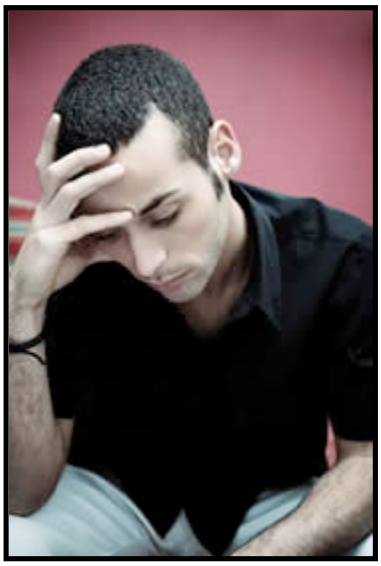
ST. JOHN-CLARK
PAIN TREATMENT CENTER

Migraine Headache: Symptoms and Treatment



- 10% of the U.S. population suffers from migraine – 12 million on a daily basis
- Symptoms: visual disturbances, nausea, vomiting, dizziness, sensitivity to sound, light, touch and smell as well as numbness or tingling in the extremities or face.
- Integrative Neurosomatic Therapy focuses on postural distortion and its effect on the C1 and C2 vertebrae.
- Closing off of the vertebral veins can occur when C1 and C2 are misaligned - increasing intracranial blood pressure.
- Distortion of C1 and C2 can compress the brain stem.
- Correcting postural distortions throughout the body allows C1 and C2 to return to a normal position.

Every 10 seconds, someone in the United States goes to the emergency room with a headache or migraine, according to the Migraine Research Foundation. They go on to say that over 10% of the U.S. population suffers from migraine. While for most, migraine occurs only once or twice a month; about 12 million

people experience attacks on a near-daily basis. Medication is the most common treatment for migraines, however we have found specific treatment using Integrative Neurosomatic Therapy to be equally, and in most cases even more effective, than traditional pharmaceutical treatment.

Migraine is a syndrome, a group of symptoms with a common cause. These symptoms include visual disturbances, nausea, vomiting, dizziness, sensitivity to sound, light, touch and smell as well as numbness or tingling in the extremities or face. The severe, intense pain that accompanies a migraine attack can be completely debilitating causing an individual to desire nothing but to seek out a dark, quiet place in which they can lay completely still. Usually, head pain associated with migraine will be focused in one location on one side of the head but can be present on both sides simultaneously.

Theories on the cause of migraine have focused on the constriction and dilation of blood vessels in the head. Other causes of migraine may include changes to the trigeminal nerve, imbalances in neurotransmitters and biological functions that result in pain generated by the membranes surrounding the brain. There are a wide range of triggers for migraine attacks including lack of food or sleep, exposure to light, hormonal irregularities (in women), anxiety, stress or even, relaxation after a stressful period. Other triggers can include certain foods, intense physical exertion, changes in barometric pressure and certain medications.

As we have studied migraine headache in our practice of Integrative Neurosomatic Therapy, we have found a significant connection between postural distortion and headache pain. In a study in conjunction with Henry Ford Hospital, Paul St. John and his colleagues treated and monitored a group of patients with intractable migraines. The patients that received St. John Method Neuromuscular Therapy (the precursor to Integrative

Neurosomatic Therapy) showed substantial reductions in the frequency, duration and intensity of their headaches as compared to patients that received Swedish massage. The results of this research also showed better outcomes, as compared to other studies, for migraine patients who received St. John Method Neuromuscular Therapy than those who were prescribed the leading migraine medication.

Our theories on the relationship of postural distortion and migraine headache deal specifically with distortions of the position of the C1 and C2 vertebrae, mechanical stresses that are placed on the musculoskeletal system in general, and the effects of postural distortion on the nervous and endocrine systems.

To begin with, many migraine-like symptoms can be produced purely from muscular imbalance patterns that cause spasm, strain and trigger point referrals. A quick look at the head and neck trigger point diagrams in Travell and Simons' *Myofascial Pain and Dysfunction* will reveal familiar pain patterns to any headache sufferer. By treating trigger point referral patterns from muscles like sternocleidomastoid or the suboccipital group that produce documented pain patterns that are commonly described as migraine, a large percentage of these headaches are successfully eliminated. Often diagnosed as migraine headache, the origin of these headaches is purely muscular.

We believe the most important factor in a true migraine syndrome is the position of the C1 and C2 vertebrae, the top two vertebrae in the neck. These two structures are completely unique in comparison to the rest of the vertebrae. The ellipsoidal joints between the occipital bone (the base of the cranium) and C1 and the similar joint between C1 and C2, allow for a great deal of mobility at this level of the spine. This high degree of mobility here opens up the possibility for some negative effects on the vertebral artery and veins, as well as the brainstem itself, when

these structures move into a distorted position. Where blood flow to and from the cranium is provided by the vertebral arteries and veins is concerned, opposing rotations of the C1 and C2 seem to have the biggest influence on migraine headache. When one of these structures is rotated to the right while the other is rotated to the left a great deal of compression of these vascular structures occurs. Since veins are much easier to compress than arteries, blood flows more easily into the intracranial space, the area around your brain, than out of it. Blood then becomes trapped inside the cranium increasing the pressure there, triggering migraine headache pain. Medical theories relating to the vasodilation causes by certain neuropeptides is a cause of migraine headache. One explanation for the presence of these neuropeptides could be that the body is trying to deal with increased blood pressure in the head that occurs as described above. In examining the cadavers of migraine sufferers, this opposing rotation of C1 and C2 has been observed by our staff in conjunction with patterns of the cranial vascular system that have been imprinted on the internal boney surface of the cranium due to the high degree of pressure in those structures. Eliminating these distortions of C1 and C2 is been vital in eliminating migraine headache in our patients.

There are other implications for the nervous system when C1 and C2 are distorted. At this level the brainstem is extending down into the spinal canal before transitioning to the spinal cord at about C3. A cranial nerve emanating from the brainstem, the trigeminal nerve has been implicated as a source of migraine headache. The trigeminal nerve is an extremely sensitive nerve that is responsible for sensation and function in the jaw, teeth, face, tongue, lips, eyes, sinuses and the brain itself. When C1 and C2 become distorted, a reduction in the space that the brainstem occupies occurs. This intrusion into the brainstem can especially be seen when the C1 projects or shears forward on the C2. In this case part of the C2, called the odontoid process, can begin to migrate backwards, compressing the brainstem and cranial nerves, including the

trigeminal nerve. When this process begins, disruption of many neurological functions can occur contributing to migraine pain that stems from these structures. Once again, we see postural distortion jeopardizing a critical area of the body.

The role of postural distortion in conditions such as hip or back pain is obvious. When we recognize that these distortions have a profound effect on vital structures in the cervical spine and cranium, we have a tremendous opportunity to create healing. It might seem strange that, in order to eliminate migraines, we might have to treat muscles in your thighs. However, along with very specific structures in the neck and head, Integrative Neurosomatic Therapists look at all facets of postural distortion in order to alleviate pain. As with our approach to relieving pain in any situation, creating balance and symmetry is the key.

Call Today to let one of our expert therapists answer any questions you may have regarding Migraine Headache (727) 347-HEAL (4325) or email us at **info@stjohn-clarkptc.com.**