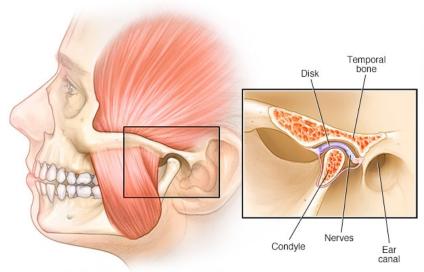


**Temporomandibular joint and muscle disorders (TMJ syndrome)** are a group of conditions that cause pain and dysfunction in the jaw joint and the muscles that control jaw movement.

The temporomandibular joint is the most complicated joint in the human body. It includes muscles, nerves, tendons, ligaments, bones and cartilage. The temporomandibular joints have a unique structure which consists of two joints that connect the jawbone (mandible) to the skull (temporal bone) with the tendon and muscle attached to and surrounding the joint and ligaments which connect the two bones. The temporomandibular joints are a bilateral synovial articulation between the temporal bone of the skull above and the mandible below with an articular disk in between which separates the two joints and keeps the movement smooth. The joint acts like a sliding hinge allowing the jaw to move up and down and side to side for speaking, chewing, yawning etc.



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# **Symptoms**

The symptoms of TMJ syndrome may include: pain of the jaw, pain in one or both of the temporomandibular joints, aching in and around the ear, difficulty or pain while chewing, locking of the joint, and/or a clicking sound while chewing or moving the jaw.

#### **Causes**

The pathophysiology of TMJ syndrome is not fully understood. Researchers believe it is multifactorial and may arise from both local insults as well as systemic disorders. Local insult/injury can cause joint displacement, dislocated jaw, or injury to the condyle and the surrounding tissues due to factors such as inappropriate biting habits and teeth structure. These can cause an internal derangement of the articulating disk and injury to the muscle, tendon, ligament, cartilage, bones and nerves leading to the pain and symptoms associated with TMJ syndrome.

Stress is thought to be a factor in TMJ and it is often linked to the temporomandibular joint. Mental stress during stressful situations or physical stress such as conducting strenuous physical tasks often manifest in ways of clenching or grinding teeth which causes overuse of the temporomandibular joint tissues resulting in tissue inflammation and injury leading to the development and aggravation of TMJ. Anxiety symptoms like tense muscles and jaw clenching can also ultimately cause TMJ.

Systemic disorders such as rheumatoid arthritis (RA) and osteoarthritis can also contribute to TMJ syndrome. These conditions can cause joint cartilage damage which can affect the temporomandibular joint. In osteoarthritis, enzymes such as matrix metalloproteinases (MMPs) are upregulated and break down the cartilage's collagen network. In RA, the immune system attacks the lining of the joints causing inflammation which can damage cartilage as well as bone tissue.

In summary, risk factors that can increase the chance of developing TMJ syndrome include various types of arthritis, jaw injuries, long-term grinding of teeth, and certain connective tissue disorders that affect the temporomandibular joint.

#### **Wellness Recommendation**

### Injury

If the TMJ condition is caused by an injury or local insult and the injured tissue involves tendon, ligament, muscle and bones, the recommendation includes 3-6 FASTT Patches. The FASTT Patch will help to heal tendon, ligament, muscle, and bone injuries in the area. The FASTT Patch helps heal injuries by accelerating local biological activities to expedite healthy collagen regeneration, increase osteoblast activity, accelerate myofiber regeneration, and reverse cellular damage. If the joint cartilage and nerve tissues are damaged as well, the recommendation includes an additional 3-6 WHITEE Patches. The WHITEE Patch helps increases blood flow and lymphatic circulation and helps enhance the chondrocyte's ability to synthesize required collagen and proteoglycan to restore the damaged joint cartilage matrix, eliminate joint pain, and improve its functionality. The WHITEE Patch also contains herbal ingredients to help heal nerve injuries.

If the TMJ condition is caused by teeth clenching or grinding due to stress, the recommendation also includes Brown and LC Balancer together with the FASTT and WHITEE Patches. Physical or mental stress can cause reduced blood flow from the hepatic artery to the liver. When blood flow from the hepatic artery is reduced, oxygen supply is greatly diminished. This condition can cause a high level of reactive oxygen species (ROS) and the resulting elevated free radical levels which can cause stress related symptoms and liver damage. Brown and LC Balancer help to improve liver's blood flow from the hepatic artery and reduce stress related symptoms by nurturing liver Yin and kidney Yin. Patients can experience symptom reduction in 1 day. 1-2 weeks of treatment is required to eliminate the symptoms with sustained results. Patients can experience an increase in stress tolerance after the treatment.

### Systemic Disorders

If the cause is due to a systemic disorder such as arthritis, the recommendation includes the WHITEE Patch and LC Balancer. The WHITEE Patch increases blood flow and lymphatic circulation and helps enhance the chondrocyte's ability to synthesize required collagen and proteoglycan to restore the damaged joint cartilage matrix, eliminate joint pain, and improve its functionality. It also helps reduce joint inflammation and matrix metalloproteinase activity to reverse joint degeneration. LC Balancer is also required to improve systemic microcirculation and enhance nutrient absorption.

Please see Wei Lab Osteoarthritis and Bone on Bone Protocol or Rheumatoid Arthritis protocol to learn more about how Wei Labs addresses the primary cause of the patients TMJ Syndrome.

If the TMJ syndrome is a secondary problem caused by other disorders, the primary cause has to be addressed to prevent TMJ syndrome from reoccurring.

#### **Patch Placement**

- Place the patch in front of the ear where the mandible and the skull come together (Figure One)
- Palpate around the temporomandibular joint to find the area of pain and have the pain spot covered by the herbs on the patch.

# **Selected Case Studies:**

## Case 1: Successful Pain Reduction of TMJ Related Symptoms

Ela Corcoran, Homeopathic Practitioner, CA

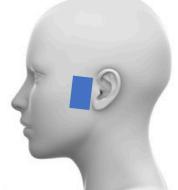


Figure One

A 55-year-old female patient came in to address her degenerative TMJ after undergoing an unsuccessful TMJ surgery in 2006. Since the patient did not want to go through with another surgery, Dr. Corcoran recommended this patient Wei Laboratories herbal patches which eliminated the patient's pain. In 2007, the patient re-aggravated her TMJ condition after doing some orthodontic work. The patient experienced a lot of pain during the healing process. Dr. Corcoran gave this patient another round of Wei Laboratories herbal patches along with some homeopathic remedies. These treatments accelerated the patient's healing process and eliminated her pain symptoms.

### Case 2: Successful Resolution of TMJ Disorder

Richard Vail, DC, ND, GA

A female patient in her mid 50s complained about severe symptoms related to her TMJ syndrome. More specifically, she reported clicking and snapping in her jaws as well as popping in the ears and headaches. The patient suffered from severe pain (8-9 out of 10) as well as irritability and insomnia (lack of sleep) due to the pain.

A combined treatment program composed of massage (e.g. contraction technique to relax jaw muscles) as well as homeopathic and herbal patches from Wei Laboratories was applied for a total of one week (three sessions every other day). In addition, a night guard was prescribed. At this point, preventative maintenance is implemented.

The results of the treatment have been very promising. The patient experienced complete pain relief. She continues to wear her splint to maintain the good health condition. The results have been sustained ever since. She is very happy.