



Press Release Contact Information:

Ira Shapira
Sleep and Health Journal
Section editor/author
1810 Delany Road
Gurnee, Illinois
USA, 60035
Voice: 847-623-5530
Fax: 847-623-7233
E-Mail: [Email us Here](mailto:ira@sleepandhealth.com)
Website: [Visit Our Website](http://www.sleepandhealth.com)

TMJ Disorders Are More Frequent In Migraine, Episodic Tension-Type Headaches and Chronic Daily Headache Patients Sleep Apnea is a TMJ Disorder. TMD and Sleep Apnea Treatment Essential

Patients who suffer from migraines and other chronic or severe headaches usually have Trigeminal Nerve involvement that requires that the TMJ disorders be treated. Some insurance companies fraudulently deny coverage of medical problems involving TMD.

GURNEE, IL, December 15, 2009 **/24-7PressRelease/** -- TMJ Disorders Are More Frequent In Migraine, Episodic Tension-Type Headaches and Chronic Daily Headache Patients Sleep Apnea is a TMJ Disorder. TMD and Sleep Apnea Treatment Essential

Patients who suffer from migraines and other chronic or severe headaches usually have Trigeminal Nerve involvement that requires that the TMJ disorders be treated. Some insurance companies fraudulently deny coverage of medical problems involving TMD.

Headaches are primarily a disorder of the Trigeminal Nerves and the tissues they innervate. The evidence is becoming increasingly stronger that the majority of headache patients also have symptoms of Temporomandibular disorders and that treatment of these disorders is essential to management and relief of headaches. Patients wishing to avoid migraines and extensive drug regimens often find they can eliminate or avoid a high percentage of headaches through Neuromuscular dental treatment. (see Sleep and Health article on Neuromuscular dentistry) A September 2009 article in HEADACHE "Headache and Symptoms of Temporomandibular Disorder: An Epidemiological Study" concluded that "Temporomandibular disorder symptoms are more common in migraine, (Episodic Tension Type Headaches) ETTH, and (Chronic Daily Headache) CDH relative to individuals without headache. Magnitude of association is higher for migraine." This is no surprise to Chicago Neuromuscular Dentist, Dr Ira L Shapira a Diplomate of the American Academy of Pain Management who has created a new resource (<http://www.ihateheadaches.org>) for headache patients looking to avoid a future plagued with pain. The site discusses neuromuscular dental treatment to eliminate and/or reduce all of these types of headaches. He is also the creator of the website <http://www.ihatecpap.com> which helps patients find comfortable and effective alternatives to treat sleep apnea and snoring. The NHLBI considers sleep apnea to be a Temporomandibular disorder.

The article looked at 1230 patients in a validated phone survey. Phone surveys by their nature will underestimate the number of patients with signs and symptoms of temporomandibular disorders because patients may be unaware of the signs not associated with frank symptoms. The study also had equal number of men and women. Many studies have shown that approximately 80% of TMD sufferers are women but they only represented half of the participants in this study. Even so, patients with one or two symptoms of TMD were almost twice as likely to have headaches. As the number of symptoms increased so did the percentage with headache. The increases were seen in all types of headaches evaluated including Migraine, Episodic Tension-Type Headache and Chronic Daily Headache. The researchers recommend that additional research should be done on the relation of TMD to headaches.

The findings of the first study were similar to another study "Are headache and temporomandibular disorders related? A blinded study" from Denmark that was reported in Cephalalgia. 2008. That study found that 56% of headache sufferers also had TMD. The study reported 40% of the TMD group suffered psychosocial dysfunction and that TMD was found in all headache types. Patients with migraines and tension-type headaches were more likely to have TMD. An amazing statement from the authors, "The trend to a higher prevalence of TMD in patients with combined migraine and tension-type headache suggests that this could be a risk factor for TMD development." shows that they really do not understand the cause and effect is reversed in most cases. Treatment of the underlying TMD disorder is likely to eliminate or reduce the headaches but treatment of headache or migraines do not eliminate the Temporomandibular dysfunction. The cause of the headaches is trigeminal nociceptive input leading to central sensitization and then to migraine and tension-type headache. Eliminating the noxious input with an oral appliance can prove this. While appliances made this author recommends utilizing neuromuscular dental techniques as being the most efficacious studies almost always show improvements of 50% or more

