

CASE STUDY

A Single Case Study: Treating Migraine Headache With Acupuncture, Chinese Herbs, and Diet

单一案例研究：利用针灸、中草药和饮食治疗偏头痛

Estudio de un caso único: Tratamiento de cefalea migrañosa con acupuntura, hierbas chinas y dieta

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ABSTRACT

Background: Acupuncture is an often sought-out treatment modality for migraine. The World Health Organization lists headache as one of the several conditions treated effectively by acupuncture.

Case Description: This single case reports on a 32-year-old woman who presented with a 10-year history of migraine.

Methods: The patient was treated with acupuncture, dietary modifications, and Chinese herbal medicine enemas over a course of 2 months.

Results: The patient experienced pain relief that resulted in several months without any migraine.

Conclusion: This article may aid in expanding practitioners' treatment options to include a more diverse set of modalities such as Chinese herbal enemas. More research is needed to investigate the role of Oriental medicine and Chinese herbal enemas in the treatment of pain conditions.

摘要

背景：针灸是偏头痛的一种常见治疗模式。世界卫生组织将头痛列为针灸可予有效治疗的多种疾病之一。

案例介绍：此单一案例记述的是一名拥有 10 年偏头痛病史的 32 岁女性。

方法：该患者接受针灸、饮食调整和中草药灌肠剂治疗，疗程为 2 个月。

结果：该患者疼痛减轻，并在数月时间内未出现偏头痛症状。

结论：本文可帮助拓展执业医生的治疗选项，以便纳入中草药灌肠剂等更为多样的模式组合。这需要人们开展更多的研究来调查东方医学和中草药灌肠剂在痛症治疗方面所发挥的作用。

SINOPSIS

Antecedentes: La acupuntura suele ser una modalidad de tratamiento utilizada para la migraña. La Organización Mundial de la

Salud enumera el dolor de cabeza como una de las diferentes condiciones tratadas con eficacia por la acupuntura.

Descripción del caso: Este único caso informa de una mujer de 32 años que presentaba unos antecedentes de migraña de 10 años.

Métodos: Trataron a la paciente con acupuntura, modificaciones dietéticas y enemas de hierbas medicinales chinas durante el transcurso de dos meses.

Resultados: La paciente experimentó un alivio del dolor que llevó a varios meses sin ninguna migraña.

Conclusión: Este artículo puede ayudar a ampliar las opciones de tratamiento de un médico para incluir un sistema más diverso de modalidades como los enemas de hierbas chinas. Es necesario realizar más investigaciones para investigar el papel de la medicina oriental y de los enemas de hierbas chinas en el tratamiento de afecciones dolorosas.

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BIOMEDICAL PERSPECTIVE

Migraine is a common, chronic, intermittently disabling neurovascular disorder. Migraine peaks between 15 and 24 years of age¹ with the greatest prevalence between 35 and 45 years.² The International Headache Society has classified migraine with six subtypes.³

The presence of aura differentiates the first two subtypes of migraine.³ Migraine with aura is further subtyped by familial or sporadic hemiplegic migraine. Hemiplegic migraine presents with motor weakness. Migraine that attacks with monocular visual disturbances is subtyped as retinal migraine. Migraine subtypes are also classified according to associated complications: chronic migraine and *status migrainosus*, which is a debilitating migraine lasting more than 72 hours. Other complications include migraine-triggered seizures or a migrainous infarction, which requires neuroimag-

ing to verify the presence of an ischemic brain lesion.

Patients often experience migraine without aura, typical aura with migraine headache, and typical aura without headache.⁴ Migraine risks increase when a patient presents with the following: asymmetry of pain; throbbing pain; pain that is moderate to severe in intensity; pain accompanied by nausea and sensitivity to light, sound, and often smell; the presence of typical migraine aura symptoms; and a family history of migraine.⁴

A three-question screen⁵ can help with the diagnosis of migraine. The screen asks if the patient felt nauseated or sick to his or her stomach in the last 3 months. It asks if light has bothered him or her more when not experiencing headaches. Finally, it asks if headaches limited the patient's ability to work, study, or complete daily tasks for at least 1 day.

