
Colorado Guide To Neuromuscular Dentistry

Is Neuromuscular Dentistry for You?

ADLER
ADVANCED DENTISTRY

TABLE OF CONTENTS

Colorado Guide to Neuromuscular Dentistry

3

Take The Quiz

4

Introduction

6

TMJ Symptoms

7

Jaw Pain

8

Back, Neck & Shoulder Pain

9

Chronic Headaches

10

Ringling In Ears (Tinnitus)

11

Teeth Grinding / Jaw Clenching

12

TMJ Treatment

ADLER
ADVANCED DENTISTRY

Take The Quiz

Are Your Headaches or Upper Body Pain the Result of TMJ?

Answer YES or NO to these questions to find out:

- | | Yes | No |
|---|--------------------------|--------------------------|
| 1. Do you suffer from headaches? | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Does your jaw ever feel stiff or locked up? | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Do you have ear congestion or ringing in the ears? | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Do you have pain in your jaw when you eat? | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Does your bite feel uncomfortable? | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Do you clench or grind your teeth? | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Do you hear clicking or popping in your joint? | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Are your teeth worn down or cracked? | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. Do you experience pain or discomfort in your jaw or facial muscles on a regular basis? | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. Have you been told that you snore? | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. Have you been diagnosed with sleep apnea? | <input type="checkbox"/> | <input type="checkbox"/> |
| 12. Do you have difficulty chewing? | <input type="checkbox"/> | <input type="checkbox"/> |
| 13. Do you have neck pain or postural problems? | <input type="checkbox"/> | <input type="checkbox"/> |

If you answer yes to three or more of these questions, we invite you to call Adler Advanced Dentistry at (303) 449-1119 for a complimentary consultation.

Introduction

Neuromuscular Dentistry at Adler Advanced Dentistry

Symptoms such as headaches, teeth and jaw soreness, jaw popping and ringing in your ears can be uncomfortable and frustrating to live with, especially if your doctor cannot diagnose the cause. These symptoms can go on for many years.

Neuromuscular dentistry deals with problems in the relationship between your teeth, jaw joints and muscles.

What Is Neuromuscular Dentistry

The goal of neuromuscular dentistry is finding the most relaxed and comfortable jaw position. Strain is caused when the jaw position is poor or misaligned, and you may experience many symptoms as a result.

One of the most common outcomes of neuromuscular problems is temporomandibular joint disorder (TMJ or TMD), which causes many painful symptoms originating from a poor relationship between your jaw joints and the muscles and nerves of your head and neck. These types of imbalances can also result from teeth grinding. As an experienced neuromuscular dentist, Dr. Adler places the jaw into its optimal position, relieving the symptoms associated with TMJ/TMD.

Neuromuscular dentistry is the science of occlusion (your bite). But it deals with much more than just the way your teeth come together. Neuromuscular dentistry also evaluates the jaw joints and the muscles in your head, neck and back, as well as how they affect your total body posture.

While traditional dentistry evaluates primarily the teeth, bones and gums, neuromuscular dentistry works with the complex relationship between the hard tissues, soft tissues, muscles and nerves. Dr. Adler even looks at your airway and how your body is getting and using oxygen, both of which may be contributing to snoring and sleep apnea problems you experience.



Common TMJ Symptoms

TMJ can refer to any number of issues that impact the proper alignment of the jaw. Because it occurs in the jaw joint, swelling and pain in the area are two of the most common symptoms. These may be accompanied by:

- Clicking, popping, or grinding noises
- Difficulties opening and closing the jaw
- Complete lockjaw

In addition to symptoms that can occur in and around the jaw joint, TMJ may result in painful symptoms located in other regions, including:

- Chronic headaches
- Ear ringing and pain without the presence of infection
- Pressure and pain in and around the eyes
- Generalized facial pain
- Neck, shoulder, and back pain

When left untreated, TMJ may also cause postural problems and digestive issues, along with oral health concerns such as uneven tooth wear and premature tooth loss.

