

## **Temporomandibular Joint Disorder**

Does it hurt when you chew, open wide to yawn or use your jaws? Do you have pain or soreness in front of the ear, in the jaw muscle, cheek, the teeth or the temples? Do you have pain or soreness in your teeth? Do your jaws make noises loud enough to bother you or others? Do you find it difficult to open your mouth wide? Does your jaw ever get stuck/locked as you open it?

If you answered “yes” to some of these questions, you may have a temporomandibular joint disorder, or TMD. TMD is a group of conditions, often painful, that affect the jaw joint.

Signs may include:

- Radiating pain in the face, neck, or shoulders;
- Limited movement or locking of the jaw;
- Painful clicking or grating when opening or closing the mouth;
- A significant change in the way the upper and lower teeth fit together;
- Headaches, earaches, dizziness, hearing problems and difficulty swallowing.

For most people, pain or discomfort in the jaw muscles or joints is temporary, often occurs in cycles, and resolves once you stop moving the area. Some people with TMD pain, however, can develop chronic symptoms. Your doctor of chiropractic can help you establish whether your pain is due to TMD and can provide conservative treatment if needed.

### **What Causes TMD?**

Researchers agree that TMD falls into three categories:

- Myofascial pain—discomfort or pain in the muscles of the jaw, neck, and shoulders;
- A dislocated jaw or displaced disc;
- Degenerative joint disease—rheumatoid arthritis or osteoarthritis in the jaw joint.

Severe injury to the jaw is a leading cause of TMD. For example, anything from a hit in the jaw during a sporting activity to overuse syndromes, such as chewing gum excessively or chewing on one side of the mouth too frequently, may cause TMD.

Both physical and emotional stress can lead to TMD, as well. The once-common practice of sitting in a dentist's chair for several hours with the mouth wide open may have contributed to TMD in the past. Now, most dentists are aware that this is harmful to the jaw. In addition to taking breaks while they do dental work, today's dentists also screen patients for any weaknesses in the jaw structure that would make physical injury likely if they keep their mouths open very long. In that case, they may use medications during the procedure to minimize the injury potential, or they may send the patient to physical therapy immediately after treatment. In less severe cases, they instruct patients in exercises they can do at home to loosen up the joint after the visit.

While emotional stress itself is not usually a cause of TMD, the way stress shows up in the body can be. When people are under psychological stress, they may clench their teeth, which can be a major factor in their TMD.

Some conditions once accepted as causes of TMD have been dismissed—moderate gum chewing, non-painful jaw clicking, orthodontic treatment (when it does not involve the prolonged opening of the mouth, as mentioned above), and upper and lower jaws that have never fit together well. Popular theory now holds that while these may be triggers, they are not causes.

Women experience TMD four times as often as men. Several factors may contribute to this higher ratio, posture and higher heels.

### **TMD Diagnosis and Treatment**

To help diagnose or rule out TMD, your doctor of chiropractic (DC) may ask you to put three fingers in your mouth and bite down on them. You may also be asked to open and close your mouth and chew repeatedly while the doctor monitors the dimensions of the jaw joint and the balance of the muscles. If you have no problems while doing these things, then the problem is not likely to be TMD. Your DC can then look for signs of inflammation and abnormalities. Sometimes special imaging, an x-ray or an MRI may be needed to help confirm the diagnosis.

If you have TMD, your doctor may recommend chiropractic manipulation, massage, applying heat/ice and special exercises. In most cases, your doctor's first goal is to relieve symptoms, particularly pain. If your doctor of chiropractic feels that you need special appliances or splints (with the exception of the "waterpack" and other guards against teeth grinding), he or she will refer you to a dentist or orthodontist for co-management.

In addition to treatment, your doctor of chiropractic can teach you how to:

**Apply heat and ice to lessen the pain.** Ice is recommended shortly after the injury or after your pain has started. In the later stages of healing, you need to switch to heat, especially if you are still experiencing discomfort.

**Avoid harmful joint movements.** For example, chomping into a hard apple is just as bad as crunching into hard candy (some hard candies are even called "jawbreakers"—for good reason). And giant sandwiches can cause the mouth to open too wide and have a destabilizing effect on the jaw.

**Perform TMD-specific exercises.** Depending on your condition, your DC may recommend stretching or strengthening exercises. Stretching helps to loosen tight muscles and strengthening helps to tighten muscles that have become loose. Special feedback sensors in the jaw can be retrained, as well, if needed.