



ISSN: 2644-2957

DOI: 10.33552/OJCAM.2023.08.000688

Online Journal of
Complementary & Alternative Medicine

Iris Publishers

Case Report

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Acupuncture and Propolis Combination May Be a Good Option for Herpes Zoster Treatment

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Received Date: March 13, 2023

Published Date: April 17, 2023

Abstract

Herpes zoster is a neurocutaneous disease usually caused by reactivation of the VZV latent in the sensory ganglia after primary infection. Many clinical studies and meta-analyses show that acupuncture treatments, alone or in combination with medical treatments, can reduce herpes zoster pain, skin lesions, and the incidence of postherpetic neuralgia. In this case report, acupuncture and propolis application in a patient admitted with the diagnosis of herpes zoster is presented.

Keywords: Herpes zoster; Acupuncture; Apitherapy; Propolis; Postherpetic neuralgia

Introduction

Herpes zoster (HZ) is a neurocutaneous disease usually caused by reactivation of the latent Varicella Zoster Virus (VZV) in the sensory ganglia following primary infection. The primary infection of the VZV causes chickenpox. After chickenpox heals, the virus remains hidden in the dorsal root ganglia. cell-mediated immunity against VZV is reduced due to aging or immunosuppressive conditions. In this case, the virus reactivates and causes acute HZ anywhere in the body [1].

Herpes zoster causes characteristic vesicular skin eruptions localized in the sensory region of the affected ganglia. It is often accompanied by severe pain, pustular skin lesions or itching. Pain and other symptoms caused by HZ significantly affect individuals daily routines, sleep, psychological situation, and reduce the quality of life. Patients create a medical and economic burden on their families and society [1].

The aims of the treatment are to relieve pain in the acute phase, to limit the spread and duration of skin lesions, and to prevent the acute and chronic complications such as postherpetic neuralgia (PHN). Many clinical studies and meta-analyses show that acupuncture treatments, alone or in combination with medical treatments, can reduce HZ pain, skin lesions, and the incidence of PHN. Some studies have even shown that it may have a better therapeutic effect than medical treatment [1,2]. Acupuncture is a preferred treatment because it has no side effects and contributes positively to sleep and psychological situation [3-5]. Studies show that propolis, one of the apitherapy products, is superior to acyclovir in the treatment of HZ in terms of healing and pain [6,7].

In this case report, a patient who applied to the Traditional and Complementary Medicine (TCM) practice center with the diagnosis of HZ and successfully applied acupuncture and propolis is presented.



Case Report

A 52-year-old female patient with no history of chronic disease was admitted with the complaints of yellow vesicular rash, pain and itching in the area compatible with the thoracic 6-7 dermatome areas on the anterior surface of the trunk. The patient was diagnosed with HZ approximately 16 days ago and pregabalin 75mg capsule, valacyclovir 1000mg tb, dextketoprofen 25mg tb, lidocaine 5% cream was prescribed. The patient, who used medical treatment regularly, applied to the hospital again 8 days later because her complaints did not change. This time, the patient was prescribed Brivudin 125mg tb, diclofenac potassium 50mg dragee, 500mg paracetamol/30mg caffeine/10mg codeine phosphate, acyclovir 5% cream. She used this treatment together with pregabalin for 7 days and was admitted to the hospital for the third time since his complaints did not change. It has been suggested to add vitamin B12 to the current treatment. However, the patient did not comply with this recommendation at this stage and left the medical treatment and applied to the TCM application center. A complete medical history of the patient was taken, and a detailed physical examination was performed. Except for the present HZ finding, other systems examinations were normal. Complete blood count, biochemical tests, vitamin levels and electrocardiography were normal. After the detailed evaluation, we decide to start propolis, an apitherapy application, together with acupuncture treatment.