with orthotics made by dentists. The advantage to neuromuscular appliances is they are designed and adjusted to reduce excess masticatory muscle activity, which is measured by the dentist. The use of botox injections to relieve migraines proves that the pain is coming from the masticatory (trigeminal innervated) muscles. Establishing health through correction of the initiating factors allows healing, reduction of central sensitization and headaches. Tension-type headaches usually resolve faster because they are less affected by the central sensitization. The study also found that "Patients with coexistent TMD had a significantly higher prevalence of depression-most markedly in patients with combined migraine and tension-type headache. Our studies indicate that a high proportion of headache patients have significant disability because of ongoing chronic TMD pain". The depression is the direct result of the chronic pain.

When I see patients we discuss the difference between psychosomatic pain that translates into "I hurt because I'm crazy" and Somatopsychic pain, which translates into "my pain is making me crazy". I then explain that if they are in constant pain and do not become depressed they are "certifiable". Of course patients with TMD are depressed, they have severe headaches or migraines but more importantly they have a dysfunctioning system that controls breathing, swallowing, speech, communication, chewing, posture and many other important functions. In addition to headaches they have one or more of the following symptoms: Ear Pain, Sinus Pain, Pain behind the eye, throat pain, jaw pain, facial pain, tongue pain, neck pain, shoulder pain, top of the head pain, back of the head pain, sleep apnea, disturbed sleep, GERD, loss of cognitive function, short-term memory loss, anxiety, and noises such as popping and clicking when they use their jaws and joint pain. TMJ disorders are often called The Great Imposter because they have symptoms of so many other disorders. There is another article in Sleep and Health Journal written by this author discussing the effects of TMJ disorders on patients. Read 'Suffer No More: Dealing with The Great Imposter'

An interesting phenomenon is how insurance companies treat patients with TMJ disorders. They deny coverage or limit coverage to a pittance. If a dentist does not treat a patient they may well live a life full of misery and regret but if they do see a dentist than insurance companies often fraudulently deny their claims by classifying all symptoms as TMJ. This is actually discrimination against women since the majority of patients seeking treatment of TMJ disorders are women. An interesting fact to note is that the National Heart Lung and Blood Institute (NHLBI) of the National Institute of Health (NIH) considers snoring; sleep disordered breathing and sleep apnea to be a TMJ disorder. However women are still discriminated against by many insurance companies but it is only partially the fault of the insurance companies. Insurance coverage for treatment of sleep apnea often requires a certain minimum AHI or apnea/hypopnea index. The definitions for apnea and hypopnea were historically made while studying old fat men. Women in general and younger thinner healthier men often have sleep disordered breathing that does not meet the definition of hypopnea or apnea. They have RERA's, respiratory effort related arousals or UARS, upper airway resistance syndrome. Their sleep is just as disturbed as patients with sleep apnea but their episodes do not meet current definitions. The sleep physicians are well aware of this fact and use terms like RERA, UARS and RDI or respiratory distress index to quantify the problem. Insurance companies often pay only for (AHI) Apnea Hypopnea indexes of (?) but not Respiratory distress indexes that are elevated. This is where women become the victims of discrimination again. Disturbed sleep is a major cause or complicating factor leading to Fibromyalgia. Fibromyalgia and TMJ disorders also have extremely high correlation rates similar to TMD and headaches. Fibromyalgia is also a disorder marked by central sensitization but is more wide spread.

The field of Neuromuscular Dentistry (<http://www.sleepandhealth.com/neuromuscular-dentistry>) is not a specialty but is considered by dentists trained in the field to be one of the most effective treatments for TMD disorders and headache treatment.. Neuromuscular Dentistry has been in the news because of the Makar Pure Power Mouthguards that are worn by the New Orleans Saints who credit these neuromuscular mouthguards for their incredible season. Neuromuscular Dentistry not only optimizes physiology to increase strength and balance in athletes but this same optimization of physiology treats migraines, tension type headaches and chronic daily headaches as well as TM Joint disorders and TMD or temporomandibular dysfunction.

