



TMD DISORDERS

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.

Causes

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.

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 face and neck muscles.

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 present since birth.

Symptoms

Symptoms associated with TMJ disorders may include:

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

Exams and Tests

You may need to see more than one medical specialist for your TMJ pain and symptoms, such as your primary care provider, a dentist, or an ear, nose, and throat (ENT) doctor, depending on your symptoms.

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.

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.

Read as much as you can, as opinion varies widely on how to treat TMJ disorders. Get the opinions of several doctors. The good news is that most people eventually find something that helps.

Ask your doctor or dentist about medications you can use:

- Short-term use of acetaminophen (Tylenol) or ibuprofen (Advil, Motrin), naproxen (Aleve, Naprosyn) or other non-steroidal anti-inflammatory drugs
- Muscle relaxant medicines or antidepressants
- Rarely, corticosteroid shots in the TMJ to treat inflammation

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

- While many people have found them to be useful, the benefits vary widely. The guard may lose its effectiveness over time or when you stop wearing it. Other people may feel worse pain when they wear one.
- There are different types of splints. Some fit over the top teeth, while others fit over the bottom teeth.
- Permanent use of these items is not recommended. You should also stop if they cause any changes in your bite.

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.

Support Groups

For more information, see The TMJ Association—www.tmj.org.

Outlook (Prognosis)

For many people, symptoms occur only sometimes and do not last long. They will go away in time with little or no treatment. Most cases can be successfully treated. Some cases of pain go away without treatment. TMJ-related pain may return in the future. If the cause is nighttime clenching, treatment can be very tricky because it is a sleeping behavior that is hard to control.

Mouth splints are a common treatment approach for teeth grinding. While some splints may silence the grinding by providing a flat, even surface, they may not be as effective at reducing pain or stopping clenching. Splints may be effective in the short term but could become less effective over time. Some splints can also cause changes in your bite, causing a new problem.

Possible Complications

- Chronic face pain
- Chronic headaches

When to Contact a Medical Professional

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. Experts who are specially trained in facial pain can help diagnose and treat TMJ.

Prevention

Many of the home-care steps to treat TMJ problems can prevent such problems in the first place:

- 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.

TMJ Exercises and Treatment

This includes some simple and natural exercises that you may start implementing today that will hopefully lessen the severity of your symptoms, along with the protocol given to you by your physician. These exercises are not a quick fix, nor are they a complete list, but merely some samples for you to try.

Passive Exercises

Passive exercises are those that require little active force from the muscles. They should be done without causing pain and can aid in maintaining blood flow to the muscles, which decreases the chances of myostatic contracture. Passive exercises will help you to do certain movements that will hopefully overcome your jaw dysfunction.

Passive Exercise 1:

Stand in front of a mirror and open your mouth slowly and gently along a straight opening pathway.

Do not push into pain if possible. It is important to watch your jaw and make sure it is opening and closing in a symmetrical way.

Passive Exercise 2:

Click your tongue against the top of your mouth. If you can do this, proceed by opening and closing your jaw while holding your tongue against the roof of your mouth.

*Another very important thing to keep in mind is your **posture**. Make sure you are sitting upright, with your shoulders back and your core firm.*

Active Exercises

Active exercises require more force to be generated by the muscles. If your muscles hurt too much under small amounts of strain, these exercises may not be right for you. There are two types of exercises that can be used: assisted stretching and resistance.

Assisted Stretching Exercise:

Apply stretching force gently and intermittently to the elevator muscle. It should look like you are sticking your bottom jaw out straight in front of you. Stretch for 30 seconds on and off six times.

Resistant Exercises:

Uses pressure to trick the brain into releasing pressure.

Resistant Exercise Example:

Place your fist under your chin and open your mouth against the resistance. Repeat this 10 times per session, two sessions a day.

If you feel any pain or discomfort during any of these exercises, discontinue.