

# Temporomandibular Joint Disorders and Pain

## TMJ Disorders Overview

There are two matching temporomandibular joints -- one on each side of your head, located just in front of your ears. The abbreviation "TMJ" literally refers to the joint but is often used to mean any disorders or symptoms of this region.

Temporomandibular joint and muscle disorders (TMJ disorders) are problems or symptoms of the chewing muscles and joints that connect your lower jaw to your skull.

## TMJ Causes and risk factors

Many TMJ-related symptoms are caused by the effects of physical stress on the structures around the joint. These structures include:

- Cartilage disk at the joint
- Muscles of the jaw, face, and neck
- Nearby ligaments, blood vessels, and nerves
- Teeth

For many people with temporomandibular joint disorders, the cause is unknown. Some causes given for this condition are not well proven. These included:

- A bad bite or orthodontic braces
- Stress and tooth grinding. Many people with TMJ problems do not grind their teeth, and many who have been grinding their teeth for a long time do not have problems with their TMJ joint. For some people, the stress associated with this disorder may be caused by the pain as opposed to being the cause of the problem.

Poor posture can also be an important factor in TMJ symptoms. For example, holding the head forward while looking at a computer all day strains the muscles of the face and neck.

Other factors that might make TMJ symptoms worse are stress, poor diet, and lack of sleep.

Many people end up having "trigger points" -- contracted muscles in your jaw, head, and neck. Trigger points can refer pain to other areas, causing a headache, earache, or toothache.

Other possible causes of TMJ-related symptoms include arthritis, fractures, dislocations, and structural problems.

## **TMJ Symptoms**

Symptoms associated with TMJ disorders may be:

- Biting or chewing difficulty or discomfort
- Clicking, popping, or grating sound when opening or closing the mouth
- Dull, aching pain in the face
- Earache
- Eye pain
- Headache
- Jaw pain or tenderness of the jaw
- Reduced ability to open or close the mouth

## **Diagnosing TMJ**

A thorough examination may involve:

- A dental examination to show if you have poor bite alignment
- Feeling the joint and connecting muscles for tenderness
- Pressing around the head for areas that are sensitive or painful
- Sliding the teeth from side to side
- Watching, feeling, and listening to the jaw open and shut
- X-rays to show abnormalities

Sometimes, the results of the physical exam may appear normal.

Your doctor will also need to consider other conditions, such as infections, ear infections, neuralgias, or nerve-related problems and headaches, as the cause of your symptoms.

## TMJ Treatment

Simple, gentle therapies are usually recommended first.

- Learn how to gently stretch, relax, or massage the muscles around your jaw. Your doctor, dentist, or physical therapist can help you with these.
- Avoid actions that cause your symptoms, such as yawning, singing, and chewing gum.
- Try moist heat or cold packs on your face.
- Learn stress-reducing techniques.
- Exercising several times each week may help you increase your ability to handle pain.

Ask your doctor about medications or interventional procedures that can be used:

- Short-term use of acetaminophen (Tylenol) or ibuprofen (Advil, Motrin), naproxen (Aleve, Naprosyn), or other nonsteroidal anti-inflammatory drugs
- Muscle relaxant medicines or antidepressants
- Synvisc or corticosteroid shots in the TMJ
- Botox injections to relax trigger points in the head, neck and jaw muscles

Mouth or bite guards, also called splints or appliances, have been used since the 1930s to treat teeth grinding, clenching, and TMJ disorders.

Failure of more conservative treatments does not automatically mean you need more aggressive treatment. Be cautious about any nonreversible treatment method, such as orthodontics or surgery, that permanently changes your bite.

Reconstructive surgery of the jaw, or joint replacement, is rarely required. In fact, studies have shown that the results are often worse than before surgery.

See your health care provider right away if you are having trouble eating or opening your mouth. Keep in mind that a wide variety of possible conditions can cause TMJ symptoms, from arthritis to whiplash injuries. **We at Mind and Body Pain Clinic can help diagnose and treat TMJ with Dr. Singh's training in orofacial pain.**

## TMJ Prevention

A painful TMJ disorder may be preventable with a little care and practice. People with TMJ pain or people looking to avoid TMJ pain can observe the following measures to control the condition:

- Avoid eating hard foods and chewing gum.
- Learn relaxation techniques to reduce overall stress and muscle tension.
- Maintain good posture, especially if you work all day at a computer. Pause often to change position, rest your hands and arms, and relieve stressed muscles.
- Use safety measures to reduce the risk of fractures and dislocations