

Acupuncture Outcome of Patients With Migraine

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ABSTRACT

Background: Population-based studies suggest that 17.6% of women and 5.6% of men suffer from migraine. Different mechanisms of pathophysiology are reported in allopathic medicine on which pharmaceutical treatments are based. Traditional Chinese Medicine delineates Excess Liver Yang (Wood Element), either relative or absolute resulting from Liver Yin Deficiency, as causing explosive sensations and headaches in migraine. Since Liver opens into the eye, some visual symptoms like photophobia may occur.

Objectives: To use Five Element principles to find a different hypothesis for pathophysiology and to determine the outcomes of patients with migraine after acupuncture treatment.

Design, Setting, and Participants: A protocol was established to enhance Liver Yin (Wood) with tonification to balance Liver Yang. Water, the Mother Element to the affected Element, Wood, was tonified. In addition, the excess Wood Yang was balanced by tonification of Earth Yang. Finally, dispersion of excess Yang was treated by needling Governing Vessel (GV) 20 and Ah Shi points of Water and Wood Yang Meridians. There were 47 patients with migraine in this study but no controls. The author treated all patients and collected the data prospectively. The study was conducted in Phoenix, Arizona, from January 1998 to December 2005. Follow-up was for 1 year.

Intervention: Needling Liver (LR) 3, 5, 8, and 14, and a 2-Hz stimulation from LR 3 to LR 14 completed Liver Yin enhancement. Also needled were Pericardium (PC) 6 and Triple Heater (TH) 5, Kidney (KI) 3, Spleen (SP) 6, and Stomach (ST) 25, 36, and 44. All these needles were bilateral. Then, a single needle was placed on GV 20 for dispersion of any excess Yang. After 20 minutes of this treatment, all needles were removed. Patients assumed a sitting position and all the Ah Shi points of LR and GB Meridians were felt and needled. This lasted for 10 minutes. Treatments were done weekly.

Main Outcome Measures: A complete cure was defined as no further headaches; moderate cure, requiring periodic acupuncture treatments to remain headache-free; and treatment failure, no response to acupuncture.

Results: Headache resolution was seen in 38 of the 47 patients (81%), moderate cure was noted in 7 patients (15%), and treatment failure was seen in 2 patients (4%).

Conclusions: Using the intervention described herein, a cure or moderate cure is possible in the vast majority of migraine cases.

Key Words: Migraine, Acupuncture, Five Elements, Liver, Meridians, Ah Shi Points

INTRODUCTION

MIGRAINE, A COMMON CHRONIC headache disorder, affects approximately 10% of the populations of Western countries and the United States.¹ Epidemiologic studies suggest that 17.6% of women and 5.6% of men are afflicted with migraine.² Significant disability is reported by more than 50% of migraine patients.^{1,3} Evidence of a genetic basis and familial risk factors have been reported.⁴⁻⁶

Different theories of pathophysiology have been proposed. Cortical spreading depression is an initiation of a slow wave of neuronal depolarization. This is followed by longer-lasting neuronal suppression in the trigeminal vascular system. Bolay et al⁷ suggested that this suppression causes migraine. Another theory is that excessive sympathetic stimulation caused by triggers such as smell, food, stress, lack of sleep, tobacco, and alcohol eventually leads to the depletion of norepinephrine. This sympathetic hypofunction allows other sympathetic co-transmitters such as dopamine, adenosine, and prostaglandins to increase, causing sustained vasodilation. The vasodilation combined with disinhibition of trigeminal neurons, secondary to systemic hypofunction, may cause migraine.⁸ A different theory proposes that increased activity in the superior salivatory nucleus transmitted to the sphenopalatine ganglion leads to a vasoactive cascade activating the trigeminal vascular system leading to onset of migraine headaches.⁹

The hypothesis tested here was based on Five-Element theory and acupuncture. The precipitating factor is depletion of Liver Yin (Wood Element), and may be caused by triggers such as stress. This leads to increase in Liver Yang, either relative or absolute.¹⁰ This may lead to explosive feelings in the head.¹¹ Therefore, enhancing Liver Yin and balancing Liver Yang are the focus of treatment. Since the affected element is Wood, then Water is the Mother Element that needs tonification (Shen Cycle). Needling the Earth Yang is helpful to control Wood Yang (Ke Cycle). Dispersion of any remaining excess Yang at Governing Vessel (GV) 20, and needling all Ah Shi points of Wood and Water Yang (Gallbladder and Bladder Meridians) near the neck and upper shoulders, completes the treatment.