A series of two articles published in Cranio several years ago showed a 200-300% increase in medical costs in patients diagnosed with TMJ disorders in every field of medicine except obstetrics. Patients with untreated TMJ disorders strain our medical resources.

There are controversies about whether Myofascial Pain and Dysfunction (MPD) and Fibromyalgia (FM) are the same disorder. They both demonstrate taut bands and trigger points in the muscles and lead to sleep disorders. Myofascial pain is usually not as widespread as fibromyalgia and is frequently diagnosed as coexisting with TMD and masticatory muscle disorders. The disturbed sleep associated with Fibromyalgia is Alpha intrusion (awake brain waves) into Delta (deep) sleep and a similar condition is also found in TMJ disorders. In sleep apnea patients the Delta phase of sleep is often lost completely. The American Academy of Sleep Medicine recently dropped Delta Sleep or stage 4 sleep from its sleep studies over the objections of many members. CPAP is still considered the Gold Standard for treating sleep apnea. It has never been very successful at restoring Delta Sleep and there is a belief that the changes in how sleep is staged are to make CPAP results look better. Unfortunately this change decreases the value of sleep studies or overnight polysomnography. Accredited Sleep Centers are no longer allowed to separate stage 3 and 4 sleep and must just report a combined SWS, Slow Wave Sleep or stage 3 encompassing both phases. Much of the research in sleep is based on having stage 3 and stage 4 (delta) sleep differentiated. An example is the excellent research that was done at the University of Chicago showing that loss of Delta sleep led to weight gain due to decreases in Growth Hormone production. The bulk of growth

hormone is produced during the first period of Delta Sleep. If delta sleep is lost growth hormone is drastically reduced and adult patients gain weight, have slower metabolism and loose muscle tissue at an accelerated rate. They get old.

In Children growth hormone is very involved in growth and development. Sleep apnea in children is also a serious concern. Studies have shown delayed intellectual development and possibly permanent brain changes in children with sleep apnea. It is estimated that up to 80% of ADD and ADHD is caused by sleep apnea. We treat these diseases with Ritalin and other stimulants. The drug of choice is Oxygen during sleep while growth and development is moving at mach speed not Ritalin or Ritalin like drugs for life. Removal of tonsils and Adenoids that partially or completely occlude the airway are a first line treatment for pediatric apnea along with rapid maxillary expansion (orthodontics) to correct narrow mouths and noses. The mouth and the nose are like a two story building. When you make the downstairs (mouth) wider the upstairs (nose) also widens and children do better for life.

As the country ponders the future of healthcare it must consider the positive effects early medical treatment can have on the growth and development of children. While an across the board public option may not be adopted at this time it is important to realize that the savings we hear about will come primarily from treating pregnant women and children. We will save more in special education costs by covering children then the program would cost. Read A Rational National Health Plan in Sleep and Health Journal <http://www.sleepandhealth.com/rational-health-plan>

CPAP as mentioned earlier is "still" considered the "Gold Standard" of treatment for sleep apnea. If we examine this issue we may want to reconsider if that is still true. Many studies have shown that the majority of patients abandon their CPAP. A recent study showed 60% of patients discontinued CPAP use while other studies have shown that only 23-42% of patients use their CPAP. Many patients refuse to have sleep studies done because they do not want CPAP and still others refuse to ever try CPAP. Patients in these groups are not even counted in the above statistics. Other patient are not offered CPAP because their AHI is to low but their sleep disordered breathing is still causing them to have very disturbed sleep. These patients are also not included in the statistics of CPAP failures. Recent studies have shown that even patients who are successful with CPAP use only average 4-5 hours a night not the recommended 7-7 1/2 hours. They are without a doubt undertreated. This does not mean CPAP is nor excellent treatment. It is excellent treatment for the approximately 25% of patients who love CPAP from the first day and use it faithfully because it makes them feel great. The problem is we have a "Gold Standard" of treatment that fails the majority of patients. Can a treatment that fails or partially fails most of the patients it is meant to help truly be called a "Gold Standard"?

