

Acupuncture to Treat Migraine Headaches

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The Use of Acupuncture and Traditional Chinese Medicine to Treat Migraines

by: Craig Amrine, L.Ac.

“Not Tonight, I Have a Headache”

Headaches can vary from a mild inconvenience to completely debilitating condition. Descriptions vary from feeling like a steel band around the head to an ice-pick stabbing behind the eye. The study of headaches and how to treat them have been around for as long as history has been recorded. In this article, however, we’re going to focus on the modern view of headaches including migraine and cluster versions and how Traditional Chinese Medicine with acupuncture can be used to treat them.

How common are migraines?

Unless you’ve experienced them, it’s difficult to really imagine how life-altering headaches can be. It may be surprising to learn how common they are. According to the Migraine Research Foundation (1), at least 36 million people in the United States suffer from migraines, 14 million of which suffer from chronic attacks that hit at least 15 days per month. American employers claim to lose more than \$13 billion each year due to lost work days resulting from migraine debilitating attacks. Migraine attacks will affect about 3 times more adult women than adult men. Surprisingly, almost 10% of school age children suffer from migraine attacks. People who suffer from migraines are also likely to struggle with depression, anxiety, and sleep disorders. With such a common problem however, several misconceptions exist on headaches.

What exactly is a migraine? How does it differ from other types of headaches?

The most common headaches can be roughly divided into 3 separate categories: Migraine, Cluster, and Tension headaches. They can be differentiated by symptoms, frequency, and cause(2).

Craig Amrine L.Ac. is the owner and operator of Hidden Rhythm Acupuncture located in the heart of Tempe, Arizona. These newsletters are designed to help educate the public on various afflictions that acupuncture as a part of Traditional Chinese Medicine is known to treat. Each month, Craig will address a new health challenge that commonly affects the general public and offer a brief explanation on the disease from both the Western perspective as well as from the Traditional Chinese Medical perspective. He will also offer his own thoughts on treatment based on personal clinical observation and treatment experience.



Migraine Headaches:

These headaches are characterized by intense and throbbing pain usually on one side of the head. About 1/3 however, can migrate to both sides. They can last from a few hours to several days. Attacks can range from several times per week to just a few times per year. They are often accompanied by early warning signs called “auras” . Auras are a collection of symptoms that usually show up hours or days before the attack and may continue through the attack. They include visual disturbances (flashing lights, halos, blind spots), and a sensitivity to light. The intense pain from migraines is often accompanied by other symptoms including nausea and vomiting, fatigue, and even pain or numbness in the limbs. Among women, migraines are often associated with the menstrual cycle. A migraine attack can often be confused with a transient ischemic attack otherwise known as a stroke.

Cluster Headaches:

Cluster headaches usually attack several times in a row and can last anywhere from a few minutes to a few hours. These attacks will occur in “clusters”, showing up night after night and are often described as an intense steady pain that will be felt just behind an eye on one side of the face. The pain can cause the eye to become red, watery, or even droop. They may run for several days or weeks and then disappear for years at a time. Unlike migraines, cluster headaches are 4 times more common in men than in women.

Tension Headaches:

Tension headaches (also known as stress headaches) will often begin in the back of the head and migrate to circle both sides of the head. They are often described as a tight band around the entire head. They are not associated with any light sensitivity or nausea, and are not focused on one side of the head.

What causes these different types of headaches?

The exact reasons are unclear, but theories exist that identify certain factors that may play a role in headaches including foods containing tyramine and nitrates, hereditary or familial connection, lifestyle choices including smoking and drinking, excessive stress and overwork, noisy environments, eyestrain, withdrawal from caffeine, and prescription drugs.

A deeper view into migraines

The exact mechanisms of migraine headaches are still not fully understood. Early theories thought that migraines were vascular... meaning they were just a disfunction of blood vessels because they were often described as having a “throbbing” quality. Since up to half of recorded migraines lack this throbbing character however, something else must be involved(3).

A migraine attack can be broken down into 4 phases (4):

Prodrome phase: 24 hours of a vague feelings including unusually energetic, irritable, fatigue and sleepy, all prior to the Aura Phase

Aura phase: Several hours before the attack, visual disturbances can occur including “halos” around light sources, flickering light patterns, vision loss. Other strange sensations including prickly feelings on the skin or language difficulty have also been reported. About 20% of victims experience auras before the attack.

