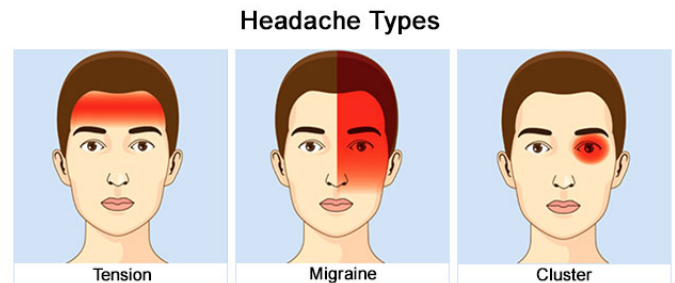


Headaches

Most people will experience a headache at some point in their lives. A headache includes tension headaches, cluster headaches, and hemicrania. Tension-type headaches are very common and affect around 42 percent of adults worldwide. Tension-type headaches feel like a band of intense pressure around the head that gives no warnings before it happens. It can be caused by a lack of sleep, stress, depression, or anxiety. When the body is under stress, the liver can become upset leading to a deficiency in toxin processing which allows toxins and chemicals to accumulate in the blood. The high levels of toxins can enter into the brain and irritate the nerves that trigger tension-type headaches as well as emotional depression, and mood swings. These toxins typically come from processed foods or foods sprayed with pesticides.

Cluster headaches are a series of relatively short but extremely painful headaches that occur in cyclical patterns or cluster periods. It is one of the most painful types of headache that occurs on one side of the head, often behind or in or around one eye which may spread to the forehead, temple, nose, cheek, or upper gum with other symptoms such as eye redness or tearing and stuffy or runny nose on the affected side. Cluster headaches often feel like piercing or burning and throbbing that reach their full force quickly within 5 or 10 minutes that last 30 to 90 minutes for each episode. It happens regularly at the same time each day for 2 weeks to 3 months followed by a 2-week pain-free period before the next episode. The cause of cluster headache is the widening or dilation of the blood vessels that supply blood to the brain and face around the eye area that applies pressure to the trigeminal nerve. The blood vessel dilation may be triggered by the chemicals released from the brain.



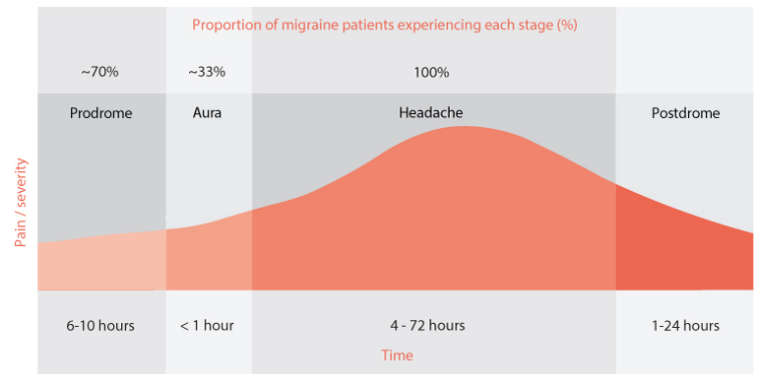
Blood vessel dilation can also affect lymphatic system in the brain because the driving force of the lymphatic circulation is the rhythm of blood vessel contraction. The reduced amplitude of blood vessel contraction will cause reduced lymphatic drainage. The resulting accumulation of toxins in the affected area can irritate the nerves and cause headaches.

Hemicranias are persistent headaches that fluctuate in severity that usually affect the same side of the head. People can have daily, or chronic, headaches as well as other migraine symptoms including nausea and vomiting, sensitivity to light and sound, or sweating. Patients who suffer from hemicrania might experience periods of recurring headaches followed by headache-free periods. Physical exertion and alcohol use may increase headache severity. It was believed that the hemicranias may be caused by irregular blood vessel contraction with vasoconstriction on the affected side. It was found that during the attack, the blood vessel of the affected side enters a state of lasting contraction that affects the blood circulation and causes headaches. During the attack, patients may also experience body coldness and fatigue or numbness on the affected side due to poor blood circulation caused by vasoconstriction.

Migraines

Migraines are a complex neurobiological disorder with symptoms of headaches, usually throbbing, intense, and debilitating as well as features of nausea, sensitivity to light, sound, and exacerbation with head movement. However, some types of migraines do not cause head pain. The episodes usually last anywhere from a few hours to several days and it is recurring with warning signs beforehand. The frequency with which migraine attacks occur vary person to person, from once in a lifetime to almost daily. Migraines mostly affect one side of the head, but some people experience pain on both sides.