CPAP manufacturers have done an impressive job in improving CPAP. The machines are smaller, quieter, come equipped with battery packs on some and humidification is available. One company Fisher Paykal even has heated hoses to increase comfort. The machines can be offered with BiPAP or bi-level pressures to make expiration easier, ramping so the pressure increases after the patient is asleep and APAP that can automatically set pressures to what is needed by the patient. There are literally hundreds of masks to allow more comfort to the patient and they can be oral, nasal and with many different improvements to increase comfort. Yet in spite of all these improvements they still have such a low success rate, the question is CPAP still the "Gold Standard"

In February of 2006 new guidelines of The American Academy of Sleep Medicine were published in Sleep accepting oral appliances as a first line treatment for mild to moderate sleep apnea along with CPAP and for severe apnea when patients do not tolerate CPAP. Patients offered a choice initially between CPAP and Oral Appliances prefer oral appliances to CPAP almost 20-1. Patients report wearing their appliances on a nightly basis however this figure cannot be confirmed because unlike CPAP there is currently no way to objectively measure patient compliance proving that patients wear their appliances.

Appliances are extremely effective for most patients but not always as effective as CPAP in eliminating all apneas and hypopneas. But patients do wear them. An appliance that relieves 80% of the apnea and is worn is a 1000% improvement over a CPAP that eliminates the apnea but is never used.

So, I again ask the same question, Is CPAP still the "Gold Standard" of treatment. I do not think so. I created the website <http://www.ihatecpap.com> specifically because the number one comment heard from patients was "I HATE CPAP" THE WEBSITE IS DESIGNED TO INFORM THE PUBLIC ABOUT THE DANGERS OF SLEEP APNEA AND THE TREATMENTS THAT ARE AVAILABLE. The website still states that CPAP is the "Gold Standard" of treatment. It is not impressive not because of effectiveness but because it is not used. A CPAP machine gathering dust in the closet is absolutely not effective. Studies are coming out that now show that even severe sleep apnea can be treated with oral appliances. The I HATE CPAP! Website will help patients find a dentist trained to treat sleep apnea with oral appliances. If a doctor is not yet listed in your area I HATE CPAP! Website we will assist in finding a qualified doctor leaving patients to decide on treatment with their doctors.

PubMed abstracts of quoted articles. Headache. 2009 Sep 14. [Epub ahead of print] Headache and Symptoms of Temporomandibular Disorder: An Epidemiological Study. Gonçalves DA, Bigal ME, Jales LC, Camparis CM, Speciali JG.

From the Department of Dental Materials and Prosthodontics, Araraquara Dental School, Sao Paulo State University, Brazil (D.A.G. Gonçalves and C.M. Camparis); Merck Research Laboratories, Whitehouse Station, NJ, and Department of Neurology, Albert Einstein College of Medicine, Bronx, NY, USA (M.E. Bigal); INBIO - Instituto de Neuropsicologia e

Biofeedback, Ribeirao Preto, Sao Paulo, Brazil (L.C.F. Jales); Department of Neurology, School of Medicine at Ribeirao Preto, University of Sao Paulo Ribeirao Preto, Sao Paulo, Brazil (J.G. Speciali). Objectives.- A population-based cross-sectional study was conducted to estimate the prevalence of migraine, episodic tension-type headaches (ETTH), and chronic daily headaches (CDH), as well as the presence of symptoms of temporomandibular disorders (TMD) in the adult population. Background.- The potential comorbidity of headache syndromes and TMD has been established mostly based on clinic-based studies. Methods.- A representative sample of 1230 inhabitants (51.5% women) was interviewed by a validated phone survey. TMD symptoms were assessed through 5 questions, as recommended by the American Academy of Orofacial Pain, in an attempt to classify possible TMD. Primary headaches were diagnosed based on the International Classification of Headache Disorders. Results.- When at least 1 TMD symptom was reported, any headache happened in 56.5% vs 31.9% (P < .0001) in those with no symptoms. For 2 symptoms, figures were 65.1% vs 36.3% (P < .0001); for 3 or more symptoms, the difference was even more pronounced: 72.8% vs 37.9%. (P < .0001). Taking individuals without headache as the reference, the prevalence of at least 1 TMD symptom was increased in ETTH (prevalence ratio = 1.48, 95% confidence interval = 1.20-1.79), migraine (2.10, 1.80-2.47) and CDH (2.41, 1.84-3.17). At least 2 TMD symptoms also happened more frequently in migraine (4.4, 3.0-6.3), CDH (3.4; 1.5-7.6), and ETTH (2.1; 1.3-3.2), relative to individuals with no headaches. Finally, 3 or more TMD symptoms were also more common in migraine (6.2; 3.8-10.2) than in no headaches. Differences were significant for ETTH (2.7 1.5-4.8), and were numerically but not significant for CDH (2.3; 0.66-8.04). Conclusion.- Temporomandibular disorder symptoms are more common in migraine, ETTH, and CDH relative to individuals without headache. Magnitude of association is higher for migraine. Future studies should clarify the nature of the relationship.

