

Prevention of Chronic Migraine Attacks with Acupuncture and Vamana Dhauti (Yogic Therapeutic Self-Induced Emesis) Interventions

Abstract

Chronic migraine is a prevalent neurological disorder. Conventional treatment has been providing symptomatic relief by reducing the symptoms of pain and vomiting. In addition, there are side effects associated with these medications. A 53-year-old male presented with chronic migraine with aura. He was treated for acute symptoms for 10 days with the following acupuncture points at the EM 6 (Qiuhou), ST 8 (Touwei), GB-8 (Shuaigu), LI 4 (Hegu), and ST 44 (Neiting). In addition, Vamana Dhauti (VD) (self-induced emesis) was taught once followed by VD practice once a week as part of a long-term follow-up for 10 years. Results suggest that acupuncture is beneficial to reduce the acute symptoms of migraine and the possible frequency of migraine attacks. However, VD has shown to be beneficial in reducing the frequency of migraine attacks over a period of time and eventually led to the complete cessation of migraine attacks. In conclusion, randomized controlled trials are required for testing the efficacy in managing migraine.

Keywords: Acupuncture, case report, migraine, Shatkriya, Vamana Dhauti, yoga

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Introduction

Chronic migraine is a neurovascular disorder which manifests as a unilateral pulsating headache. Migraine with aura manifests as visual or sensory symptom prior to the onset of migraine headache, whereas no prior symptoms are observed in migraine without aura.^[1] Approximately 15% of people are affected by migraine worldwide, and it is estimated to be the 7th highest cause of disability across the globe.^[2] Conventional treatment has been beneficial to provide symptomatic relief for these patients. However, there are many common side effects associated with these medications (sleep disturbance, fatigue, nausea, gastrointestinal disturbance, drowsiness, weight gain, and others) and patients are reluctant to take the medications.^[3,4] This case report demonstrates the beneficial effects of combined Vamana Dhauti (VD) (yogic self-induced emesis) and acupuncture treatment (AT) as a comprehensive therapy.

Case Report

A 53-year-old married male who had a family history of migraine was diagnosed with migraine associated with aura since

15 years old. He also had a family history of migraine. He had visited a naturopathy and yoga clinic in the southern part of India. He had presented with a complaint of a unilateral left-sided headache since 38 years and had a history of a unilateral migraine headache mainly on the left side associated with nausea, sensitivity to loud noise, pulsating veins in the temporal region, and sensitivity to light exposure. In addition, the aura was associated with blurred vision and heaviness in the head region for 5–10 min before the onset of a migraine headache. Migraine was aggravated by stress and relieved by vomiting. Besides, the frequency rate of migraine attacks was initially 2–3 migraine attacks in a year for 15–16 years. Subsequently, the frequency increased to 5–6 times per year for the next 20–22 years. Each migraine attack episode lasted for 2–3 h for the first 10 years. Consequently, the duration increased to >24 h.

Clinical findings

On initial examination, his blood pressure was 112/74 mmHg, the pulse rate was 72 beats per minute, and body mass index (BMI) was 30.21 kg/m². He had not undergone any laboratory investigations.

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Conventional treatment started after 10 years of onset of the migraine attacks with tablet vasograin (paracetamol 250 mg + ergotamine 1 mg + caffeine 100 mg) twice daily for 1 month. Furthermore, his neurologist advised him to take these tablets only during acute symptoms according to his needs. However, the relief was temporary.

Diagnosis and assessment

The migraine diagnosis was made based on the International Headache Society criteria-II.^[1] According to yoga, mental stress at manomaya kosha is the root cause for migraine headache and yang excess is the cause according to acupuncture.^[5,6] Body weight, BMI, and resting blood pressure were also measured. The intensity of migraine pain was assessed using a numbered Visual Analog Scale ranging from 0 to 10 (0 rating indicates no pain and a score of 10 suggests worst pain). In addition, the frequency of the migraine attacks was noted down based on the detailed history and referring to the clinical records.

Therapeutic focus and assessment (intervention)

The VD and AT interventions were planned after having received the written informed consent, catering to the needs of the patient in outpatient settings. AT was administered by the same naturopathy and yoga physician for 10 days, who has > 8 years of clinical experience in the field of acupuncture and yoga. Subsequently, he advised the patient to practice self-induced emesis in the early morning once a week on an empty stomach. The patient was instructed to reduce the triggering factors such as fasting and stress. The patient was followed up regularly once in 3 months either by a telephone consultation or visit to the clinic. The consultation questions were mainly focused on the frequency and intensity of migraine headache along with the VD intervention including kapalabhati and yoga nidra technique details.

1. AT: The patient was treated for acute symptoms for 10 days with the following acupuncture points at the EM 6 (Qiuhou), ST 8 (Touwei), GB-8 (Shuaigu), LI 4 (Hegu), and ST 44 (Neiting). Further, specific details related to the rationale for acupuncture point selection, type of the needle, a method of needle insertion, duration of the treatment, electrical stimulation, and device used are summarized in Table 1
2. VD (self-induced emesis): VD practice is one of the upper gastrointestinal tract purification procedures to be practiced in the early morning with an empty stomach. The patient was advised to consume warm saline lukewarm water (2%) for around 4–5 glasses each of 250 ml. After getting the vomiting urge, the patient was asked to irritate his epiglottis mildly with both the index and middle fingers to initiate vomiting. Precaution was taken not to take out both fingers till the water comes out. The duration of VD was <10 min. Afterward, two cycles of Kapalabhati (120 rounds/minute/cycle was the maximum, instructed subject to practice based on his capacity) and short-duration yoga nidra (7 min) practices were done interspersed with 1 min of relaxation between these two practices. To practice Kapalabhati, the patient was instructed to sit in Vajrasana/Sukhasana and asked to expel the air from the lungs rapidly. Exhalation is active, and inhalation is passive. Yoga Nidra is a conscious sleep (a yogic relaxation technique). It is typically practiced for 45–60 min. However, here short version was practiced which emphasizes the rotation of awareness of different body parts and a mindfulness breathing. The patient reported that these two practices were easy to learn and practice. These practices were done under the supervision of a naturopathy and yoga physician with the initial VD demonstration by him.