Jaw Pain

Chronic jaw pain is one of the most common warning signs of TMJ. Sometimes, this jaw pain may extend into your head, neck or back, which can make it challenging to identify the source of the problem. In order to determine whether your jaw pain is being caused by TMJ, you will need to undergo a thorough neuromuscular dentistry evaluation.



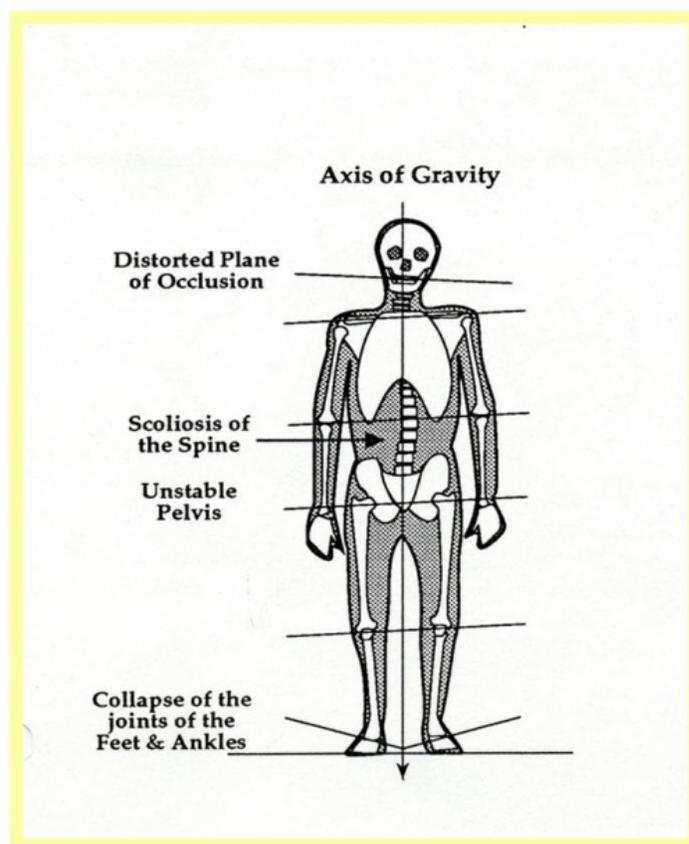
When your jaw is misaligned from TMJ, it impacts your trigeminal nerve, which is the largest nerve in your cranium. The trigeminal nerve runs through your jaw and is responsible for sensation input to the brain associated with the joints and muscles of this region. TMJ causes tension in your jaw joints and muscles which compresses the trigeminal nerve. This is often the cause of chronic jaw pain and many other painful TMJ symptoms such as headaches, ear aches and facial pain.

The only way to relieve this pressure on your trigeminal nerve is to restore proper alignment to your jaw. Dr. Adler will place your jaw in its ideal resting position, alleviating the painful symptoms you experience.

Back, Neck & Shoulder Pain

Chronic back, neck and shoulder pain can often be difficult to diagnose. If you have visited several different doctors and specialists without learning the source of your problem, you may want to schedule an evaluation with Dr. Adler. Often, these issues are caused by TMJ.

Your jaw muscles extend from ear to ear and interact with many of the muscles in the neck region that maintain proper alignment of your spine. When your jaw is misaligned, it causes the surrounding muscles to work harder in order to maintain proper balance and head posture. When your jaw muscles become fatigued, it forces the muscles in the back, neck and shoulders to assist with these important functions. This can cause you to experience pain in these areas of your body.



By restoring a properly aligned bite, Dr. Adler can help relieve the strain on your jaw muscles, allowing them to function properly. This will typically alleviate the chronic back, neck and shoulder pain that occurs when the muscles in these areas are forced to work overtime assisting your jaw.

Chronic Headaches

Chronic headaches can be debilitating and painful. While it is often difficult to pinpoint the exact cause of chronic headaches, there is a significant amount of research indicating they may be caused by jaw alignment issues associated with TMJ.



