CASE REPORT

Highly Effective Pressure Point Applied Between the Thumb and Index Finger for the Treatment of Migraine Attacks

Mohammad Reza Movahed, MD, PhD, FACC, FACP, FSCAI, FCCP

ABSTRACT

An acute migraine attack is a very painful condition and can be difficult to treat. Pharmacological treatments are limited by significant side effects and limited efficacy. There are anecdotal reports suggesting that acute migraine attacks could be treated using pressure point stimulation between the thumb and index fingers. There are no scientific published data to evaluate the effectiveness of this trigger point. Using rhythmic pressure applied to the trigger point between the index finger and thumb, we report the effectiveness of this method in 6 of 7 cases. This technique can effectively break acute migraine attacks in a matter of minutes. The pressure must be applied in a rhythmic cycle without causing significant pain. A detailed description of this technique in successfully treated cases is described in this manuscript (*Altern Ther Health Med.* 2023;29(3):271-273).

Mohammad Reza Movahed, MD, PhD, University of Arizona Sarver Heart Center, Tucson, AZ; University of Arizona, Phoenix, AZ.

Corresponding author: Mohammad Reza Movahed, MD, PhD
E-mail: rmova@aol.com

BACKGROUND

Migraine is very common in the population and can be disabling, with about 15% yearly prevalence.[1,2] It is the second most common neurological disorder worldwide, causing more disability than all other neurological disorders combined.[2,3] Migraine presents as recurrent headache attacks with various associated symptoms.[4] The cause of migraine is not well understood but is thought to be related to activation of the trigeminovascular system.[5-7] Treatments for migraine can be difficult and involve prevention and active modalities. Despite available treatment options, migraine remains a major public health problem.[8,9]

Relaxation techniques could be effective in the treatment of migraines. There are anecdotal reports describing pressure applied to the trigger point between the index and thumb. This may treat acute migraine-type headaches. (Figure) There are no published cases in the scientific literature to validate this technique. There are reports describing myofascial trigger points in the pathogenesis of migraine and tension-type headaches.[10] However, trigger points involving the hands for the treatment of acute migraine attack have not been published. We report 6 of 7 cases that were successfully treated using this technique. This technique can resolve a severe migraine attack in a matter of minutes. In this manuscript, we present the successfully treated cases, and describe the detail about the location and technique of applying rhythmic pressure to this trigger point located between the thumb and index finger performed ipsilateral to the side of a migraine attack.

TECHNIQUE

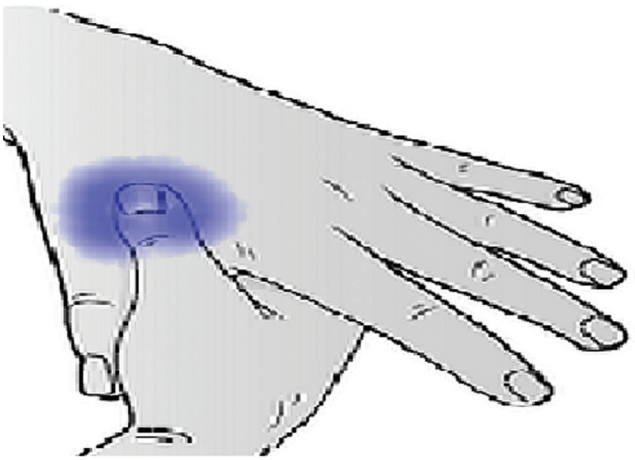
Positioning

If using the right hand for a right-sided migraine attack, the patient's index finger will be held with the physician's left hand and the patient's thumb will be held with the physician's right hand. Next, the physician will position his right thumb in the arch between the patient's index finger and thumb. If using the left hand for a left-sided migraine attack, the patient's thumb will be held with the physician's left hand and the patient's index finger will be held with the physician's right hand. Next, the physician again will position his right thumb in the arch between the patient's index finger and thumb. (Figure). Patients all agreed to be part of publication.