Migraines have a distinct set of four phases, although not everyone experiences every phase; prodrome, aura, headache, and postdrome. Prodrome, also known as the pre-headache, marks the beginning of a migraine attack. Symptoms of prodrome can vary in individuals but commonly consist of changes in mood, fatigue, sensitivity to light, insomnia, nausea, and muscle stiffness. Up to one-third of people who suffer from migraines experience aura. During the aura phase, patients can endure periods of blurry vision, vision loss, the appearance of geometric patterns, flashing lights, and blind spots. This phase can last 5 minutes up to 60 minutes. The headache phase of a migraine attack is characterized by pain on one or both sides of the head. This is the longest of the phases, which can last from several hours up to three days. The pain experienced during the headache phase varies from mild pain to debilitating pain. During this phase, everyday activities like turning on a light or physical activity can aggravate the migraine. Postdrome, which occurs after the end of the headache phase, includes symptoms of fatigue, body aches, and dizziness.



Migraines were believed to be caused by blood-vessel microemboli, often a blood clot, which becomes caught in the brain and causes blockage in a cerebral blood vessel. The cause of the blood clot formation is often due to chronic blood vessel inflammation.¹ A microemboli in a severe case can cause stroke when it stays in the blood vessel for too long to trigger an infarction. While in a mild case it can trigger a migraine when the microemboli are stuck for a short period, but long enough to induce cortical spreading depression (CSD).¹ CSD is a slowly propagating wave of the surrounding brain tissue occurring during the aura that is characterized by ionic shifts with a massive increase of extracellular potassium and rises in intracellular sodium and calcium which produces a slow direct current. These electrical currents trigger the release of various brain chemicals and the neurotransmitter glutamate which leads to an acute inflammation of blood vessels and nerves. The resulting inflammation causes symptoms of a migraine including the throbbing pain, nausea, and sensory sensitivities. Hypoperfusion and hypoxia due to restricted blood flow can also provoke migraine headaches. Transient ischemic attacks (TIAs) may reside in between the stroke and migraine. This also may explain why a delayed stroke sometimes occurs during prolonged migraine attacks.

The CSD wave also restricts the glymphatic space. The glymphatic system is the perivascular pathway for waste clearance from the brain interstitial fluid. Glymphatic flow significantly decreases in the period just before a migraine as the CSD wave passes. This impairment of glymphatic flow may compromise the clearance of a variety of extracellular excitatory and inflammatory chemicals. This causes intense pain caused by inflamed nerves in the tissue that surrounds the brain. As a result of the faulty clearance of molecular waste from the brain, inflammation in pain fibers can be triggered.

Migraines can also be hereditary. As many as 90 percent of people with migraines report having family members who also suffer from these headaches. If one or both parents has migraines, the child is also more likely to experience these headaches. A child with one parent who suffers from migraines has about a 50% risk versus if both parents have migraines, the child's risk goes up to 75%.

Familial hemiplegic migraines are a form of migraine that runs in families. Symptoms include insomnia, intense throbbing pain in one area of the head, often accompanied by nausea and vomiting. These recurrent headaches typically begin in childhood or adolescence and can be triggered by certain foods, emotional stress, and minor head trauma. Each headache may last from a few hours to a few days. This type of migraine can also give rise to other symptoms such as insomnia and a loss of balance with or without headache. Currently, there are four genes related to familial hemiplegic migraine: CACNA1A, ATP1A2, SCN1A, and possibly PRRT2. These genes are related to the control of movement for ions like sodium, calcium, and potassium across the nerve cell membranes. Imbalances of these ions disrupt the release and uptake of the neurotransmitter and result in increased glutamate. This causes over-excitability of nerves as well as inflammation causing migraine headaches and other related symptoms.²

In Traditional Chinese Medicine (TCM), several factors that may cause headaches and migraines have been identified based on patient symptoms. These include a Liver Yin Deficiency, an upsurge of Liver Yang and Wind, a deficiency of both Qi and Blood and the resulting Blood Stagnation, Cold Wind in the meridian, or Spleen and Phlegm damp with Brain Meridian Heat and Blood Stasis.

