularly in the chewing muscles and/or jaw joint, is the most common symptom. Other likely symptoms include:

- radiating pain in the face, jaw or neck
- jaw muscle stiffness
- limited movement or locking of the jaw
- painful clicking, popping or grating in the jaw joint when opening or closing the mouth
- a change in the way the upper and lower teeth fit together

Treatment

For most people, discomfort from TMJ disorders will eventually go away with little or no treatment. Some, however, develop significant, long-term problems. Simple steps that may help ease symptoms temporarily include eating soft foods, applying ice packs, and avoiding extreme jaw movements such as wide yawning and gum chewing. Short-term use of over-the-counter or prescription pain medicines and learning techniques to reduce stress may also provide relief. Even if symptoms become significant and persistent, most people still do not need aggressive types of treatment.

Because the most common jaw joint and muscle problems are temporary and do not get worse, simple treatment is all that is usually needed to relieve discomfort.

Self-care practices

There are steps you can take that may be helpful in easing symptoms, such as:

- eating soft foods
- applying ice packs
- avoiding extreme jaw movements (such as wide yawning, loud singing and gum chewing)
- learning techniques for relaxing and reducing stress
- practicing gentle jaw stretching and relaxing exercises that may help increase jaw movement. Your health care provider or a physical therapist can recommend exercises if appropriate for your particular condition

Pain medications

For many people with TMJ disorders, short-term use of over-the-counter pain medicines or nonsteroidal anti-inflammatory drugs (NSAIDs), such as ibuprofen, may provide temporary relief from jaw discomfort. When necessary, your dentist or doctor can prescribe stronger pain or anti-inflammatory medications, muscle relaxants or antidepressants to help ease symptoms.

Stabilization splints

Your doctor or dentist may recommend an oral appliance, also called a stabilization splint or bite guard, which is a plastic guard that fits over the upper or lower teeth. Stabilization splints are the most widely used treatments for TMJ disorders. Studies of their effectiveness in providing pain relief, however, have been inconclusive. If a stabilization splint is recommended, it should be used only for a short time and should not cause permanent changes in the bite. If a splint causes or increases pain, stop using it and see your health care provider.

The conservative, reversible treatments described are useful for temporary relief of pain—they are not cures for TMJ disorders. If symptoms continue over time, come back often, or worsen, tell your doctor.

Irreversible treatments

Irreversible treatments that have not been proven to be effective—and may make the problem worse—include orthodontics to change the bite; crown and bridge work to balance the bite; grinding down teeth to bring the bite into balance, called “occlusal adjustment”; and repositioning splints, also called orthotics, which permanently alter the bite.

Source: National Institute of Dental and Craniofacial Research