Table 1: The details of acupuncture treatment

Acupuncture points used	Rationale for points selection	Type of the needle and duration	Method of needle insertion	Needle measurement	ES and device used
Local points: EM 6, ST 8, GB 8 Distal points: LI-4 and ST-44	Combined local and distal points in accordance with the traditional chinese medicine, past clinical experience, and standard textbook of acupuncture ^[5] Points were selected mainly on the basis of location of headache. Frontal headache relates to stomach channel of foot-yangming and temporal headache relates to GB channel of foot-shaoyang. The acupoints' main focus was to reduce the yang excess in the head region	Sterile single-use disposable stainless steel needles, 30-min duration	Needles were inserted bilaterally either obliquely or transversely except LI-4 and ST-44 (vertically) Needles without ES were evenly twirled and rotated manually. The depth of needle insertion was approximately 10-25 mm	25-40 mm in length and 0.25-0.30 mm in diameter	Applied to ST-44 and LI-4 point's using a commercial four-channel electroacupuncture device. The frequency of ES was 2 Hz with continuous waves and intensity was 1 mA

ES=Electrical stimulation

Follow-up

After the initial treatment with acupuncture for 10 days and once VD, the follow-up of the case was done for 10 years. The patient had migraine attack 8 years ago and another one 6 years ago which lasted >24 h. However, the intensity of the symptoms was mild compared to the previous attacks. He has been in remission for 6 years. Further, specific details related to improvement in intensity and frequency of migraine attacks are summarized in Table 2.

Outcomes

The significant reduction in the frequency and intensity of migraine was observed over a period of 10 years [Table 1]. The patient could live without taking the allopathic medicines during this entire period of 10 years. Moreover, the complete cessation of migraine attacks was observed over a period of time with the regular VD practice.

Discussion

Research studies across the globe have shown that frequency and intensity of migraine attacks could be reduced with yoga and AT.^[7,8] However, there is no clear evidence to support that VD and acupuncture interventions are useful for the long-term treatment of migraine. Furthermore, the long-term effects of acupuncture studies are lacking in migraine. In this case report, the results suggest that acupuncture is beneficial to reduce the acute symptoms of migraine and the possible frequency of migraine attacks. However, VD has shown to be helpful in reducing the frequency of migraine attacks over a period of time and eventually leads to the complete cessation of migraine attacks. In addition, the results indicate weekly-once VD as a better control measure for patients with chronic migraine after an initial brief AT. No adverse events have occurred with these treatments. The patient did not use any other treatment modalities during the course of treatment other than the allopathic medication according to his needs. This has avoided any confounding effect on the outcome of the treatment.

Yoga has been shown to reduce stress hormones such as serum cortisol levels in patients with depression and helps to attain a stable autonomic balance in patients with migraine.^[8,9] The traditional yoga texts such as Gheranda Samhita mentioned the usefulness of VD,

particularly in kapha- and pitta-related diseases.^[10] Likewise, the weekly-once VD yogic kriya practice has been mentioned in the yoga therapy module for migraine based on clinical observation.^[11] By considering the effect of physical postures and breathing exercises on the autonomic nervous system regulation and traditional textbook reference, it could be hypothesized that VD may bring autonomic balance and eventually relieve the migraine headaches. Similarly, acupuncture inhibits pain transmission to the central nervous system, and it releases natural endorphins.^[12,13] This is the first case report to show the cessation of chronic migraine attacks with VD and reduction in the intensity and possibly frequency of migraine attacks with short-term AT. Long-term follow-up on this case has been the main strength of the study. However, parameters such as a headache diary were not used in this study, which is one main limitation. This treatment may be incorporated into primary health-care settings to be an “add-on” treatment and part of the health care in yoga and naturopathic medicine.

Conclusion

By considering the initial short course of AT, it can be concluded that VD (self-induced emesis) may be one of the long-term control or preventive measures in patients with migraine by reducing the frequency and intensity of migraine attacks over a specified period of time. However, this needs to be inferred with robust randomized controlled trials with blinding methods.

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Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has given his consent for other clinical information to be reported in the journal. The patient understands that his name and initials will not be published and due efforts will be made to conceal identity, but anonymity cannot be guaranteed.

Table 2: Improvement in the intensity and frequency of migraine attacks

Variables	At the time of consultation (day 1)	After 10 days of AT and VD	Until 1 year of AT and VD	Until 3 years of AT and VD	Until 5 years of AT and VD	Until 7 years of AT and VD	Until 10 years of AT and VD
VAS for pain intensity	9	3	2	1	0	0	0
Frequency of migraine attacks per year	5-6 times	-	0	1	1	0	0

VAS=Visual Analog Scale, AT=Acupuncture treatment, VD=Vamana Dhauti

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Nil.

Conflicts of interest

There are no conflicts of interest.

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