



Research Article

ACUPUNCTURE TREATMENT IN TEMPOROMANDIBULAR JOINT PAIN AFTER TOOTH EXTRACTION

Jihe Zhu¹, Blagica Arsovska^{1,2} and Kristina Kozovska^{1,3}

1 Faculty of Medical Sciences, University Goce Delchev, Shtip, Republic of Macedonia;

2 Institute of Biology, Faculty of Natural Sciences and Mathematics, Skopje, Republic of Macedonia

3 Medicine Faculty, St. Cyril and Methodius University of Skopje, Republic of Macedonia

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ABSTRACT

Temporomandibular joint (TMJ) or jaw joint is one of the most active joints in the human body. Temporomandibular joint connects the lower jaw (mandible) with the temporal bone that is part of the skull and gives the lower jaw the possibility of multiple movements. Most common symptoms are: pain when chewing near the joint and the ear, difficulty opening the mouth or inability to move the jaw, sound of cracking, headache, neck pain, buzzing in the ears (tinnitus), hearing problems or balance and so on. According to classical medicine, therapy usually consists of removing the causes of increased joint burden, resting and relaxing the joint, massage around the joint, passive mouth-opening exercises, cold anti-inflammatory drugs, and so on. Acupuncture is the most common used technique in traditional Chinese medicine (TCM) to treat lesions of the temporomandibular joint. Acupuncture is a technique which involves insertion of needles into the acupuncture points of the skin in order to stimulate the blood circulation and balance energy through the meridians. The study included 8 patients, 5 men and 3 women, aged 22 to 65. All patients experienced pain and soreness in TMJ. All patients are treated with acupuncture at one acupuncture point ST7 (Xiaguan). In all patients, an effect is achieved on average with 2 treatments. Acupuncture as a treatment for temporomandibular joint pain after tooth extraction is an effective treatment and helps to relieve muscle spasms, reduces pain and swelling, releasing the jaw in a natural way and allows it to move freely.

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INTRODUCTION

Temporomandibular joint (TMJ) or jaw joint is one of the most active joints in the human body. Temporomandibular joint connects the lower jaw (mandible) with the temporal bone that is part of the skull and gives the lower jaw the possibility of multiple movements. Most common symptoms are: pain when chewing near the joint and the ear, difficulty opening the mouth or inability to move the jaw, sound of cracking, headache, neck pain, buzzing in the ears (tinnitus), hearing problems or balance and so on. Temporomandibular joint syndrome is more common in women than in men in a ratio of 4:1, and people with inherited predisposition to joint problems are at greater risk in the presence of excessive joint habits (excessive chewing) or people with general conditions which have a connection to the joints in the body.

Clicking of the TMJ is one of the symptoms which points that something is wrong with the joint, which under normal conditions does not occur.

If one of the symptoms lasts longer than a week then it is necessary to visit the dentist and to determine the cause and to recommend appropriate therapy. According to Western medicine, therapy usually consists of removing the causes of increased joint burden, resting and relaxing the joint, massage around the joint, passive mouth-opening exercises, cold anti-inflammatory drugs, and so on. Acupuncture is the most common used technique in traditional Chinese medicine (TCM) to treat lesions of the temporomandibular joint. Acupuncture is a technique which involves insertion of needles into the acupuncture points of the skin in order to stimulate the blood circulation and balance energy through the meridians.

Problems with TMJ can be well treated with acupuncture, both in acute and chronic cases. The response time from therapy is correlated with the history of the disease, for example, acute cases respond quickly, and in chronic cases, the treatment lasts longer. According to TCM, toothache is caused by stagnation of Qi (the vital energy) in the meridians of the Intestines and Stomach. These meridians have a direct flow to the upper and lower palates. The needles can be inserted into the area of pain, around the ear and jaw. However, due to mutual (common) paths between the meridians, the needles can be inserted close to the elbows, knees and thumb of the foot.

***Corresponding author: Jihe Zhu**

Faculty of Medical Sciences, University Goce Delchev, Shtip, Republic of Macedonia;

These distal points can change the flow of Qi through the jaw to relieve pain and inflammation. Balancing the overall flow of the energy in the body can help reduce stress and other possible factors that contribute to the disturbance of TMJ. [1] [2]

MATERIAL AND METHODS

The study included 8 patients, 5 men and 3 women, aged 22 to 65. All patients experienced pain and soreness in TMJ. The patients were treated in clinic for traditional Chinese medicine and acupuncture in Skopje, Macedonia, by a doctor specialist in traditional Chinese medicine. All patients are treated in a period of one year 2018-2019. In the acupuncture treatments are used sterile acupuncture needles of 0.25x25mm produced by Wuijuiang City Medical & Health Material Co., LTD. The treatments are performed indoors at a temperature of about 25 degrees, in duration of 30-45 minutes. The patients are treated only with acupuncture and no other medications were used during the treatment.