Although for a single case, the cause may be multiple factors, usually, the tension-type headache is caused by a Liver Yin deficiency which requires nurturing the liver. A cluster headache is usually caused by Qi and Blood Deficiencies and Blood Stagnation causing the blockage of blood circulation and required treatment includes Qi and Blood enhancement and removal of Blood Stagnation in the brain. The resulting Spleen and Phlegm Damp from Blood Stagnation requires treatment to clear Spleen and Phlegm Damp. A hemicrania is usually caused by an upsurge of Liver Yang and Liver Wind which requires clearing the Liver Heat as well as quenching the Liver Yang and Liver Wind. Migraines are usually caused by Heat in the Brain Meridian and Blood Stasis and treatment requires clearing the Heat and Blood Stasis in the Brain Meridian. Familial hemiplegic migraines are usually caused by Cold Wind in the meridian and treatment requires clearing the Cold Wind.

Wellness Recommendation

Tension Headaches and Liver Deficiency

If the patient experiences tension headaches accompanied by emotional depression or mood swings due to a Liver Yin Deficiency, Brown and LC Balancer are recommended. Brown helps to improve liver function to enhance the liver's ability to convert the toxins that are causing the headache to a non-toxic substance. LC Balancer enhances microcirculation to increase nutrient absorption and delivery as well as supports the kidneys to expel the metabolic waste. By nurturing the Liver Yin, Brown, and LC Balancer will also help to address stress and anxiety to resolve anxiety headaches. Patients can experience headache and emotional symptom improvements within 1-3 days and 2 to 4 weeks of the protocol are recommended for significant improvement. If patients also have a kidney deficiency with decreased waste secretion, Xcel is also required.

Cluster headaches and Qi/Blood Deficiency and Blood Stagnation

For patients with cluster headache caused by blood vessel dilation or widening, Sona-R is recommended to remove the blood stagnation and enhance cerebral blood vessel contraction and improve the cerebral blood circulation to resolve the blood vessel dilation. Patients should experience symptom improvement in 1 week and 2-4 weeks of treatment is required for a significant improvement.

If patients have repeat cluster headache attacks, their blood vessels can become damaged due to the increased pressure. Peach-R is recommended to enhance Brain Meridian Qi to help repair the cerebral blood vessel damage. If the patient's brain blood vessels stay dilated or widened and a bulging of the blood vessel or brain aneurysm have developed, Hemorin is recommended to enhance Brain Blood Vessel Yang to help resolve the condition.

If the patient's headache still persists, a treatment that addresses the Spleen and Phlegm Damp is also required. Glia is recommended to reduce glial cell inflammation and increase glymphatic circulation. If the stagnating glymphatic circulation has developed into a Phlegm Damp and the lymph fluid has become semi-soluble for patients with a very chronic condition, B-3 is also required to clear the phlegm damp to convert the semi-soluble lymph to soluble form and resolve the headache. If the glial cells have become degenerated with reduced drainage efficiency and capacity due to chronic inflammation, Gliagen is recommended as an additional treatment to nurture the glial cells to increase their efficiency and capacity after 2-3 weeks use of Glia and the inflammation has been reduced.

If patients still experience a headache and has developed insomnia, BetterNow is required to enhance Qi and Blood to the brain and nurture the brain in a broad base to resolve the headache and insomnia.

Hemicranias and Upsurge of Liver Yang and Wind

For patients with hemicranias caused by blood vessel constriction, Chrys, Platinum, and Levera along with Brown, and LC Balancer are recommended. Chrys helps clear Liver Wind and relieve the blood vessel constriction. Platinum removes Brain Heat to clear brain inflammation. Levera helps clear Liver Heat and quench the upsurge of Liver Yang.

Brown and LC Balancer nurtures Liver Yin to support liver health and clearance of liver heat. Patients should experience symptom improvement in 1 week and 3-4 weeks of treatment is required for a significant improvement.

Migraines

For patients who suffer from migraines with an aura caused by brain blood vessel inflammation and transient blood vessel blockage by the microthrombi, Resurgen and Surgenin along with Platinum, Brown, LC Balancer, and Xcel are recommended. Resurgen helps clear Heat in the cerebral blood vessel and reduce its inflammation. Surgenin helps remove blood stasis and dissolve the blood clots in the brain blood vessel and resolve the cerebral vasoconstriction. If the patient also has a venous blockage, Surgenin-R is also required to help clear the blood clots in the veins. Platinum helps clear Brain Heat and reduce the inflammation of the brain. Patients should experience symptom improvement in 1 week and 3-4 weeks of treatment is required for a significant improvement.

