## NATURAL WAYS TO STOP TMJ CLICKING, GRINDING AND PAIN



DR. JUSTIN SCHALLMANN

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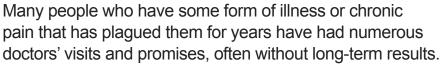
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### INTRODUCTION

Thank you for downloading this e-book. It is my hope that you will discover practical and actionable information to help you find hope and healing. My name is Dr. Justin Schallman, and I have been helping people with temporomandibular joint disorders (TMJ) find natural and drug-free relief for many years.

Most people cannot appreciate the devastating impact of TMJ. Temporomandibular joint disorders disrupt every aspect of life often causing pain with any mouth movement including eating, talking, yawning and more.



Unfortunately, there is no magic potion or pill that will simply heal you. The realization of this has led many people to our door.



The process of getting well requires a doctor that is willing to get to the cause of the illness and/or pain and not just mask the problem with meds; a doctor that understands how to reverse years of degeneration; and lastly, a doctor that can create a success plan incorporating ALL of the fundamental facets of health care, not just one. TRUE healing has occurred when you get your body back to the place it once was (or maybe even better) before you acquired the troubles you have today! Yes, that is possible but it takes hard work and consistency.

The fundamentals of upper cervical care re—empower the nervous system so that you can heal properly. It is truly a "miracle" system when done to its fullest potential but it is not enough to create full health. Full health requires the adoption of a proactive healthcare model; doing what it takes to get healthy and stay healthy, not just treating symptoms. This includes a nervous system free of interference, good nutrition, regular exercise and plenty of rest. This recipe will remove the obstacle of "no hope". It is a success system that heals the ONLY effective way...from the "inside out". This is what we will begin to explore in this e-book.

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# TEMPOROMANDIBULAR JOINT DISORDER OVERVIEW



The lower jaw is connected to the skull by the temporomandibular joints (TMJ) which are located in front of each ear. These are complicated joints which allow the lower jaw to open, close, slide and rotate. On an average, the TMJ is used over 5000 times each day when we chew, swallow, yawn, smile, laugh, eat and speak!

If you have ever noticed a clicking sound when you chew – then you are likely experiencing symptoms of TMJ. Surprisingly, a large number of the adult population is affected by this – anywhere between 20-30%, usually those between the ages of 20 and 40. It is more common for women to suffer from this than men.

TMJ pain is mainly caused due to damage to the joint itself. The most common cause is trauma to the jaw or upper neck, which leads to immense pain and dysfunction either immediately after the injury or sometime later. Head and neck injuries including sports injuries, car accidents, and dental work may be the reason for the trauma and resulting TMJ disorder. Other things like excessive gum chewing, teeth clenching, nail biting, consistently holding a phone between your shoulder and the side of the head and other repetitive trauma are potential threats as well. TMJ can affect one or both joints and the symptoms can vary from mild to severe and from person to person.

#### Signs of TMJ include:

- Clicking, grinding, popping or other noises in the joint
- Pain with or without chewing
- · Locking of the jaw
- Toothache
- Facial and/or neck pain
- Headaches
- Earaches
- Tinnitus (ringing in the ears)
- · Clogged or stuffy ear

These symptoms are frequently caused by the joint being out of alignment and can be a result of muscle fibrous bands (scar like tissues) in the jaw muscles that can occur due to teeth clenching or grinding and poor posture as well. The symptoms come about when muscles tense up causing the skull and lower jaw to pull closer together and end up misaligned, putting pressure on the joint, tearing or stretching ligaments and compressing the disc which pulls it out of position (a common occurrence in whiplash injuries). In some cases this leads to joint degeneration, when the disc wears away, causing the bones to rub against and irritate the nerves.



### THE HEAD, NECK AND JAW

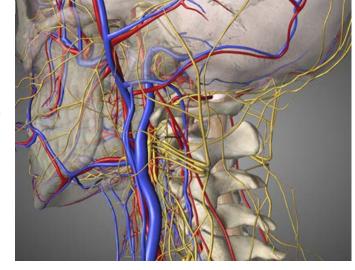
In order to understand temporomandibular joint disorders, one has to understand where the jaw lives: the head and neck.

### The Head and Spine

The head and spine are composed of 55 different bones, which house and protect the brain and spinal cord.

