Current Status of TMD/Migraine Diagnosis & Treatment

The TMD/Migraine Dilemma: Good Night Guards, Bad Night Guards… What to do?

The TMD/Migraine Dilemma: Good Night Guards, Bad Night Guards… What to do?

Many of my new patients come to see me for the first time with a bag in hand holding several night guards that previous dentists had made for them. Some patients bring with them night guard appliances purchased at pharmacies that have not worked.

It's apparent there is a lack of Temporo Mandibular Disorder (TMD) knowledge on the part of most physicians, general dentists, and even oral surgeons. Unfortunately, TMD study is all post-graduate study only done by dentists willing to take the extra step. In dental school, dentists are exposed to night guards as a tool to balance an unbalanced bite… that's it! Unfortunately, TMD is a condition more complicated than an unbalanced bite.

TMD is a physiologic muscle-nerve disorder with the primary cause being a Temporo-Mandibular Joint Dis-function, which is either passed off by the doctor as untreatable or in many cases not even diagnosed. In addition, most migraine patients I initially see have been to neurologists where brain MRIs are taken, showing negative results. These patients are often treated with muscle relaxants and sent home. Further, pain management physicians routinely give TMD/migraine patients injections to temporarily treat the TMD pain symptoms, with the physicians unable to find or treat the source of the patient's pain.

Many patients eventually end up researching and diagnosing their own condition after failed attempts by health professionals to guide them.

TMD usually affects one side of the head more than the other, with the constriction and inflammation of the muscles surrounding the Temporo-Mandibular “hinge” joint dysfunction. Included in this pain cycle are associated inflamed, spastic muscles of the neck and shoulders via muscle trigger point connections. All TMD symptoms stem from irregular jaw-joint-disc mobility (the “hinge” motion), where at times the jaw joint disc appears asymptomatic and not able to be diagnosed properly.

Many tension-stress TMD patients present disruptive sleep patterns with sporadic episodes of nighttime clenching. There is the clenching of upper and lower back teeth including the canines (eye teeth) contacting each other with 600 to 900 lbs. of force in a cyclic pattern of on and off pressure. Then there are maybe a few nights where symptoms have reduced in scope, where it appears that all is getting back to normal. Then the negative cycle starts all over, making you feel miserable once again. TMD does not go away by itself; it is a roller coaster ride. Only where Temporo Mandibular Joint (TMJ) Dysfunction is present without pain or muscle or active bone damage is it safe to do nothing -- and even then you may be taking chances.

It is estimated that 80% of the population has some form of TMD. I believe, as some of my colleagues do, that all headaches are associated with some form of TMD. I have yet to experience migraine and/or TMD cases where we have not achieved success. Migraine/tension headache is not a disease as suggested by many of the health profession; it is a symptom of an underlying source. We address that source. Tension/stress is certainly part of the negative process along with the fact that 85% of the TMD sufferers are women.

When joint disc disorder and muscle inflammation are present, the dentist has an impossible task of determining what the proper upper and lower tooth balance should be like, without addressing the muscle disorder and joint harmony first. Therefore the fabrication and wearing of a full arch night guard where TMD exists does not alleviate the TMD and in most cases makes everything worse.

Can you imagine at bedtime wearing a night guard that covers your back teeth including your eyeteeth? At this point you are only exaggerating and agitating the muscle abuse with nighttime clenching that you may not be aware of. During the day the patient usually feels the jaw joint displacement on the side where the back teeth hit first and hardest, which at night intensifies the clenching. In many cases you'll wake up in the morning feeling lousy with head soreness and jaw pain. I've yet to see a full contact horseshoe shaped night guard that takes away headaches and reverses TMD.

The TMD / Migraine / Tension Headache ANSWER – the Right Night Guard

In the **Phase One** treatment of TMD, we must use a deprogramming NTI-type muscle orthotic including associated muscle therapy such as Direct Current Microcurrent and Class 4 Cold Laser. The NTI-type appliance does not allow the back teeth including the eyeteeth to make contact. The anterior deprogrammer (NTI) is the ideal mouth orthotic appliance for clenching, and actual EMG studies show a decrease of the jaw elevator muscle (anterior temporalis and masseter) contraction by 80% when an anterior deprogrammer such as the NTI orthotic is used.

We must be especially concerned with not allowing the upper and lower eye teeth (canines) to touch during the de-programming period as 75% of the clenching is borne by the eyeteeth. During Phase One, we must reposition the skull and jaw relationship along with deprogramming the muscles before we even try to do a fine adjustment of the biting contact between the upper and lower teeth. The Phase One deprogramming period may last anywhere from 3 months to over a year.

Phase Two treatment is initiated once the symptoms have subsided and all affected musculature is normal. It is then that the upper and lower teeth position is re-evaluated and treated either by a simple bite adjustment all the way up to corrective jaw-tooth re-construction.

The Phase One wearing of the NTI-type deprogramming orthotic deactivates the temporal muscle activity associated with the cortex of the scull, stopping the headaches, and preventing the lower jaw from “banging” into the thinly protected outer wall of the ear canal. That's where you might get the symptoms of ear pain, dizziness, imbalance and light-headedness or even the presence of tinnitus. Fifth cranial nerve (trigeminal nerve) hyperactivity is reduced. Pain referred to the neck and shoulders, if present, is reduced with the help of Direct Current Microcurrent therapy and Class 4 Cold Laser treatment. Pseudo-sinusitis symptoms and maybe throat swallowing problems go away.

Have you ever been treated medically for sinusitis, when in fact there was no bacterial presence of disease and all the medicines didn't help? All you were suffering from was TMD physiological muscle-nerve disorder and its abuse on the cavity and fragile walls of the sinus via the negatively affected trigeminal nerve activity.

TMJ Migraine Expert

Dr. Mike Pilar

Offering Help with Severe Migraine Treatment:

(917) 414-8355