The study includes patients with completed treatment for pain in the temporomandibular joint. The study does not include children, pregnant women, people who used medicament therapy and people who have quit the treatment. All patients are treated with acupuncture at one acupuncture point ST7 (Xiaguan). In all patients, an effect is achieved on average with 2 treatments.

RESULTS AND DISCUSSION

The study involved 8 patients, 5 men and 3 women. Although according to the statistics, the syndrome of the TMJ is more common in women (4: 1) than men, in this study more affected patients were men. However, people who have a hereditary predisposition to joint problems or people who have a habit of overloading the joint (excessive chewing) or people with general diseases that are related to joints in the body are at greater risk. Treated patients are on the age from 22 to 65 years. Patients were divided into 5 age groups. The majority of patients - 3 patients are in the age group of 20 to 30 years. Two patients are in the age group 30 to 40 and 50 to 60 years and one patient in the groups 60 to 70 years. There are no patients in the group of 40 to 50. The same results are shown in Table 1.

Table 1 Age groups

Age groups	Number of patients
20-30	3 (37.5%)
30-40	2 (25%)
40-50	/
50-60	2 (25%)
60-70	1 (12.5%)

According to the number of therapies, most of the patients (5 patients) have done 2 therapies. Two patients have done one therapy and one patient 3 therapies. The same results are shown in Table 2. All patients have a positive effect and the pain, uneasiness in the jaw, sneezing, limitation and other accompanying symptoms have been released.

Table 2 Number of therapies

Number of therapies	Number of patients
1	2
2	5
3	/
4	1

The most common symptoms present in all patients are pain and clicking in the joint. According to the duration of the condition, patients were treated in the acute phase.

While acupuncture therapy can not eliminate the cause of the problem in the TMJ as a result of structural anomalies, such as degenerative changes and displacement of the disk, acupuncture can help alleviate the pain and discomfort associated with the condition. Acupuncture has been proven to help in relaxation of the muscles and reducing the muscle spasms, if spasms are of muscle origin. Acupuncture may also help to minimize the clicking in the TMJ by relaxing the lateral pterygoid muscles, thereby reducing the forward displacement force of the TMJ meniscus.

The exact mechanism by which the acupuncture can decrease the pain in TMJ has not been yet fully described, but according to the theories of TCM, the acupuncture works by restoring and balancing the flow of the Blood and Qi.

The acupuncture point St7 (Xiaguan) used in the treatment was used to help patients with pain in the temporomandibular joint, to ease the painful feeling, relax muscles, improve circulation in the surrounding tissue, and to remove any other present symptoms.

Other commonly used acupoints in the treatment of TMJ pain are: ST6 (Jiache), ST8 (Xiaohai), LI4 (Hegu), BL10 (Tinazhu), GB20 (Fengchu) and GV20 (Baihui).

The purpose of acupuncture is to remove the external pathogenic factors of the wind and cold, to remove the backlog and blocked energy and to release the blood flow through the vessels. The stimulation of certain acupuncture points can alleviate the obstruction of the meridians and collaterals, restore the balance of Yin and Yang and the physical, emotional and spiritual aspects of the individual, improve the energy flow and energy quality that disables the free flow of Qi and thus eliminate pain. Acupuncture has anti-inflammatory and analgesic effects. It helps to relieve toxins from the body, strengthen immunity, increase the threshold of pain, relieve neurotransmitters in local regions, and modulate the pathways in the central nervous system, giving an analgesic effect.

Unfortunately, pharmaceutical treatments provide only symptomatic relief to TMJ. However, acupuncture can find the root of the situation by balancing the mind and body through a network of energy channels called meridians, helping to reset neuromuscular tension in the jaw. Often dysfunctions in TMJ are due to everyday stress that accumulates in the jaw or muscles with contraction in the jaw and face. Acupuncture can help relax these specific muscles and reduce the overall level of stress in the body to relieve discomfort in TMJ. [3] [4] [5]

CONCLUSION

Acupuncture as part of traditional Chinese medicine is used to improve and maintain good oral health and can give a quick and effective relief to the pain of many dental conditions. Acupuncture as a treatment for temporomandibular joint pain after tooth extraction is an effective treatment and helps to relieve muscle spasms, reduces pain and swelling, releasing the jaw in a natural way and allows it to move freely.

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