

# Use of Acupuncture in Migraine Patients: A Case Report

## Migren Hastalarında Akupunktur Kullanımı: Bir Vaka Sunumu

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### ABSTRACT

**Introduction:** Acupuncture is a treatment method with a history of about 3000 years and can be used for many ailments, especially in pain treatment. Migraine often affects the young population and is 2-3 times more common in women. Migraine both reduces the quality of life of the person and becomes an economic burden on society.

**Case:** In this case, we use acupuncture for a 50-year-old female who cannot use oral drugs. After 10 sessions, she had significant relief.

**Conclusion:** We advise acupuncture in the treatment of migraine, especially for patients with comorbidities, using multiple drugs, or who do not want to use drugs.

**Keywords:** Acupuncture, headache, migraine

### ÖZ

**Giriş:** Akupunktur yaklaşık 3000 yıllık geçmişi olan bir tedavi yöntemidir ve özellikle ağrı tedavisinde birçok rahatsızlıkta kullanılabilir. Migren sıklıkla genç nüfusu etkiler ve kadınlarda 2-3 kat daha sık görülür. Migren hem kişinin yaşam kalitesini düşürür hem de toplum üzerinde ekonomik bir yük haline gelir.

**Olgu:** Bu vakada oral ilaç kullanamayan 50 yaşında kadın hastaya akupunktur uygulanmış ve on seanstan sonra hastada belirgin bir rahatlama olmuştur.

**Sonuç:** Özellikle komorbiditesi olan, birden fazla ilaç kullanan veya ilaç kullanmak istemeyen hastalarda migren tedavisinde akupunktur önermekteyiz.

**Anahtar Kelimeler:** Akupunktur, baş ağrısı, migren

### INTRODUCTION

Acupuncture is a treatment method with a history of about 3000 years. Although the interest in acupuncture in Europe started in the 17th century, the importance of acupuncture in treatment has been understood, especially in the last 20-30 years.<sup>1</sup> According to the World Health Organization, acupuncture can be used in many illnesses, especially in the treatment of pain.<sup>2</sup>

The annual prevalence of migraine, which frequently affects the young population, is around 10% and is 2-3 times more common in women.<sup>3</sup> According to the data of the global burden of disease study, migraine is the first cause of years spent with disability in the 15-49 age group.<sup>4</sup> Migraine in this state both reduces the quality of life of the person and is an economic burden to society.

In our study, the use of acupuncture in a patient with migraine who did not respond to medical treatment is presented.

### CASE PRESENTATION

A 50-year-old female was admitted to our outpatient clinic due to migraine. From her history, it was learned that she had migraine for about 15 years, had migraine attacks twice a month, lasting approximately 3 days, without aura, attacks were triggered by insomnia, and she did not benefit from oral treatment during attacks but was relieved by intravenous treatment (such as paracetamol, diclofenac sodium, and metpamid). The pain started in the lateral region of the neck and spread to the eye. The patient, who was followed up by the neurologist, was not taking regular medication because of the side effects of the medication she often experienced. The patient generally expressed

herself as an indecisive, irritable, and thoughtful person. Neurological examination was normal.

Informed consent was obtained and acupuncture was applied to the GV-20 (Governing Vessel), Yintang (EX-HN 3), GB-14 (Gall Bladder), GB-20, GB-40, TE-5 (Triple Energizer), LI-4 (Large Intestine), ST-36 (Stomach), LV-3 (Liver), and KI-3 (Kidney) points after taking the patient's consent as a result of the anamnesis.<sup>5,6</sup> Sessions lasted approximately 30 minutes each. It was planned to be twice a week, then once a week, and finally once a month.

A total of 10 sessions of acupuncture were applied to the patient. The patient stated that the severity and duration of the pain decreased from the first sessions. The patient had only 1 migraine attack in the last 2 months and stated that she was relieved with oral non-steroidal anti-inflammatory drugs (NSAIDs) in that attack, too, without the need for intravenous treatment.

## DISCUSSION

Migraine is an important disease that significantly affects the quality of life of patients and often causes loss of workforce.<sup>3</sup> In population-based studies conducted with migraine patients, it was observed that the quality of life of these patients was significantly lower than the general population.<sup>7</sup>

The pathogenesis of migraine, which was defined as "headache accompanied by visual complaints and relieved by vomiting" for the first time by Hippocrates in 400 B.C., still cannot be explained by a single mechanism. Neuronal and vascular changes originating from the trigeminovascular system, cortical spreading depression, and cortical excitability are thought to play a role in the occurrence of migraine attacks.<sup>8,9</sup>

Although there are many pharmacological treatment options such as NSAIDs, triptans, ergot derivatives, opioids, and COX 2 inhibitors in the treatment of migraine, the treatment should be individualized.<sup>10</sup> In some patients, only acute attack treatment is sufficient; in some patients, prophylactic treatment is required due to

the ineffectiveness of acute attack treatment.<sup>11</sup> Long-term use of drugs used in prophylactic treatment both causes an increase in health costs and decreases drug compliance.<sup>12</sup>

Acupuncture is a good non-pharmacological alternative that can be given as a supplement to pharmacological treatment, especially for patients with comorbidities, multiple drug use, or who do not want to use drugs.<sup>13,14</sup> Acupuncture appears to have fewer side effects compared to drug prophylaxis treatment, and there are fewer dropouts compared to prophylactic drug use.<sup>13</sup>

Our case was a patient who fits this description, despite having had migraine attacks for a long time. Since the patient generally described herself as unstable, nervous, and thoughtful, not only headache was focused on but also spleen and liver points were included in the study. As a limitation of our study, the patient's visual analog scale (VAS) score was not calculated at the beginning of the study (VAS score is a tool that widely used to measure pain). But with the patient's compliance with the treatment, the patient started to relax from the first session, and at the end of the sessions, her quality of life increased significantly.

Acupuncture, especially for patients with serious obstacles to long-term drug use, is a complementary treatment option with fewer side effects and better patient compliance.

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**Informed Consent:** Written informed consent was obtained from the patient who participated in this study.

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## MAIN POINTS

- Migraine is a disease that seriously reduces the quality of life of patients, and some patients do not respond adequately to pharmacological treatment.
- Acupuncture is a safe treatment option for patients who cannot use pharmacological treatment or do not respond adequately to treatment.
- Acupuncture offers patients a personalized treatment option.

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