The treatment was started after the detailed informed consent was obtained. Two sessions of body acupuncture and one session of ear acupuncture per week were applied. In this way, a total of 10 sessions of body and 5 sessions of ear acupuncture were applied in 5 weeks. For body acupuncture Ren 12-13-14-15-16, Liv 3 (bilateral) 13-14 (right), GB 24 (right), Yintang, Li 4 (bilateral), St 36 (bilateral), Sp 6 (bilateral)) points were selected. Sterile disposable 0.25x25 mm steel needles were used. Shenmen (bilateral), Antidepressant point (bilateral), Stomach (left), Liver (right) were selected for ear acupuncture. Sterile disposable 0.22x1.5mm steel needles with double plasters were used. The patient was prescribed both topical and oral propolis. After two sessions of acupuncture application, the patient obtained propolis and started to apply it. When the patient was admitted to the first session, she had a yellow vesicular rash on a red background, pain and itching (Figure 1-a). Three days later, the patient's vesicles faded, the redness turned brown, and the complaints of pain and itching decreased by 50% (Figure 1-b). When the patient came to the 3rd session, the pain was completely resolved, and the itching continued despite the decrease. When she came to the fourth session, the complaint of itching also disappeared. Pain and itching did not occur again until the treatment was finished. The rashes decreased at each session and finally disappeared (Figure 1). The treatment was successfully completed in the 5th week when the patient had no complaints.

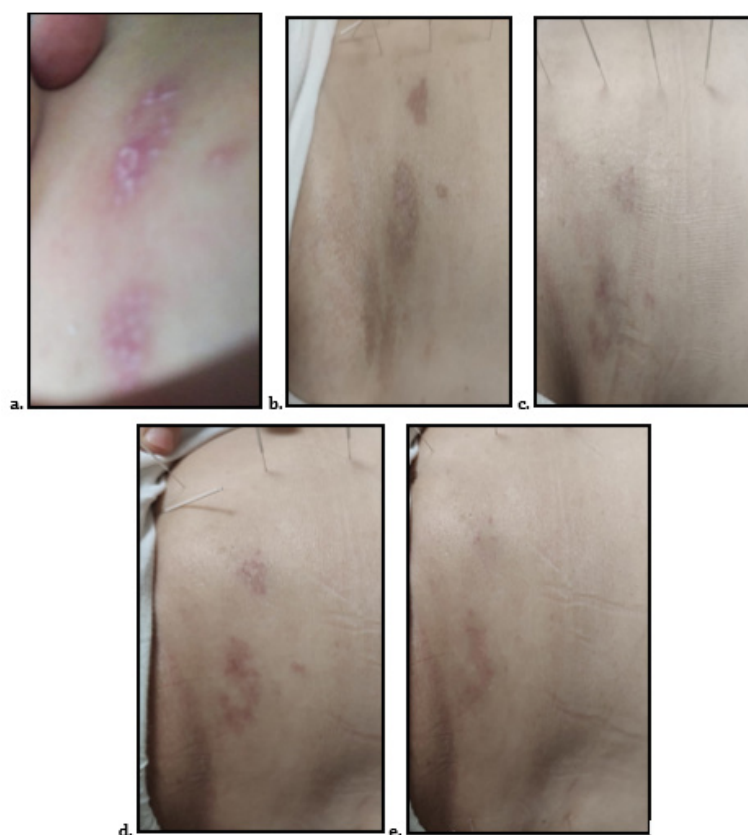


Figure 1: The course of the lesion during the treatment (a. Before the first session, b. Before the second session, c. Before the fifth session, d. Before the seventh session, e. Before the tenth session).

Discussion

Approximately 25% of the world's population has a lifetime risk of developing HZ. The incidence of HZ has been shown to be strongly related to age. Therefore, especially after the age of 50, the incidence of HZ, hospitalization and mortality rate increases progressively. Although acute HZ is self-limiting, 13-47% of patients may have comorbidities such as PHN, HZ ophthalmic us, cutaneous and visceral spread. The most common of these is PHN. The risk of PHN is higher in women than in men [1]. Our case is compatible with the risk group in terms of age and gender.

In cases of HZ, local and systemic therapy are applied together. Along with antiviral therapy, corticosteroid, neuralgia and neurotrophic therapy are used. These drugs have a high medical cost and certain side effects. Prolonged use of antiviral drugs can lead to hemolytic anemia, thrombocytopenia or renal failure. Due to the limited dose and cumulative toxicity, it is difficult to achieve a satisfactory effect in the elder patients with reduced renal function or in patients with renal insufficiency [1]. Acupuncture and propolis application has no serious side effects when performed by authorized physicians [2]. In the application of acupuncture, as a result of various stimulations to the acupuncture points, several substances which have analgesic, anti-inflammatory and sedative effects are synthesized. Since nothing is given to the body externally, toxicity or side effects are not expected. Propolis is a natural resinous substance containing essential oils and pollen, formed by the combination of bees' salivary secretions with plant parts and beeswax. In the presented case, no side effects were observed for acupuncture and propolis.