METHODS

All patients in this study gave written informed consent. There were 47 consecutive patients with migraine but no

TABLE 1. PATIENT CHARACTERISTICS (N = 47)

Characteristic	Data
Sex, M/F	8/39
Age, median (range), y	34 (11-52)
Duration of migraine, median (range), y	5 (1-20)
Acupuncture sessions, median (range), No.	8 (4-12)

TABLE 2. PATIENT OUTCOMES (N = 47)

Outcome	No. (%)
Resolution (cure)	38 (81)
Moderate cure	7 (15)
Treatment failure	2 (4)

controls. The author treated all patients and collected the data prospectively. The study was conducted in Phoenix, Arizona, from January 1998 to December 2005. Follow-up was for 1 year.

The needles were twirled clockwise to obtain Qi. Treatment rooms were dark with soft relaxing music playing. Low-frequency (2 Hz) electrical stimulation was administered with a calibrated IC-1107+ stimulator (ITO Co, Ltd, Japan). Positive lead was placed on LR 3 and negative on LR 14. Needling Liver (LR) 3, 5, 8, and 14, and a 2-Hz stimulation from LR 3 to LR 14, completed Liver Yin enhancement. The energy was directed to flow in the Liver Gallbladder (GB) Meridian. This is done by needling Pericardium (PC) 6 and Triple Heater (TH) 5. Kidney (KI) 3 needling tonifies Water Yin, the Mother. The needling of Spleen (SP) 6, (Earth Meridian) increases total Yin. The Earth Yang points are Stomach (ST) 25, 36, and 44. All these needles are bilateral. Then, a single needle is placed on GV 20 for dispersion of any excess Yang.

After 20 minutes of this treatment, all needles are removed. Patients assume a sitting position and all the Ah Shi points of LR and GB Meridians are felt and needled. This lasts for 10 minutes. Treatments are done weekly. Acupuncture needles (32 gauge, 1 inch, Famous Physician Brand, ACC International, Monterey Park, CA) are placed.

A complete cure was defined as no further headaches; moderate cure, requiring periodic acupuncture treatments to remain headache-free; and treatment failure, no response to acupuncture.

RESULTS

Patient characteristics are shown in Table 1. The outcomes defined as cure, moderate cure, or treatment failure are presented in Table 2. The study patients were advised to contact the author if migraine relapse occurred after the follow-up period of 1 year.

DISCUSSION

There are several reports that describe improvement of migraine with acupuncture treatment. Controlled studies have reported significant improvement in patient populations, describing less headache, less medications, and less

absence from work.^{12,13} Baischer demonstrated patient improvement in 69% of cases shortly after, and 58% after 3 years of treatment.¹⁴ A recent randomized sham-controlled trial reported greater than 40%-50% improvement.¹⁵ Acupuncture has been demonstrated to be superior for migraine prophylaxis when compared with flunarazine.¹⁶

The cure rate reported herein of 81% is consistent with such published data. However, adding modest cure to that rate, the positive outcome was 96%, which may be one of the best reported in the published literature. Identifying the basic Traditional Chinese Medicine pathology and then designing a treatment to address that specifically, instead of the allopathic explanation of pathophysiology of migraine, might have helped in obtaining a high rate of improvement.

Wonderling et al¹⁷ reported significant cost benefit for acupuncture. The cost per quality-adjusted life year for acupuncture treatment was estimated at \$14,688 (£9180). In the randomized control group receiving conventional allopathic treatment, the cost for the same estimate was \$48,000 (£30,000),¹⁷ more than 3 times the cost. With 10% of the population suffering from migraine, the cost-effectiveness of acupuncture is considerable.

CONCLUSION

Treating migraines as Liver Yin Deficiency with Liver Yang Excess, using the method described herein, may lead to treatment success in most patients.

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This article has been cited by:

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