To address the restricted glymphatic system related to migraines, Glia, B-3, Brown, LC Balancer, and Xcel are recommended. Glia helps clear heat in the brain's glymphatic system and enhance its Qi. It helps reduce the inflammation of the glymphatic system and enhances the brain's waste drainage function. This helps to clear molecular waste that is causing inflammation and migraine and aura symptoms. Through clearing the inflammation, the glymphatic space can be reestablished. B-3 helps resolve Brain Phlegm Damp to further improve the efficiency of the glymphatic circulation. Brown, LC Balancer, and Xcel are required to help support the body for toxin processing and secretion.

Patients who are aged or have chronic neurodegenerative conditions with a degenerated glymphatic system capacity may experience improvement plateaus after 2-3 weeks. It is recommended to add the Gliagen to the treatment to help repair the glial cells damage and revers its degeneration and improve the transportation efficiency of the perivascular network to unload the waste to the main lymphatic system. 6 weeks to 3 months of treatment are required to have significant improvement.

Familial Migraines and Cold Wind in the Brain Meridian

For patients with inherited migraines caused by increased neurotransmitter glutamate in the brain, Imgraine is recommended. Imgraine helps clear the Cold Wind the Brain Meridian and re-balances the levels of the neurotransmitter glutamate in the brain to resolve the migraine headaches. Patients can experience reduced headache or insomnia in 1 week. 2 weeks of treatment is required for significant improvement. After 2 weeks of treatment, if one symptom is resolved and another symptom emerges, another 1-2 rounds of 2 weeks of treatment is required. It is recommended to repeat 2 weeks of treatment 3 times to resolve the problem completely and have sustained results.

Condition	Products	Summary
Tension Headaches	Brown, LC Balancer	Enhances the liver's ability to process and clear toxins that are triggering the headache/migraine
Cluster Headaches	Sona-R, Peach-R, Hemmorin Glia, Gliagen, B-3, BetterNow	Enhances cerebral blood vessel contractions Improves cerebral blood circulation Repairs cerebral blood vessel damage Clears inflammation and repairs damage to the glial cells to improve glymphatic function Nurtures the brain
Hemicranias	Chrys, Platinum, Levera, Brown, LC Balancer	Relieves blood vessel restriction Clears brain inflammation
Migraines with Aura	Resurgen, Surgenin, Platinum, Brown, LC Balancer, Xcel, Glia, B-3, Gliagen	Removes inflammation and clots in the cerebral blood vessels Clears inflammation and repairs damage to the glial cells to improve glymphatic function
Familial Migraines	Imgraine	Re-balances the levels of the neurotransmitter glutamate in the brain

Selected Case Study

Successful Improvement of GI Issues and Headaches

Dr. Robert Bartosh, DC, IL

A 26-year-old female complained of constant headaches and migraines that she had been struggling with since the age of 16. She also had GI issues including poor digestion, nausea, bloating, gas, diarrhea, abdominal pain/cramps, recent weight gain, binge eating/drinking, craving certain foods, excessive weight, compulsive eating and heavy appetite.

Dr. Bartosh recommended an herbal treatment from Wei Laboratories focusing on GI health including the Spring Juice, Spring Capsules, Pearl Capsules and Formula B. After 2 weeks of GI treatment, the patient reported a reduction in headaches.

Dr. Bartosh continued with the Liver and Qi treatments of Brown Juice and Qi Booster specifically focused on headaches. Three weeks later, the patient reported that her headaches that she has had for 10 years were completely gone! Her mood and energy levels also improved and she was able to run a 5K marathon which was her first race in a year.

References:

1. Dönmez-Demir B;Yemisçi M;Kılıç K;Gürsoy-Özdemir Y;Söylemezoğlu F;Moskowitz M;Dalkara T;, B. (n.d.). Microembolism of Single Cortical Arterioles Can Induce Spreading Depression and Ischemic Injury; A Potential Trigger for Migraine and Related MRI Lesions. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/29183666/>
2. Are Migraines Hereditary? (n.d.). Retrieved from <https://www.excedrin.com/migraines/causes/are-migraines-hereditary/#:~:text=Migraines are possibly hereditary.,also suffer from these headaches.&text=Although the causes of migraine are not totally understood, both,your genetics play a role.>