A positive response to two of the three questions suggests a 93% chance that the headaches are migraine; if all three responses are positive, there is a 98% chance of migraine.

The pathophysiology of migraine is due in part to the sensory input from the trigeminal nerve and the ninth and tenth cranial nerves, humoral factors (eg, blood glucose, ingested food, gonadotrophic hormones), environmental factors (sleep, stress, smells, light, and changes in barometric pressure), and other factors.⁴

Auras are caused by a localized decrease of blood flow immediately followed by an increase of blood flow. This wave depolarization affects the parieto-occipital cortex. This complex neurological symptom typically presents just before a migraine attack.⁶

BIOMEDICAL TREATMENT

The biomedical treatment of migraine is a three-pronged approach: avoidance of recognized triggers, prompt treatment of acute attacks, and preventive anti-migraine therapy.⁴ Triggers are tracked using a migraine diary. The diary lists possible triggers such as weather, stress, menstruation, and diet.

Pharmaceuticals treat acute migraine. The drugs of choice for the past 20 years have been triptans (sumatriptan, naratriptan, zolmitriptan, eletriptan, almotriptan, frovatriptan, and avitriptan). All seven triptans are available in the form of pill, injection, nasal spray, and dissolving oral tablets. Triptans leave the patient clear-headed while reversing nausea and pain.⁴ The side effects of triptans include tingling; flushing; and sensations of warmth, heaviness, pressure, or tightness in different parts of the body including the chest and neck.⁴ These drugs provide headache relief in 75% of patients.⁴

TRADITIONAL CHINESE MEDICINE PERSPECTIVE

Acupuncture provides a nonpharmacological treatment for migraine pain. Positron emission tomography (PET) and magnetic resonance imaging (MRI) scans have demonstrated how acupuncture modulates brain structures.⁷ Acupuncture affects the mechanisms of pain by its vasodilatory effect on the radial artery diameter. Acupuncture also affects cell secretion and signaling and afferent sensory input⁸ and the activity of norepinephrine,⁹ angiotensin II, serotonin,⁸ enkephalin,^{9,10} beta-endorphin,^{9,10} and glutamate. Acupuncture has a strong analgesic effect and should be used in migraine treatment.⁷

Acupuncture has been found to be more effective than both control treatment and preventive migraine pharmaceuticals.^{11,12} A prospective randomized trial documented the prophylactic benefit of acupuncture in migraine.¹³ The research demonstrated that after a 12-week treatment protocol, the acupuncture group experienced larger decreases in monthly moderate-to-severe headaches compared to the topiramate group.

Traditional Chinese medicine (TCM) theory classifies migraine as an external invasion or an internal disruption. The qi and blood of the six bowels and five vis-

cera all ascend to the head. The three hand yang channels, the three foot yang channels, and the liver channel all meet at the head. Stagnation of qi and blood is often present with migraine. The excess type of migraine, typically short in duration, is from external forces such as wind, cold, dampness, or heat. Wind is the most common external element.^{14,15}

Persistent migraine is caused by internal disruption concerning the liver, spleen, and kidney. These organs exhibit signs of deficiency in addition to signs of liver yang rising. Deficiency patterns generally present with observable excesses, such as phlegm and blood stasis.¹⁴

Other factors include weather, emotions, sexual activity, diet, posture, menstruation, and hypertension. Damp phlegm accumulation due to eating fatty, greasy, or sweet food or dairy products initiates migraine. Drinking alcohol or eating pungent food can cause flare-ups of stomach or liver fire. A headache that worsens with pressure is usually due to an excess condition.¹⁶

CASE HISTORY

In October 2011, a 32-year-old Ethiopian-American woman, height and weight proportionate, presented with a 10-year history of debilitating migraine headaches. She described them as the worst feeling of her life, with a pain scale rating of 10 out of 10 (10 being the highest level of pain). During the attacks, the patient experienced sharp pain; photophobia; distorted vision with visible auras; a feeling of heaviness, dizziness, and irritability; occasional nausea and vomiting; hypersensitivity to sound; and a desire to lie down in a dark, noise-free room. The pain was often on the right side of her head, occurring once every 7 to 10 days.