Attack Phase: The phase where the true pain begins. It can attack one or both sides of the head, may have a throbbing nature, can cause sensitivity to lights and sounds, cause nausea and/or vomiting.

Postdromal Phase: “The After-Party”. Once the acute attack subsides, feelings of malaise, exhaustion, and confusion may occur for up to 24 hours.

How migraines first begin and why they do exist for some people is not fully understood. The common theory is that they involve various stimulus response from several factors including, stress, bright light, and even certain foods that initiate a particular neurologic response in the brain. These changes are thought to, among other things, affect blood flow around the brain and the corresponding branches of the tri-geminal nerve. Studies do show that changes in blood flow around the brain, beginning in the back and migrating to the front of the head, are definitely involved(5). Specifically, a period of enhanced blood flow followed by a wave of restricted blood flow across the brain have been observed.

Vulnerability to migraines have been found to be hereditary. Specifically, gene mutations have been identified with people who are much more vulnerable to migraines(6). These mutations are involved with sodium/potassium and magnesium/calcium channels in the brain(3). The corresponding channels are also involved in the control of serotonin within the brain. As we’ve discussed in previous papers, serotonin is a neurotransmitter that is involved in many processes including food digestion and proper mood and sleep behavior. In fact, emotional depression is also linked to a serotonin deficiency. In case of migraines, a connection has been made between low levels of serotonin and a predisposition to migraines(7)(8).

So, dysfunction of serotonin regulation may play of role in onset of migraines or impair their prevention.

Magnesium levels are also found to be lower than normal in people who suffer from migraines(9).

How does all this connect to Acupuncture and Traditional Chinese Medicine?

The Traditional Chinese Medicine View of Headache

From a TCM perspective, good physical and mental health are largely dependent on the proper flow of Qi and Blood, and the balance of Yin and Yang in the body. When the circulation or amount of Qi or Blood becomes interrupted... or Yin and Yang becomes imbalanced, disease results. Headaches are categorized by factors including: the location of the headaches, the quality of the headache (dull ache, or boring pain), what makes it better or worse, and other lifestyle factors that may trigger it including emotions, foods, weather, etc. Both these factors along with tongue and pulse diagnosis help determine the underlying cause of the headache and the best way to treat it.

In the most simple of terms, TCM breaks down the cause of chronic headaches into three different reasons(10),(11):

“Invasion of some pathogenic influence” (such as cold or flu)

“Deficiency of Qi and Blood”

“A rising of Liver Yang to the head”

In most circumstances, there is a combination of factors, where one can lead into the other (for example, a deficiency of Yin or Blood can allow to Yang to rise up into the head. Without getting too deep into Traditional Chinese Medicine theory, we can summarize that in order to treat headaches effectively, restoring proper balance to Yin and Yang as well as nourishing the correct amount of Qi and Blood is necessary.

So Why Do We Need Chinese Medicine and Acupuncture for Migraines?

Migraine headaches have been around for as long as recorded history. By now, you'd assume that modern medicine would have a strong understanding on prevention and treatment of these headaches. Unfortunately, this is not the case. Common NSAID's such as ibuprofen are first recommended. Over the counter drugs marketed specifically for migraines that often combine caffeine, ibuprofen, and aspirin are also available to help relieve mild migraine symptoms. Of course, long-term use of these drugs will lead to gastrointestinal bleeding and ulcers. Other classes of drugs including: Triptans (Imitrex), Ergots (Migranal), Opioids (Codeine), and even glucocorticoids (Prednisone) have all been suggested to decrease severity of a migraine attack(12).

To prevent a migraine attack, doctors have turned to other classes of drugs including anti-hypertensives (such as beta-blockers like Innopran XL, and ACE inhibitors), anti-depressants (Amitriptyline), and anti-seizure medication (Depacon). Recently, people have even turned to Botox (OnabotulinumtoxinA) injections to help.

Of course, virtually all of these drugs have several unpleasant and dangerous side-effects ranging from nausea, liver and kidney damage, to drug addiction.

Before we go into how Traditional Chinese Medicine and Acupuncture can help, let's take a look at home remedies and other forms of natural medicine that people can try(13).

Reduce Stress: Trying to avoid intense visual stimulus, bright lights, loud sounds can help stem the onset of migraines. Meditation, massage, and even exercise have been shown to reduce migraine symptoms.

Hydrotherapy: Rapidly heating and then cooling the head for a few minutes at a time for several repetitions have been reported to help alleviate migraine pain.