The muscles of the temple area of the forehead play an important role in the posturing and closing of the jaw. If your bite is not right, it can lead to abnormal tension in these muscles, which is one potential cause of chronic headaches. If the bite is not corrected, the muscles may remain tense for extended periods of time. The contracted muscles get no rest, and poor circulation in these muscles develop, resulting in pain (a headache).

Dr. Adler can restore your jaw to its ideal resting position, which will eliminate the tension in these muscles and alleviate the headaches that often result from this muscle tension.

Ringling In Your Ears (Tinnitus)

It is common for TMJ patients to complain of ringing in their ears (tinnitus), or vertigo. This symptom is commonly misdiagnosed and often goes untreated. In many cases, ringing in the ears occurs when your jaw isn't properly aligned.



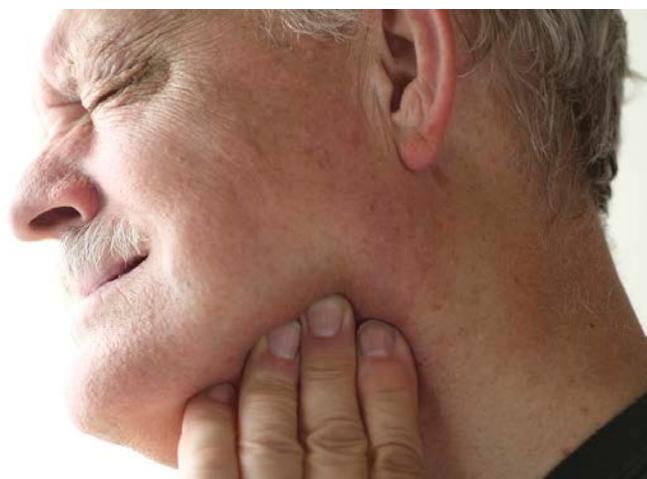
The jaw area of the face is a complex network of muscles and nerves. When the bite is misaligned, the muscles and nerves throughout the head, including the ears, can be affected. The reason is that the same nerve (the trigeminal nerve) feeds all of the muscles in this region, including two important ear muscles.

If Dr. Adler determines the cause of your tinnitus to be an unstable or misaligned bite, he can solve the problem by stabilizing the bite and restoring your jaw to its ideal resting position.

Teeth Grinding/ Jaw Clenching

If your teeth don't come together in an optimal bite, the result is subconscious clenching or grinding of the teeth. This causes pain in the muscles of the head, face and neck.

Teeth grinding (bruxism) is a most destructive habit. The joints, muscles, and teeth are essentially at war with each other. Your teeth become worn and can crack or shift from the forces of bruxism. The enamel can flake off at the gum line, causing notching on the teeth receiving the most excessive forces.



Dr. Adler can devise a TMJ treatment plan that will restore a properly aligned bite and help you stop grinding your teeth. This will not only alleviate any painful TMJ symptoms you may experience, but it will also reduce your risk of developing many of the harmful oral health conditions associated with bruxism.

TMJ Treatment

Your TMJ treatment starts with a complimentary consultation at our Boulder dental office. First you will meet with Heather, our Director of Operations. She will gather all necessary patient information and have you fill out a detailed questionnaire to learn more about your condition. You will then meet with Dr. Adler for an evaluation and to discuss treatment options.



If Dr. Adler thinks you will benefit from a neuromuscular dentistry treatment plan, he will administer a K7 evaluation. The K7 is a diagnostic tool that allows Dr. Adler to gather detailed information about the function of your jaw. It uses electromyography and joint sonography to track the position of your jaw and the associated muscles in order to identify the ideal resting position for optimal jaw functioning.



TMJ Treatment

(continued)

Often, Dr. Adler will also recommend a 3D image/CBCT scan of the head and neck, especially if you have suffered an injury. Our state-of-the-art [Newtom dental 3D imaging system](#) provides much more detail than can be observed from traditional x-rays. It allows Dr. Adler to study the positioning of your jaw from every possible angle. This comprehensive information is crucial to determining the proper TMJ treatment course to address your condition.