MRI and computed tomography (CT) scans were taken 2 years prior by a neurologist and showed no abnormalities. The patient reported no previous major illnesses or surgeries, no family history of illness, and no use of medications or nutritional supplements.

The TCM intake revealed the patient had cold hands and feet with a warm midsection. She sweated easily and craved chocolate, ice cream, and fried foods. She suffered from sinus congestion and allergies. She vomited and felt nauseated weekly. Once to twice a week, she was constipated with occasional blood in the bowl due to excessive strain to clear bowels. She was prone to stress and anxiety. The patient had an intrauterine device, and her last menstrual cycle was May 2010. The patient had a slightly red, swollen, and scalloped tongue with a thin yellow coating. The sublingual veins were dark and full. The right pulse quality was slippery. The left pulse quality was slippery with a wiry and stronger *guan* position than the right *guan* position.

TRADITIONAL CHINESE MEDICINE DIAGNOSIS AND ETIOLOGY

The diagnosis was flaring-up of liver fire with accumulation of damp phlegm. The flaring-up of liver fire presented as migraine with a sharp pain, irritability, irregular menstruation, constipation, and a red

Table 1 Acupuncture Point Selection and Indication

Acupuncture Point	Traditional Use
Taiyang EX-HN5	Treat headache at the side of head
Shuaigu GB-8	Treat headache at the side of head, eliminate dampness, resolve phlegm, and relieve dizziness
Fengchi GB-20 and Touwei ST-8	The crossing point of the foot. Lesser Yang channel and the Yang Linking vessel, promote the circulation of qi, and eliminate damp phlegm in the head so as to relieve headache
Sanyinjiao SP-6	The crossing point of the three yin channels of the foot; clears liver fire and regulates the circulation of qi in the liver
Yinlingquan SP-9	The Sea point; activate the spleen and eliminate damp phlegm
Xingjian LV-2	The Spring point of the liver channel; clears liver fire and relieves headache

Table 2 Zeng Ye Tang: Increase the Fluid Decoction Herbal Ingredients With Indications

Herb	Dose	Function
Xuan shen (<i>Scrophulariae Radix</i>)	30 g	Clears heat, cools blood, nourishes yin, softens hardness, and dissipates nodules
Sheng di huang (<i>Rhemannia Radix</i>)	24 g	Clears heat, cools blood, nourishes yin, generates fluids
Mai men dong (<i>Ophiopogonis Radix</i>)	24 g	Moistens lung and nourishes yin, augments stomach yin and generates fluids, moistens intestines, clears the heart and eliminates irritability

tongue.¹⁶ Damp phlegm accumulation was evidenced by dizziness, a heavy feeling, nausea, vomiting, a slippery pulse quality, and a swollen/scalloped tongue.

The differential diagnosis of hyperactivity of liver yang was ruled out as the patient did not experience signs of internal wind such as shaking of the head and hands or restlessness, nor was there hypochondriac pain. Uprising of stomach fire was also ruled out as there were no signs of focal pain in the forehead, profuse sweating, feverish feeling, sore throat, or painful gums.¹⁶

TRADITIONAL CHINESE MEDICINE TREATMENT PRINCIPLE

The treatment principle was to reduce liver fire, eliminate damp, resolve phlegm, and stop pain.

The acupuncture protocol consisted of weekly treatments for 6 weeks (Table). All acupuncture treatments were performed with 0.25 x 30 mm DBC Spring Singles acupuncture needles (Lhasa OMS, Weymouth, Massachusetts). Each needle was inserted and retained for 20 minutes at the standard angle and depth.¹⁷ Each needle was inserted and manipulated until the patient felt a dull pulling sensation at the needle site. This traditional method of needling is called *de qi* and is considered to bring optimal treatment effect.¹⁸ The point prescription was a collection of point suggestions from two sources.^{16,19}

The patient reported a diet high in fried foods, fat, and sodium. High-sodium diets are the major risk factor of hypertension and are linked to cardiovascular and cerebrovascular mortality.²⁰ The patient was instructed to reduce her sodium/salt intake to less than 3 g per day. The fatty fried foods were replaced with organic fruits and vegetables and fresh fish and chicken.