Acupressure: Direct pressure on the areas that feel pain

Avoiding Certain Foods: Foods containing tyramine and nitrates are thought to trigger migraines such as aged cheeses, wine, and cured meats(14).

Nutrition: There are several nutritional supplements that have been connected to migraines and may help minimize symptoms including Magnesium(15), Omega 3 fatty acids (fish-oil), Coenzyme Q-10, and Riboflavin(16).

Herbal Remedies: Aside from specific vitamins, several herbs have been shown to help with headache pain. ***Feverfew*** can be taken in many forms including chewing on raw leaves, infused into a tea, or as a supplement and has been shown to reduce migraine frequency and intensity. The other herbal solution; ***Butterbur***, should ONLY be taken in a processed supplement form but also has been found to help reduce migraine symptoms. ***Essential oil of peppermint*** has been shown to decrease headache intensity if you smell it.

While the results can wildly vary, I would STRONGLY urge migraine sufferers to try these home remedies as a first response. They lack the health-damaging side-effects so common with the drug remedies. The herbal solutions DO have precautions, however, so consultation by an herbalist, naturopathic doctor, or Chinese Medical doctor before using these herbs is *highly recommended*. Detailed information on both drugs and herbs can be found at www.Drugs.com or www.Rxlist.com.

The use of Chinese Herbs can also be very effectively used to combat migraines. Several studies showed how Chinese herbs can reduce both frequency and intensity of migraine attacks(17).

Since this article is more focused on the role of acupuncture, however, we will be discussing how the use of acupuncture can help headaches. As we mentioned before, Traditional Chinese Medicine does not differentiate between a tension, cluster, or migraine headache. Instead, TCM identifies the headache in terms of the imbalance of Yin, Yang, Qi, and Blood based on several factors including quality of the pain, the location, as well as other diagnostic factors that reflect the overall health of the individual(11).

In acupuncture, needles are typically used to help restore these imbalances and thus relieve pain. A long research history exists explaining the analgesic effects of acupuncture and how treatments can stimulate the release of endogenous opioids (pain relieving chemicals) including enkephalin, beta-endorphin, endomorphin, and dynorphin(18).

While this mechanism of acupuncture is well understood for pain relief, is that the only mechanism involved in its use for migraine treatment? Probably not. Earlier in the article we discussed how several factors have been connected to migraines. Serotonin levels in migraine sufferers have been shown to be lower than normal during attacks(19),(20). Can acupuncture affect these levels? Absolutely! Based on several studies, acupuncture has been shown to increase serotonin levels(21),(22). This ability not only impacts migraine treatment, but also helps explain why acupuncture can help emotional/mood and even digestive disorders.

We also mentioned that migraine headaches are connected to low Magnesium levels. A recent study suggested that acupuncture can increase serum magnesium levels, but little information is publicly available on this claim(23).

Acupuncture has also been proven to decrease inflammatory processes and alter acetylcholine levels, both of which may be involved in headache pain(24),(25).

Can these known factors be the reason why acupuncture is so effective in treating migraine headaches? This is difficult to answer because while there are many theories on the cause of migraines, the exact pathophysiology of a migraine is not completely understood. As such, the exact mechanisms of why acupuncture works for migraines is also not fully understood. Like many biological mechanisms, we assume that the sum really IS greater than the number of parts....meaning that our understanding of the measurable effects of acupuncture don't completely explain WHY it works so well for migraine headaches. It works so well that studies show that even 6 months after the last acupuncture treatment, many patients continue to show a marked decrease in migraine frequency and intensity of attacks. So how well DOES acupuncture work? Several studies exist summarizing that acupuncture works as well or better than conventional drugs in reduction of headaches (including migraines) in both intensity and attack frequency(26),(27),(28).

Aside from back pain, headache treatments (including migraine, cluster, and tension) are probably one of the most common problems that I treat in my clinic. While acupuncture is not the ideal solution for all problems, I can say that generally, headaches respond very quickly to treatments. Most of my patients have noticed dramatic improvement in as little as 2 to 3 treatments.

Headache pain can be a life-altering problem that affects a large part of our population. While there are drug treatments that have helped some people, many people don't respond to drugs or are unwilling to deal with the health-risks of drugs and have simply learned to live with the problem and suffer through these episodes, often at the expense of their quality of personal and working life. Treatment by a professional acupuncturist

licensed in Traditional Chinese Medicine is an incredibly powerful and inexpensive option that gives a much safer and effective alternative.

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