Ten to fifteen percent of patients treated with antiviral drugs continue to experience severe neuralgia after complete resolution of the skin lesions. It has been reported that the incidence of PHN in these patients is up to 50-85% [1]. Postherpetic neuralgia is usually resistant to treatment. It is unclear whether current treatments can prevent the occurrence of PHN. Treatments with proven efficacy for PHN include gabapentin, pregabalin, topical lidocaine patch, tricyclic antidepressants, and opioid analgesics. However, these drugs are partially or completely ineffective in many patients, whether used alone or in combination. The pain caused by PHN can persist for months or even years. Long-term pain often causes depression, fatigue, insomnia, changes in activities of daily living, and decreased socialization. Acupuncture is a treatment that is used safely in conditions such as anxiety, depression and sleep disorders [3-5]. The efficacy of acupuncture in the treatment of painful diseases has been confirmed by evidence-based medicine, especially for HZ [1]. The first symptom of the case to improve was pain. Acupuncture seems to be the preferred treatment to increase the quality of life, both because it reduces pain and has positive effects on mood. This effect has been strengthened by making use of the antiviral effect of propolis.

Current studies showed that propolis is superior to placebo and acyclovir in HZ in terms of improvement and pain. Propolis blocks the entry of the virus into the cell, interacts with the virus cell membranes and acts directly on free virions by transforming viral envelopes. It contains antioxidant, antibacterial, anti-inflammatory,

neuroprotective, immunomodulatory, antifungal and antiviral compounds [6-8]. It is thought that propolis added to acupuncture increased the effectiveness and helped to get results in a short time.

Early treatment of HZ is important in terms of medical costs, social life and possible comorbidities. Despite the medical treatment, the patient's complaints did not change for 16 days. After two sessions of acupuncture, the pain disappeared within one week, the itching decreased, the spread of the rash was limited, and the crusting time accelerated. Systematic studies and meta-analyses also confirm that acupuncture treatment more effectively reduces pain, duration of treatment and incidence of neuralgia compared to medical treatment [1,2]. With the application of acupuncture and propolis, all complaints of the patient were resolved in 10 days. Treatment was completed to 5 weeks to completely eliminate the rash and reduce the risk of PHN. When an effective treatment cannot be provided in a short time, as in our case, patients may discontinue the treatment. Therefore, the potential role of integrative medicine methods such as acupuncture and propolis in treatment should not be ignored.

HZ is a common infection in patients with acquired immunodeficiency syndrome (AIDS). Patients receiving chemotherapy for cancer have a weakened immune system and an increased risk of HZ. In these patients, the treatment should be chosen more carefully, and the dose should be titrated to reduce the liver and kidney load. Studies have shown that acupuncture treatment is more effective than drugs in these patient groups without any side effects [9,10].

Existing studies have generally focused on comparing one type of acupuncture treatment with pharmacological treatment. The effects of the integrated use of different acupuncture methods have not been adequately studied. The World Health Organization's guideline for acupuncture practice in HZ recommends the use of fire needling, electroacupuncture and phlebotomy, especially in the PHN phase [4,5]. It is also suggested that it is more beneficial to use two or more methods together. However, there is a lack of efficacy comparison between different acupuncture treatments. Therefore, there is ongoing debate about which acupuncture method is the best option in clinical practice. This situation also causes confusion among clinicians in terms of practice [4,5]. In the presented case, it was aimed to reduce the risk of PHN by applying ear and body acupuncture together. After 2 sessions of acupuncture treatment applied for this purpose, the complaint of pain disappeared and did not recur until the treatment was finished. We think that the antiviral effect of propolis also plays a role in achieving this result. In the literature, no study was found in which acupuncture and propolis were used together in HZ. Therefore, we think that the presented case is valuable in that it could lead to different combinations such as the use of acupuncture and propolis.

Conclusion

Given the evidence that HZ and PHN are better and more effectively managed with acupuncture and other TCM modalities added to acupuncture, the recognition and application of these modalities is of great importance. However, larger studies are needed to determine which combinations will be more effective.

Acknowledgement

None.

Conflict of Interest

Authors declares there is no conflict of interest.

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