There are 22 bones in the face and skull. 2 of those bones are called the temporalis and mandible. These 2 bones come together to form the temporomandibular joint a.k.a. TMJ.

There are 33 bony rings in the spine called vertebrae. There is a large hole at the base of the skull (foramen magnum)



that aligns with the rings of the upper neck to create an armored tunnel around the lower brain (brainstem) and spinal cord.

The junction between the head and spine is called the Upper Cervical Spine (also known as the Craniocervical Junction, or the Occipitoatlantoaxial Joint Complex).

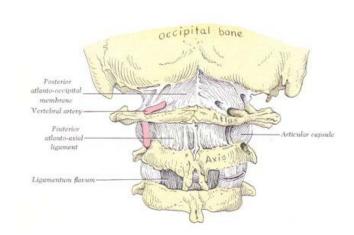
### The Upper Cervical Spine

The TMJ is closely connected to the upper cervical spine (upper neck). The junction between the head and spine is a complex system made up of the base of the head and the first two vertebrae of the neck, or cervical spine.

The first vertebra is called the Atlas Bone. This is a ring-like bone weighing an average of 2 oz. It is named after the mythic god Atlas, who held up the world on his shoulders.

Likewise, the Atlas bone holds the weight of the head, and acts as a gate-keeper for all of the structures and fluids which travel in and out.

The second vertebra is called the Axis Bone, and is another key vertebra. The axis allows extraordinary movement of the head and neck, while anchoring many important muscles and ligaments supporting the head.



The upper cervical spine is unique, in that it is the most moveable part of the spine, the most neurologically sensitive part of the spine, and yet the most vulnerable to injury. Small injuries to this area can affect the sensitive structures traveling to and from the brain. Injuries here can also have dramatic impacts on the head and neck alignment and posture of the rest of the spine.

### The 3 Highways: Nerve flow, Blood flow, CSF flow

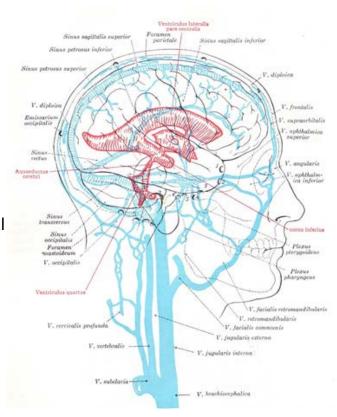
There are three main types of communication between the head and the spine. These highways are interconnected, and disruptions to one may affect the others.

Nerve flow: nerves conduct electrical messages to and from the brain and spinal cord. Nerves are organized much like a tree. The majority of nerve flow travels through the "trunk" or spinal cord. From there, nerves "branch" out to the rest of the tissues in the head and neck.

Movement of the left and right TMJs must be coordinated, working at the same time for the jaw to move properly. This movement is orchestrated by a complex set of muscles that are directly controlled by the body's nervous system, specifically branches of the trigeminal nerve, which is one of the most complex and powerful nerves in the body. It feeds sensation and function to one's jaws, face, tongue, sinus, palate, eyes, teeth, and lips. Since the trigeminal nerve feeds the jaw, it is closely associated with the function of the TMJ and is critical in the development of TMJ pain.

There is a delicate working relationship between the TMJ, the muscles that move the jaw, and the nerves that control these muscles. Therefore, healthy function of the TMJ system requires normal structure and function of both the temporomandibular joints and the trigeminal nerve. Trigeminal nerve originates in the neck. Trigeminal neuralgia and other facial pain is sometimes associated with TMJ. Trigeminal neuralgia is extreme pain in the face.

Blood Flow: there are two major roads into the head, and one major road out. The Carotid Arteries carry blood into the front of the brain, and the Vertebral Arteries carry blood into the back of the brain. The Jugular Veins are the main vessels that carry blood out of the brain, back to the body.



CSF Flow: Cerebrospinal fluid circulates within and around the brain and spinal cord, protecting it from injury and circulating important chemicals. Proper CSF flow is necessary for proper brain function.

### IMPROVING TMJ FUNCTION



One of the primary causes of TMJ is trauma (motor vehicle accidents, sports injuries, dental work, etc.). Restoration of normal temporomandibular joint (TMJ) function must be made via normalization of neurological control over the muscles that govern the TMJ. Abnormal neural input from the central nervous system due to upper cervical joint dysfunction (from traumatic injury) can result in abnormal TMJ muscle coordination. Following the trauma to the upper cervical spine and temporomandibular joint, symptoms can be triggered immediately or can take months or years to develop.