PMID: 19751369 [PubMed - as supplied by publisher]

Cephalalgia. 2008 Aug;28(8):832-41. Epub 2008 May 21. Are headache and temporomandibular disorders related? A blinded study. Ballegaard V, Thede-Schmidt-Hansen P, Svensson P, Jensen R. Danish Headache Centre and Department of Neurology, University of Copenhagen, Glostrup Hospital, Glostrup, Denmark. vibececilie@gmail.com To investigate overlaps between headache and temporomandibular disorders (TMD) in a clinical headache population and to describe the prevalence of TMD in headache patients, 99 patients referred to a specialized headache centre were diagnosed according to Research Diagnostic Criteria for TMD (RDC/TMD) and classified in headache groups according to the International Classification of Headache Disorders, second edition for headache diagnoses in a blinded design. The prevalence of TMD in the headache population was 56.1%. Psychosocial dysfunction caused by TMD pain was observed in 40.4%. No significant differences in TMD prevalence were revealed between headache groups, although TMD prevalence tended to be higher in patients with combined migraine and tension-type headache. Moderate to severe depression was experienced by 54.5% of patients. Patients with coexistent TMD had a significantly higher prevalence of depression-most markedly in patients with combined migraine and tension-type headache. Our studies indicate that a high proportion of headache patients have significant disability because of ongoing chronic TMD pain. The trend to a higher prevalence of TMD in patients with combined migraine and tension-type headache suggests that this could be a risk factor for TMD development. A need for screening procedures and treatment strategies concerning depression in headache patients with coexistent TMD is underlined by the overrepresentation of depression in this group. Our findings emphasize the importance of examination of the masticatory system in headache sufferers and underline the necessity of a multidimensional approach in chronic headache patients.

PMID: 18498400 [PubMed - indexed for MEDLINE]

Dr Ira L Shapira is an author and section editor of Sleep and Health Journal, President of I HATE CPAP LLC, President Dato-TECH, and has a Dental Practice with his partner Dr Mark Amidei. He has recently formed Chicagoland Dental Sleep Medicine Associates. He is a former International Regent and Secretary of ICCMO , the International College of CranioMandibular Orthopedics the organization of neuromuscular dentistry and is the representative to the TMD Alliance, He was a founding and certified member of the Sleep Disorder Dental Society which became the American Academy of Dental Sleep Medicine, A founding member of DOSA the Dental Organization for Sleep Apnea. He is a Diplomate of the American Board of Dental Sleep Medicine, A Diplomat of the American Academy of Pain Management, a graduate of LVI. He is a former assistant professor at Rush Medical School's Sleep Service where he worked with Dr Rosalind Cartwright who is a founder of Sleep Medicine and Dental Sleep Medicine. Dr Shapira is a consultant to numerous sleep centers and teaches courses in Dental Sleep Medicine in his office to doctors from around the U.S. He is the Founder of I HATE CPAP LLC and <http://www.ihatecpap.com> and I HATE HEADACHES LLC and the website <http://www.ihateheadaches.org>. Dr Shapira also holds several patents on methods and devices for the prophylactic minimally invasive early removal of wisdom teeth and collection of bone marrow and stem cells. Dr Shapira is a licensed general dentist in Illinois and Wisconsin.