

Temporo-mandibular (TMJ) Disorders ... *what are they?*

Q: What's a TMJ?

A: "TMJ" is an abbreviation for *temporo-mandibular joints*, which are the jaw joints located just in front of your ears. They function as the "hinges" between the base of your skull and your lower jawbone, or *mandible*.

The TMJ's are the most complex and delicate joint system in the body. Located between the lower jawbone and the "sockets" in the base of the skull are fibrous discs that provide cushioning and lubrication to the joints. Additionally, the TMJ's have numerous ligaments, nerves, blood vessels and muscles associated with them.

Our constant daily use of our TMJ's makes them prime candidates for problems or "disorders". TMJ disorders are a source of pain and discomfort for millions of people of all ages.

Q: What are some symptoms of TMJ disorders?

A: TMJ disorders can cause a wide variety of symptoms affecting the jaw joint itself, the ear, muscles of the head and neck, or some combination of these areas. Common symptoms include one or more of the following:

- Pain about the face, head and neck region.
- Clicking or popping sounds in the jaw joints upon opening and/or closing
- Limited ability to open wide or move the lower jaw side to side
- Frequent headaches, often in the area of the temples
- Earaches and/or a feeling of stuffiness in the ears
- Buzzing or ringing in the ears
- Pain deep in the jaw joints
- Pain in the area of the cheeks
- Temporary "sticking" or "locking up" of the lower jaw
- Pain when chewing, yawning or opening the mouth wide
- A sudden inability to find a comfortable bite position
- Frequent clenching and/or grinding of the teeth
- Head, neck and/or shoulder pain
- Grinding, grating or gravelly sounds in the joints

Q: What causes TMJ Disorders?

A: Chronic pain and dysfunctional problems of the TMJ's stem from several factors, which can be considered as different forms of stress – all of which may affect jaw joint function:

- **Dental Stress:** A common cause of TMJ disorders in susceptible individuals is an uneven bite – which

causes a lack of harmony between how the jaw joints hinge and the way the teeth mesh together. Teeth that do not mesh together properly tend to pull the jaw joints out of their optimal functioning position. Over time, this stress can cause strain and damage to the jaw joint system.

- **Traumatic Stress:** Previous traumatic injuries to the head, neck or jaw may lead to structural damage to the jaw bones, joint ligaments, nerves, blood supply, and/or muscles. Another common outcome of trauma to the TMJs is partial or total displacement of the fibrous disc(s). Mal-position of TMJ discs is often initially asymptomatic but may progress to a painful state over time. Some common forms of trauma to the TMJ's are automobile accidents, blows to the chin/face, and the chronic trauma caused by tooth grinding or clenching (bruxism).
- **Systemic Stress:** Systemic diseases can also have an impact on the health and function of the jaw joints. These diseases may accelerate or amplify a TMJ problem and are viewed as "co-factors". Common systemic co-factors are arthritis, gout, lupus, scleroderma and fibromyalgia.
- **Nutritional Stress:** Nutritional stress is a significant co-factor in about a third of our patients with TMJ disorders. Chronic head and neck pain is often due to muscle irritability – which can be increased by the inability of the muscles to obtain needed oxygen, proteins, vitamins and minerals. Substances such as caffeine, nicotine and excessive amounts of refined sugar have been shown to contribute to muscle tension.
- **Emotional Stress:** Emotional stress, like other forms of stress, can play an important contributing role in TMJ problems. Studies have shown a link between excessive emotional stress and frequency of tooth grinding at night. Chronic emotional stress also impairs the body's ability to heal itself by leading to changes in body chemistry that impair normal body functions, such as ability to obtain deep, restful sleep.

Q: How are TMJ disorders diagnosed?

A: The first step in the management of TMJ disorders is determining that your concern is not a medical or dental problem behaving as if it were a TMJ problem. This determination is made following an initial *TMJ Screening Visit* with Dr. Kurtis, which typically includes:

- **An interview and review of your health history with Dr. Kurtis**
- **An Orthopantomographic x-ray that shows your TMJ's, jawbones and teeth**
- **A clinical examination**

If your concern is confirmed to be TMJ-related, Dr. Kurtis will request that you schedule an appointment for additional records and studies which will allow him to diagnose the extent of your TMJ disorder and develop a *Treatment Program* specific to your needs. These additional records and studies may include:

- **Transcranial x-rays of the TMJ's**
- **Manual Muscle Testing**
- **Range of Motion Testing**
- **Diagnostic molds of the teeth**
- **Functional records of the bite**
- **Doppler ultrasound study of the TMJ's**

Q: How are TMJ disorders treated?