It is important to reverse the trauma-induced upper neck injury; thereby reducing irritation to the nerves in the brain stem and spinal cord that control neuromuscular function in the face and jaw. While many TMJ sufferers recall specific traumas such as head injuries, auto accidents or falls, some do not. An evaluation is necessary in each individual's case to assess whether an upper cervical injury is present and whether benefit from upper cervical care can be achieved.

The Atlas vertebra, also known as C1 is the top bone in the spine. This is the bone where the heavy head rests. The joint between the Atlas and the skull can frequently become damaged and misaligned due to head and neck injuries. Once the position of this upper neck and skull area has been altered compensations will develop both below and above the area.

Above the Atlas misalignment, the TMJ will frequently be affected. As the head tilts to one side more pressure will be applied to one side of the jaw. The longer this misalignment is there the more likely there will be facial asymmetry, pain and other symptoms.

Below the area, the muscles around the shoulders will begin to pull unevenly leading to a tilting of the shoulder girdle. Frequently, you'll be able to visualize this when you look in the mirror. One shoulder will be noticeably higher than the other.

Continuing down the spine the muscles will continue to be imbalanced as a result of the misalignment in the upper neck and the change in the head position.

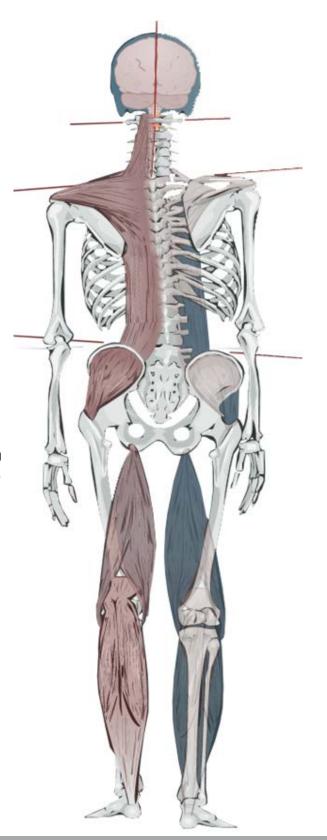
This will lead to a similar tilting of the hip position leading to uneven hips. And eventually a change in weight distribution where more of the weight will be on one leg, frequently leading to uneven wear patterns on the shoes.

A small group of clinical researchers, biophysicists, PhDs, and specialized chiropractors have focused on understanding the changes associated with changes to the head and neck in those suffering with temporomandibular joint disorders and correcting them.

Using the latest in imaging technology, physics, and biomechanics, a unique technique has been developed to detect, and correct, changes to the head and neck responsible for altered head and neck posture and trigeminal nerve function.

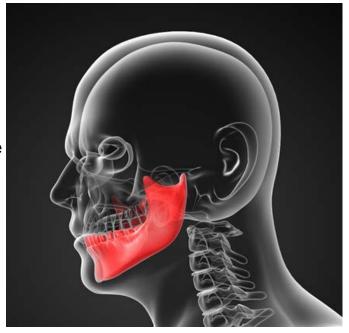
The technique is called Upper Cervical Care. It is exceptionally safe, gentle, and non-invasive. It does not seek to treat temporomandibular joint disorders, rather focuses on restoring head, neck and body posture, to improve nerve function and restore proper alignment of the jaw joints. However, the results have been overwhelmingly positive.

Research has shown a greater than <u>85%</u> improvement in those suffering with TMJ following Upper Cervical Care. The Upper



Cervical approach involves rebalancing the position of the head, the neck and as a consequence, the jaw. Upper Cervical care is safe, gentle, precise and extremely effective.

While TMJ can have numerous causes, the most common is some kind of trauma to the jaw itself or to the upper neck. This is because an injury in the upper neck area (the two uppermost vertebrae that are right at the base of the brain) can put pressure on the trigeminal nerve and also affect posture. When this nerve suffers damage various temporomandibular joint disorders can result.



In addition, soft tissue based treatments that include myofascial release techniques might also be incorporated. This tissue based therapy has been proven to break up scar tissues and adhesions on the surrounding ligaments and muscle.