The treatment protocol started with weekly coffee and Chinese herbal enemas. The regimen consisted of one enema the first week, two enemas the second week,

and enemas three times a week by week three. The patient was provided with an enema kit: an enema bucket with hose and clamp, a raw Chinese herbal formula (*Zeng Ye Tang* or Increase the Fluid Decoction tea; Table 2), and an instruction sheet.

The *Zeng Ye Tang* or Increase the Fluid Decoction tea with the coffee enema counteracted the hot property of the coffee with its cool properties. The coffee and caffeine, according to TCM nutrition, has a warm and drying effect. The *Zeng Ye Tang* tea moistens the intestines, generates fluids, and counteracts the drying effect of the coffee.

The liquid ingredients of the enema solution consisted of 1 cup of brewed organic light roast coffee, 1 cup distilled water, and 1 cup of *Zeng Ye Tang*. The strategy of incorporating enemas into treatment protocols came from the Gerson Program.²¹ The enema has a dual purpose: It clears the colon of toxic feces and bacteria while the caffeine dilates the ducts of the gall bladder and liver, allowing for a free flow of bile. It increases the effectiveness of glutathione-S-transferase by 600%. Glutathione-S-transferase is an enzyme capable of removing a vast variety of electrophiles from the bloodstream. Electrophiles are referred to as free radicals.²²

The vasodilation effect from the enema may play a role in decreasing pain levels.²¹ The removal of the toxins allows the body's self-healing mechanisms to perform their tasks.²¹

The enema solution was heated to approximately 98.9° F to prevent the colon from contracting. The patient would then lubricate 2 to 3 inches of the end of the enema tube before inserting it into the rectum. The patient was in a right lateral recumbent position with the enema bucket placed 3 feet above her. The enema tube was inserted 3 to 5 inches and the liquid allowed to flow. The solution was retained 12 to 15 minutes as it takes the body's blood supply 4 to 6 minutes to travel through the hepatic portal system.

RESULTS

After the first week of acupuncture, the first enema, and the diet modification, the patient reported no migraines. She did suffer from a headache that lasted 2 days, and she vomited twice throughout the week. The headache was a 5 on a patient self-report numeric pain scale from 1 to 10 (10 being the most severe pain). She reported feeling “better and less bloated” after the enema.

The patient reported improvement in sinus congestion after the second treatment. Her headaches were milder and of shorter duration. She continued her enema treatments and made further improvements in diet.

At week 3, the patient reported constipation for 2 days. After the third enema, she reported having a full bowel movement and feeling better. Prior to that, she reported one right temple–area headache.

At week 4, she felt overall improvement. She indulged in fatty fried foods that had been eliminated from her diet in the recent 3 weeks. She immediately had a migraine on the right side of her head. She vomited green bile and had acid reflux.

By week 5, she returned to her previously modified diet and maintained three enemas per week. She reported improvement in sinus congestion and only a mild headache, 3 out of 10 on a patient self-report numeric pain scale.

After 6 weeks of weekly treatment, the patient returned for follow-up after 8 months. She claimed the diet modification and enemas changed her life. She now goes on vacations without fear of migraine. The patient kept a food and migraine journal and was able to track the foods that triggered migraine and avoid them. She reported that acupuncture helped her immediate needs and the diet modification and enemas have contributed to her relief from migraines.

DISCUSSION

The patient responded well to acupuncture and made long-lasting changes to her diet and lifestyle. The prognosis is very good for her as long as she continues to monitor her diet, continue enema treatments, and seek acupuncture for any acute headaches. Incorporation of various aspects of TCM modalities produce effective changes. TCM practitioners should seek out and learn other holistic therapies such as the Gerson Therapy as they can be incorporated into a TCM practice. More research is needed to investigate the role of Oriental medicine and Chinese herbal enemas in treating pain conditions.

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