A: There are many different types of TMJ problems. The type of treatment utilized is directly related to the nature of the problem and each individual's response to it:

- ***Level I Care: Stabilization***

For patients who cannot be treated solely with rest and medications, a *Stabilization Treatment Program* will be developed. A Stabilization Treatment Program typically is orthopedic and neuromuscular in its focus. This treatment strategy is considered conservative in nature and is an attempt to obtain comfort and normalized functioning without surgical intervention. It often includes:

- **A specifically designed, custom jaw repositioning appliance(s) that comfortably fit on the top of the upper or lower teeth. These appliances, called *Occlusal Splints or Orthotics*, help relax spastic muscles and manage stresses and pain in the jaw joints**
- **Self-administered or professionally assisted physical therapy**
- **Various medications that reduce inflammation manage pain and relax muscles**
- **Dietary and lifestyle modifications**

Level I care commonly takes 3-12 months to complete. Success is defined as improved comfort and functioning. Many TMJ problems are not reversible, in the sense that the TM joint system fully returns to an ideal state; if that is the case, follow-up care and supervision may be required beyond Phase I care. The level of follow-up care necessary will be determined on an individual basis.

- ***Level II Care: Additional Definitive Treatment***

In some cases, *Level II Care* is required to achieve or maintain long-term comfort, function and stability within the TMJ system. This most commonly occurs when an uneven or dysfunctional bite is a contributing causative factor in the TMJ disorder. Thus, in some cases, bite correction may be indicated. Bite correction can take the form of bite adjustment (*equilibration*), corrective restorations (*crowns or onlays*), tooth repositioning (*orthodontics*) or jaw repositioning (*orthognathics*).

- ***Level III Care: Surgical Intervention***

In the rare event that neither Level I nor Level II care is unsuccessful or unlikely to enhance comfort and functioning, a referral to a properly trained oral surgeon for surgical treatment may be indicated. Dr. Kurtis will make the appropriate referral after thoroughly reviewing and discussing this option with the patient.

We wish to emphasize that jaw joint surgery today is often unnecessary and is only considered as a last alternative measure in most TMJ disorder cases.

Q: What should I do between now and my appointment?

A: Between now and the time of your first appointment, we encourage you to follow these instructions, which may be helpful if you are experiencing any discomfort:

- ***Eat soft foods:*** Place yourself on a soft diet (not liquid, but soft) of foods like cooked vegetables, eggs, fish, soups, cheese, yogurt, ground meats, fruits, etc. By cutting your food into small, bite-sized pieces, you

can avoid a great deal of chewing, which thereby reduces additional stress on your jaw joints and muscles. Avoid foods that are hard, tough or chewy such as steak, pizza, raw vegetables, hard crust breads, etc. AVOID CHEWING GUM!

- **Keep your teeth apart:** Your teeth should touch *only while you are eating*. Remind yourself throughout the day, particularly when stressed: “Face muscles relaxed, lips together comfortably and teeth apart.”
- **Avoid opening your mouth wide and putting pressure on your jaw:** Don’t open wider than the thickness of your thumb (1/2 inch). Stifle yawns by pulling your lower lip up over the edges of your lower teeth. Don’t sit with your chin resting on your hand. Hold the phone with your hand, not your shoulder.
- **Use moist heat:** Use a *moist heat* heating pad over the jaw joint areas (both sides) for 20 minutes. The pad should be secured around your face so that you don’t have to hold it or lie on it. Repeat several times a day.
- **Medications:** If you are able to tolerate aspirin products, take two tablets of Advil, an anti-inflammatory medication, four times per day. This is taken to reduce swelling and inflammation within the joints. *If you are not sure about your tolerance to aspirin-like products, or if you are taking any other medication, check with your physician first.*
- **Sleep position:** If it doesn’t interfere with your sleep, it’s best to sleep on your back –with a pillow under your knees, if this is more comfortable. You may also want to use pillows to support your sides, to discourage turning over while asleep. Don’t use firm, full pillows under your head. A soft, tube-type pillow or a rolled bath towel may be preferred. And, if you’re traveling, take your pillow (or towel) with you.

To make an appointment for a TMJ screening visit – or to ask about any clinical or insurance matters associated with treatment of TMJ – call us at 401.846.0900.

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The information above is not intended to be a substitute for personalized dental advice, diagnosis, or treatment. Always seek the advice of your dentist with any questions you may have regarding a dental condition.