Owing to the complexities and the complex interconnection of the temporal mandibular joints and the joints of the upper cervical spine and skull, collaborative efforts with neuromuscular dentists and upper cervical chiropractors can dramatically increase the percentage and predictability of positive outcomes in the treatment of TMJ disorders. Since both are linked to <u>trauma</u>, <u>headaches</u>, dizziness, fatigue, <u>face</u>, <u>neck and shoulder pain</u>, Temporomandibular Joint Dysfunction and Upper Cervical Subluxation, have much in common.

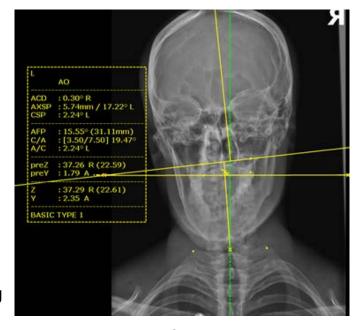
With the cranium comprising 50% of the <u>temporomandibular joint</u>, restored cranial balance can be a key component to restored TMJ biomechanics; therefore, to completely assess the craniomandibular joint, the cranial cervical junction should also be assessed. Conversely, temporomandibular joint dysfunction may prevent the upper cervical spine from stabilizing under upper cervical care and the cycle of pain and dysfunction persists.

#### **Evaluation**

TMJ sufferers undergo a non-invasive evaluation. The evaluation is designed to understand your unique story, determine the presence of an ASC (Atlas Subluxation Complex), and create a 3D image of your head and neck.

#### Composite 3D X-rays

Much like a GPS image on your iphone can give you pinpoint accuracy in your location; composite 3D digital x-rays can now give precise information about the positioning of the head and neck following a trauma. The ability to measure and



detect changes to the housing around the brain and spinal cord following a trauma can give life-changing insight to a TMJ case, even decades after the initial trauma.

The complex relationship between the head and neck following a trauma has been labeled the Atlas Subluxation Complex (or ASC). Injuries can cause over 10,000 different variations of head and neck displacement, leading to altered physiological function.

Studies have shown that changes as small as  $\frac{1}{2}$  a millimeter between the head and neck can alter the brain's ability to adapt to the environment, changes to posture leading to increased susceptibility to TMJ and associated symptoms.

### **Report and Initial Correction**

The results are discussed, and calculations are performed to determine a custom correction of the junction between the head and neck.

The correction is an extremely light and gentle adjustment that feels much like a doctor taking someone's pulse on the side of the neck. The correction is so gentle, it is safely performed on infants and babies.

Composite 3D X-rays are retaken to ensure a proper correction has been performed. The individual often does not feel a change immediately following the first correction.



### Follow-up

The individual often returns during an initial 12-week period to assess for proper correction, monitor tissue healing, and measure the progress of the symptoms.

Unlike drugs and medications, the upper cervical technique does not treat or suppress the symptoms associated with TMJ. The upper cervical procedure is designed to improve the biomechanics of the housing around the brain and spinal cord: the head and neck.

The improved biomechanics often improves the adaptability of the brain and spinal cord, and individuals often show dramatic improvement in their symptoms.

We have seen over 85% improvement in the frequency and severity of TMJ symptoms through upper cervical care. The clinic also works with integrative professionals including Neuromuscular Dentists, Neuroopthamologists, and Craniosacral Therapists for more complicated TMJ cases.

### CONCLUSION



TMJ can be a source of immense anxiety in your life. It is extremely difficult to live with pain or other symptoms every time you move your jaw. After reading this eBook, you should be able to determine possible triggers that result in a TMJ dysfunction.

While eliminating triggers can be important it is much more important to address the underlying cause

of the condition. An upper cervical corrective procedure is focused on correcting a common underlying cause of temporomandibular joint disorders. When proper posture and alignment is restored to the head, neck and jaw as a result of an upper neck corrective procedure, many of the triggers will cease to affect you.

Thank you for reading this e-book and if you would like to speak with me personally in my Redmond office about your TMJ call **425-437-9974** or just click the button below:

### **Schedule a Consultation**

Be Well,

Dr. Justin Schallman Clinic Director Back in Balance Redmond http://backinbalanceredmond.com/ 425-437-9974

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