

## Headaches, headaches everywhere

**Headaches** are one of the most common **symptoms of a TMJ (Tempromandibular joint)** problem and the number one reason for patients visiting their primary physicians. **Tension headaches** are the most common type of headache, and the TMJ headache is a tension type of headache. It is often described as a feeling of wearing a hat two sizes too small, with pain in a ring around the head, or as a **migraine headache**.

There are a few TMJ-related causes for tension headaches. Constant contraction of muscle fibers within a muscle, create tension, pressure or a tight feeling in the face and head, but constant tight muscle fibers prevent or reduce blood flow to that area. The body sends more blood to the areas and this can result an increase in general blood pressure to the muscles and head, sometimes referred to as vascular headaches. Clenching and grinding the teeth, which are **TMJ symptoms**, produce pain from the muscles in the head, which is a headache.

Unfortunately, these headaches can be so frequent or severe that they are frequently misdiagnosed and treated as migraine headaches.

The pain from muscle headaches can be blocked with medications, or nerves cut with brain surgery or muscles somewhat relaxed with muscle and psychological therapy, but the cause of the disease and damage from the bad bite, malocclusion, will persist. Side effects with medications, complications from brain surgery, and limited results with muscle or psychological therapy do not correct the source of the problem. **Neuromuscular dentistry** ensures the muscles are happy because they do not have to work hard positioning the teeth to a strained bite.

Many times these headaches are accompanied with facial pain. The jaw area of the face is a complex network of bones, joints, muscles, and nerves. When the jaw becomes unaligned, the surrounding bones, muscles, and nerves are also affected. This includes the muscles of the face, which experience strain or spasm because the muscles are working extra hard to compensate for the unstable bite.

By putting the Tempromandibular joint back into alignment and placing the jaw into its optimal position, neuromuscular dentistry can alleviate most headache and facial pain problems related to TMJ, muscle, nerve and joint disorders.

For more information in this regard, or to have a free evaluation with Dr. Nassery, call our office at (305) 672-4444 and arrange your appointment with us. Please visit us at our website [www.miamibeachdentistry.com](http://www.miamibeachdentistry.com)

# Facial Pain

When a patient's bite is not properly aligned, **TMJ (Tempromandibular joint) dysfunctions** and a number of related **symptoms** can arise. One of these symptoms is **facial pain**.

A **neuromuscular dentist** can help **facial pain** problems by working with the source of the problem, the bite. Your neuromuscular dentist will stabilize and realign your bite so that the teeth, muscles, and joints all work together without strain.

Following are references to a number of studies that illustrate the success of neuromuscular therapy in treatment of tension headaches.

Vargo and Hickman<sup>i</sup> reported on two classic cases presenting with diagnoses of chronic cluster headache. Both patients were evaluated neuromuscularly. This included relaxation of masticatory muscles with low-frequency electrical muscle stimulation and verification with surface electromyography (SEMG). Patients were then treated initially with a mandibular orthosis, posturing the mandible to the physiologically dictated rest position. Both patients reported almost immediate relief of headache symptoms. For longer-term treatment, each patient was provided with an overlay appliance adjusting the occlusion to the neuromuscularly determined position. Follow-up for periods of 25 and 20 months, respectively, found both patients continuing to be virtually symptom free.

Coy, et.al.<sup>ii</sup> reported on a study designed to document frequency and ranking of various symptoms of head and neck pain and dysfunction. Sixty-eight (68) case histories of patients who had been treated by dentists for craniomandibular pain or dysfunction were reviewed retrospectively. Of fourteen signs and symptoms exhibited in the patient group, headache was the most common symptom, being reported by 85% of the patients. Sixty-three (63) percent also had cervicgia and fifty-four (54) percent atypical facial pain or neuralgia. Patients were treated with mandibular repositioning to the neuromuscular rest position as verified with SEMG. Treatment results, as evaluated by both patients and practitioners, showed ninety-seven (97) percent to be completely or largely asymptomatic following treatment.

Cooper's article<sup>iii</sup> reported on 1182 patients treated for TMD at the Myofacial Pain/TMJ Clinic of the New York Eye & Ear Infirmary and in private practice. Of that population of patients, 81.6% subjectively reported headache as a symptom. After muscle relaxation with low-frequency TENS, electromyographic studies of the group showed an average reduction of tension of the anterior temporalis muscle of 39.3% and of all masticatory muscles of 36.7%. Following treatment to the neuromuscular mandibular position, patients were asked to complete an in-office, self-evaluation questionnaire. Sixty-seven (67) percent of patients reported improvement or cure of headaches with treatment after one month and seventy-eight (78) percent after three months.

Garry<sup>iv</sup> reported on a classic case of a patient suffering through nine years of various treatments and misdiagnoses before being correctly diagnosed with temporomandibular disorder resulting from malocclusion. The patient's chief complaint was severe pain in the left side of her face. She also suffered pain in the left and right temporal regions. Surface electromyographic studies revealed extreme hyperactivity of masticatory muscles. Muscle stimulation with low frequency TENS reduced muscle tension to within normal limits. Provisional treatment to the neuromuscular occlusal position was applied for three months, during which the patient was symptom free. This was followed by permanent crown and bridge treatment to that neuromuscularly determined occlusal position. Eight years post-reconstruction, the patient remained symptom free.

Lynn, et.al.,<sup>v</sup> studied 203 consecutive patients referred to Craniofacial Pain Diagnostic Associates of Pennsylvania. Patients were treated with neuromuscular physiologic orthotics to maintain the neuromuscularly determined position of the mandible. Mean resting surface electromyography values decreased markedly during a twelve (12) week follow-up period. Results of a subjective patient self-questionnaire showed a consistent pattern of decreasing craniocervical pain over the same twelve week period, with the most apparent decreases occurring between 2 and 4 weeks following orthosis insertion. By the end of 12 weeks, all mean pain reports were less than 1 (on a scale of 0 being no pain and 10 being the most severe pain ever experienced). The authors concluded that, "There is increasing evidence supporting the premise that hypertonicity within facial muscles is an etiologic factor for some chronic headache patients."

---

<sup>i</sup> Vargo, CP, Hickman, DM: Cluster-like Signs and Symptoms Respond to Myofascial/Craniomandibular Treatment: A Report of Two Cases. *J. Craniomand. Practice.* 1997;15:19-23

<sup>ii</sup> Coy, RE, Flocken, JE, & Adib, FA: Musculoskeletal Etiology and Therapy of Craniomandibular Pain and Dysfunction. *Cranio Clinics International*, 1991;1:163-173

<sup>iii</sup> Cooper, BC. The role of bioelectronic instrumentation in the documentation and management of temporomandibular disorders. *Oral Surg., Oral Med., Oral Pathology*, 1997;83:91-10

<sup>iv</sup> Garry, JF: Craniomandibular Pain and Dysfunction of Elusive Occlusal Origin, *Am. J. Pain Management*, 1993;3:175-178

<sup>v</sup> Lynn, JM, Mazzocco, MW, Miloser, SJ & Zullo, T: Diagnosis & Treatment of Craniocervical Pain and Headache Based on Neuromuscular Parameters, *Am. J. Pain Management*, 1992;2:143-151