

## Case report- Acupuncture treatment in migraine

Jihe Zhu<sup>1</sup>, Blagica Arsovska<sup>1,2</sup>, Kristina Kozovska<sup>1,3</sup>, Julijana Velkovska<sup>1</sup>,

<sup>1</sup>Center for Traditional Chinese Medicine "Tong Da Tang", Republic of N. Macedonia;

<sup>2</sup> Faculty of Medical Sciences, University "Goce Delcev", Stip, Republic of N. Macedonia;

<sup>3</sup> Medicine Faculty, University "St. Cyril and Methodius", Skopje, Republic of N. Macedonia;

---

### Abstract

A migraine is a headache that can cause severe throbbing pain usually on one side of the head left or right. Migraine is often accompanied by vomiting, nausea and extreme sensitivity to light and sound. This pain attacks can last for hours to days, and the pain can be so severe that it interferes with the daily activities. The aim of the acupuncture treatment is to increase blood circulation and help the body to release pain-relieving chemicals. Acupuncture needles stimulate the nerves to release hormones such as endorphins and trigger a response from the body. The stimulation of the immune and circulation system is what relieves migraines and tension headaches. In this article is presented a case of 39 year old man with chronic headache that persists for a longer period of time, a period of more than 5-6 years. The patient has made 20 acupuncture treatments in a period of 3 months. Before the treatments, the patient, on the doctor's recommendation, took tablets with ergotamine derivatives 0.75 mg once a day, then the patient increased the dose 3-4 times a day due to the pain, without consulting a doctor, and at the same time he also drank Zolmitriptan 5 mg. on day. During the acupuncture treatment he started to feel better and with consultation with doctor he started reducing the tablets. After 20 treatments the patient stopped taking medications completely. Acupuncture as part of the TCM gives positive results in treating migraine and generally supports the whole condition of the body.

**Key words:** migraine, acupuncture, Traditional Chinese Medicine

---

Date of Submission: 25-07-2022

Date of Acceptance: 08-08-2022

---

### I. Introduction

A migraine is a headache that can cause severe throbbing pain usually on one side of the head left or right. Migraines are often accompanied by nausea, vomiting and extreme sensitivity to light and sound. This pain attacks can last for hours to days, and the pain can be so severe that it interferes with your daily activities. Migraines, which affect children and teenagers as well as adults, can progress through four stages: prodrome, aura, attack and post-drome, but it doesn't mean that is same for everyone and not everyone who has migraines goes through all stages. Prodrome include upcoming migraine symptoms like: constipation, mood changes, neck stiffness, fluid retention etc.

Aura might occur during or before migraine. Auras are reversible symptoms of the nervous system. Symptoms usually begin gradually and build up in several minutes and can last up to 60 minutes. Migraine auras include: vision loss, pins and needles sensation in one arm or leg, weakness or numbness in one side of face or one side of the body, difficulty speaking etc.

Migraine attack might occur rarely or several times in a month and last usually from 4 to 72 hours if untreated. During the migraine patients can have symptoms like : pain in one or both sides of the head, nausea and vomiting, sensitivity to light, sound and sometimes smell.

Post-drome means after the attack patients might feel drained and confused. Some of them report feeling elated.

If patient have migraine or family history of migraines, the doctor will likely diagnose migraine based on patients medical history, symptoms and neurological examinations. If conditions is unusual, and suddenly becomes several, than patient must to make magnetic resonance imaging (IMR) or computerized tomography (CT) scan, which helps doctors to diagnose tumors, strokes, bleeding in the brain, infections or other damage. [1]

Current doctors thinking is that migraine starts when overactive nerve cells sent out signals that trigger trigeminal nerve, which gives sensation to the head and face. This cause body to release chemicals like serotonin and calcitonin gene-related peptide (CGRP). CGRP makes blood vessels in the lining of your brain swell and then, neurotransmitters cause inflammation and pain.

Migraine can be also caused from hormone changes, stress, foods, skipping meals, caffeine, senses like loud music and bright light, medication like vasodilators, tobacco, changes in sleeping etc.