After we receive the data from your K7 diagnostic exam and CBCT scan, you will return to our office for another complimentary consultation. During this appointment, Dr. Adler will go over the results of your scans and discuss possible treatment options.



TMJ Treatment

(continued)

In most instances, the first stage of TMJ treatment will be a neuromuscular orthotic device. There are two different types:

- Fixed orthotic device
- Removable orthotic device

Dr. Adler will recommend the best option for your unique needs. During your orthotic treatment, you will visit our office every 7-14 days depending on the severity of symptoms. At these appointments, you will receive:

TENS therapy -- The TENS (transcutaneous electrical nerve stimulation) unit allows your jaw muscles to relax and detox. When you receive the relaxing TENS therapy, you will be able to enjoy our comfortable treatment room, complete with a zero gravity chair, relaxing heat packs, aromatherapy and cozy blankets.



TMJ Treatment

(continued)

Physical therapy -- After TENS, Dr. Adler performs physical therapy techniques to enhance and extend your comfort. His technique typically includes stretching the neck, an act that releases lubricating fluid in your joints and creates more space between the cervical vertebrae. Your therapy may also include shoulder stretching and alignment techniques to address the tension resulting from neuromuscular imbalances.



TMJ Treatment

(continued)

Trigger point injection therapy (if needed) -- These injections contain lidocaine and anti-inflammatory medication, and are introduced to an area of tension. Dr. Adler uses trigger point injections on patients who are experiencing acute pain or spasms in their backs and shoulders, often as a result of a poor bite. This virtually painless procedure provides tremendous relief of TMJ symptoms caused by muscle fatigue and strain caused by teeth grinding. It works by breaking up the knots (trigger points) that form due to muscle memory.



An adjustment to the orthotic device --Adjustments are made as needed to ensure your orthotic device is keeping your jaw in its ideal resting position.

TMJ Treatment

(continued)

If there are improper muscle functions of the tongue and face contributing to your TMJ, Dr. Adler may recommend [myofunctional therapy](#) in addition to an orthotic device.

Once your orthotic treatment has restored proper bite alignment and your painful symptoms have been alleviated, you will move onto the second stage of your TMJ treatment. This phase of your treatment involves permanently moving your jaw into its proper resting position.

Depending on your unique condition, Dr. Adler may recommend one of the following procedures:

- [Neuromuscular orthodontics](#)
- [Full mouth reconstruction](#)



Dr. Michael Adler

About Your Dentist

Dr. Michael Adler is pleased to bring a diverse background of academic research and life experiences to his practice. A graduate of the University of Michigan, Dr. Adler worked as a research biochemist at Stanford University prior to enrolling and completing his dental degree at Georgetown University.

Dr. Adler served as a Lieutenant in the United States Public Health Service, providing care and patient education on the Navajo Reservation. For this service, Dr. Adler was awarded a prestigious commission by Surgeon General Dr. C. Everett Koop. Dr. Adler has been in private practice since 1990.



Dr. Adler is committed to lifelong training as a way to be able to offer his patients the best dental care possible. His postgraduate training has been extensive, including studies on the topics of neuromuscular dentistry and smile design at the nationally renowned Las Vegas Institute for Advanced Dental Studies (LVI). Dr. Adler was awarded a fellowship from the prestigious Las Vegas Institute for Advanced Dental Studies. This post-graduate learning institution provides cutting-edge training in neuromuscular and cosmetic dentistry. Dr. Adler is proud to bring his patients the most advanced knowledge and techniques in the diagnosis and treatment of TMJ.



Contact Us

For Questions or To Schedule A Consultation

Please call us at (303) 449-1119
or email us at greatsmiles@adlerdentistry.com

Adler Advanced Dentistry
1810 30th Street, Suite A
Boulder, CO 80301
(303) 449-1119
adlerdentistry.com

ADLER
ADVANCED DENTISTRY