Pressure

Strong pressure is applied in a rhythmic back and forwards movement into the area between the patient's thumb and index finger without causing significant pain. The pressure needs to be felt as a relaxing and not a painful stimulus. With increasing migraine severity, stronger

Figure. Trigger point between thumb and index finger for the treatment of acute migraine attack



rhythmic pressure needs to be applied in the area. The amount of pressure is dependent on the pain tolerance of the patient. In most instances, the applied pressure will create a sense of relaxation. On average, only a few minutes of rhythmic pressure is necessary to resolve the acute migraine attack. In severe cases, migraine may reoccur after initial resolution, requiring prolonged or repeated treatment. In most cases, migraine is not solely unilateral, and therefore, bilateral pressure treatment of both hands is necessary.

CASE REPORTS

Case 1

A 24-year-old female with a history of migraine had sudden onset of acute migraine attack during a stressful event. Rhythmic pressure was applied between her index and thumb of both hands for several minutes with complete resolution of her migraine. She had recurrence of her symptoms after 10 minutes, with prompt response to repeat treatment and resolution of her symptoms.

Case 2

A 25-year-old female with a history of intermittent migraine headache, suddenly suffered from resistant unremitting migraine attack with no response to acetaminophen or ibuprofen. Her migraine started around 8 am when she started her work and continued until 2 PM until she was treated with pressure applied to the affected site between her thumb and index finger. After 3 minutes of treatment, she experienced a strong sensation of relaxation, with complete resolution of her migraine headache and without any recurrence of her symptoms.

Case 3

A 34-year-old female with a history of migraine headaches suffered from severe migraine headache bilaterally a few hours in the morning while she was at work. She developed severe nausea and suffered from visual changes associated with her migraines. She was treated with acetaminophen and later with ibuprofen with no relief. Her migraine intensified to the point of exhaustion during her works hours. Around 4 PM, she received pressure point treatment applied to both hands between her index and thumb with complete resolution of her headache after 3 minutes of treatment with no recurrence later that day.

Case 4

A 32-year-old female, with a history of frequent migraine headaches, suffered from an acute onset of severe migraine headache after her work. She had a left-sided migraine attack with no response to acetaminophen or non-steroidal anti-inflammatory treatment. A few minutes after pressure point treatment on her left hand, her headache completely gone.

Case 5

A 35-year-old dental assistant with a history of migraines suffered from a migraine headache on her day off, starting early in the morning. Acetaminophen was not effective to relieve her pain. In the late morning hours, she was treated with trigger point pressure applied to her between her left thumb and index finger for 4 minutes with complete resolution of her symptoms. She experienced a sense of relaxation with the pressure treatment and had no recurrent migraine that day.

Case 6

A 49-year-old female with a long history of intermittent severe migraine headaches over the last 30 years suffered from an acute migraine attack associated with severe visual disturbance, nausea, and vomiting. She had a history of treatment-resistant migraine headache lasting for days after her initial attack. She was treated with pressure applied to both hand trigger points with only minimal relief of her symptoms. She required multiple dosing of non-steroidal inflammatory treatment and rest with persistent migraine over several days. This case is an example of trigger point failure to treat an acute migraine headache.

Case 7

The patient was a 28-year-old male who suffered from a migraine headache after he woke up from sleep, with no response to over-the-counter analgesics. Later in the afternoon, he was treated with pressure applied between his thumb and index fingers of both hands. After 5 minutes, his pain gradually resolved without any recurrence that day.

DISCUSSION

Migraine attack is a very painful condition with limited therapeutic options.[7] Currently available treatment options have limited efficacy and are associated with many significant adverse events.[11] Trigger point has been used for pain treatment for decades. Many non-invasive treatments such as self-myofascial release[12,13] have been suggested for the treatment of migraine attacks. Acupuncture for chronic headaches has been reported with various success.[14] However,

the pressure point between the index figure and thumb has only been reported on one website with no published data. In this report,[15] pressure point LI-4, also called Hegu, is described as existing between the base of the thumb and index finger.

There are no scientific reports reporting successful cases. This manuscript is the first to report a highly effective treatment of migraine attacks using simple pressure points.

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