According to west medicine there is no cure for migraine yet. But medications can help to prevent them or keep symptoms from getting worse. Lifestyle changes like easing stress and heaving good sleep can help too. [2]

According to the scientific research, acupuncture is beneficial in the treatment of acute migraine attacks. Acupuncture has also been shown to be more effective than standard therapy. Acupuncture is a part of traditional Chinese medicine that places needles at specific acupoints on the skin. The idea is to change the flow of energy through the body, bringing about balance and harmony. Other effects that come from acupuncture include: increasing blood circulation, helping the body to release pain- relieving chemicals, relaxing the muscles. [3] [4]

## II. Case Report

In this article is presented a case of 39 year old man with chronic headache that persist for a longer period of time, a period of more than 5-6 years. The patient provided information that his mother also had chronic migraines. He works professionally on a computer for more than 8 hours. The pain felt by the patient is always unilateral, followed by photophobia, nausea and vomiting. A few days before the main attack, the patient feels tension in the neck and changes in mood (prodromal stage), as an aura presents visual symptoms - vision problems and ringing in the ears. The migraine attack occurs 3-4 days a week, that is, more than 15 days a month for a period longer than 3 months, with an intense unilateral headache lasting up to 72 hours accompanied by nausea, vomiting, photophobia and phonophobia. After the end of the migraine attack, the patient feels malaise and confusion. Routine laboratory blood tests, neurological examination, which are normal, were also performed. Magnetic Nuclear Resonance was also performed, which did not show any changes in the central nervous system. Cardiac and vascular changes in the patient were ruled out by carotid doppler examination and cardiological evaluation (examination of atrial septal defect and persistent foramen ovale). The patient, on the doctor's recommendation, took medications based on ergotamine derivatives 0.75 mg once a day, who lately increased the dose 3-4 times a day due to the great pain he felt, without consulting a doctor, and at the same time he also drank Zolmitriptan 5 mg daily.

The acupuncture treatments were made in a clinic for acupuncture and TCM in Skopje, North Macedonia by a licensed doctor specialist in acupuncture. Treatments were done once a week, with duration of 30-45 minutes. Treatments were done indoor, on a roomtemperature. In the treatment were used fine sterile disposable needles sized 0.25x25 mm. Acupuncture point used in the treatments are: DU21, GB20, GV24, GB1, LI4, ST25, ST36, DU14, GB20, RN10, RN6, SP6, LV3 and 6 ashi points on the neck.

Migraine or headaches in TCM are treated differently depending on their causes: Wind invasion can disturb the harmony of Qi (the body's essential energy) and Blood causing headaches, excessive liver yang energy, deficiency of blood and qi blood stagnation. [5]

The Chinese Medicine is one of the oldest healing systems on the planet. Acupuncture is probably the most important component procedure in the TCM, which is used in variety of diseases. Traditional Chinese medicine compared to Western medicine is more older and their approach to the illness is totally different as they come from different philosophical theories. Apart the acupuncture, TCM includes many different techniques, including Chinese herbal medicine, moxibustion, tuina, tai chi, qi gong and other. All these techniques help the body to be balanced and healthy, while the disease appears when there is internal imbalance of yin and yang. With the acupuncture treatment the body is allowed to heal and self-regulate. Other studies done for acupuncture treatment for migraines also confirm positive results and reduction of the frequency of the headaches. [6] [7] [8]

## III. Conclusion

Acupuncture treatment as part of the Traditional Chinese Medicine, gives promising results in a short manner of time, helping the body to release pain-relieving chemicals and relaxing the muscles. The treatment also changes the flow of energy through the body, bringing in balance and harmony.

## References

- [1]. Mayo Clinic Staff, Migraine; 2022 [www.mayoclinic.org]
- [2]. Ratini M; What Is Migraine?; 2020 [www.webmd.com]
- [3]. Molsberger A; The role of acupuncture in the treatment of migraine; CMAJ. 2012 Mar 6; 184(4): 391–392
- [4]. Boyle K; Acupuncture for migraine: What to know; 2021 [www.medicalnewstoday.com]
- [5]. AcuMedic; Headache and migraine; 2022 [www.clinic.acumedic.com]
- [6]. Zhu J, Arsovska B, Kozovska K; STATISTIC ANALYSIS OF EFFECTIVENESS OF ACUPUNCTURE TREATMENT, International Journal Of Current Medical And Pharmaceutical Research, Vol. 3, Issue, 05, pp. 1689-1692, May, 2017
- [7]. Zhu J, Arsovska B, Kozovska K, Nikolovska K, Acupuncture in the treatment of pain, Journal of Scientific and Innovative Research 2017; 6(1): 16-18
- [8]. Zhu J, Arsovska B, Kozovska K, Acupuncture Treatment for Migraine, International Journal of Advanced Ayurveda, Yoga, Unani, Siddha and Homeopathy 2017, Volume 6, Issue 1, pp. 348-350, Article ID Med-360