Bell Palsy and Acupuncture Treatment

Bell Palsi ve Akupunktur Tedavisi

Bell Palsi ve Akupunktur / Bell Palsy and Acupuncture

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Özet

22 yaşında, kız, ebelik bölümü öğrencisi, Bell paralizi House-Breckman Evre 6 tanısı ile kortikosteroid ve antiviral ajanla tedavi edildi. 6 hafta sonra, House –Breckman Evre 3 olan ve düzelmeyen hastaya, akupunktur tedavisi uygulandı. Akupunktur tedavisinde, lokal ve distal akupunktur noktaları, kulakta, vücutta ve yüzde kullanıldı. Kulak akupunkturu, kulak dedeksiyonu ile iki seans uygulandı. 6 seans vücut ve yüz akupunktur noktalarına elektro-akupunktur uygulandı. 10 seans içinde, felçli yüz yarısında tamamen düzelme oldu. ST2 noktasında küçük bir ekimoz oluştu. Yüz simetrisi, yetişkinler, çocuklar ve hamile kadınlar için kişiler arası cazibede etkilidir. Medikal seçenekler, sekel Bell paralizili hastalarda sınırlı kalmaktadır. Klinik ve elektrofizyolojik daha çok çalışmalarla, akupunkturun Bell paralizisindeki etkinliği gösterilmelidir.

Anahtar Kelimeler

Akupunktur; Bell Palsi; Tedavi

Abstract

A 22-year-old female patient, a midwifery student, had treatment with corticosteroid and antiviral agents as soon as Bell Palsy (BP) was diagnosed (House-Breckman stage 6). Six weeks later, patient didn't recover, while in House-Breckman stage 3, acupuncture was perfomed and local and distal acupoints were used with ears, body and face. Ear acupuncture point was used two times with detection. In the course of six sessions body and face points were stimulated by electroacupuncture. After ten acupuncture treatments, the subjective symptoms and the facial motion on the affected side improved. There was an spotting ecchymosis the ST2 points on. The symmetry of the face is a determinant of facial charm and influences interpersonal attraction for adults, children and pregnant women. Medical options for the sequelae of BP are limited. Acupuncture's effectively in Bell palsy patients' should be shown with more clinical and electrophysiological studies.

Keywords

Acupuncture; Bell's Palsy; Treatment

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Introduction

The incidence of Bell's palsy globally is approximately 30/100000 people per year. The prognosis is good, and approximately 70% of patients recover completely within 6 months without treatment. However, 30% of BP patients have sequelae, such as residual paresis (29%), contracture (17%), and facial spasm or synkinesis (16%). The incomplete recovery of facial symmetry can have a long-term impact on the quality of life, such as difficulty with drinking, eating and speaking, as well as psychosocial problems [1]. For children a study has indicated a favorable prognosis. But even with steroid therapy some were healed with sequelae [2]. Reports have shown that women of reproductive age are affected two to four times more often than men of the same age, and pregnant women 3.3 times more often than non-pregnant women. Corticosteroids in pregnancy are controversial [3]. Corticosteroids are currently the drug of choice when medical therapy is needed. Antivirals, in contrast, are not superior to placebo according to the most reliable studies. At the time of publication, there is no consensus as to the benefit of acupuncture or surgical decompression of the facial nerve [4]. The symmetry of the face is important for facial beauty and influences personal attraction for everyone. So, acupuncture treatment can be used to stop the developing sequelae.

Case Report

November 2013 a 22- year-old female patient presented with severe retroauricular pain and lingering facial movement on left hemifacial area. She was subsequebtly diagnosed with BP in the hospital. She was treated with corticosteroid and antiviral agents and lubricating drops as soon as diagnosed. Oral prednisone and acyclovir were used in descending doses. The patient used these drugs, but after six weeks her illness regressed to House-Breckman stage 3. She was restless with her face asymmetry and facial inactivity. It was decided to try acupuncture treatment. Whole inserted needle were disposable, 0.25*25 mm. size and inserted perpendicular to skin. Sessions were for a duration of 30 minutes two times in a week. ACTH point, Interferone point, Main Omega point, Anti agression point and Anti depression point were detected in the dominant ear. Gold plated needles were used ACTH, Interferone, Main Omega and Anti depression points. A silver plated needle was used Anti agression point. These points responded in the first two sessions but not the third. The whole body and face points inserted needle by steel needles. ST 36, LI4 and LIV3 points were used bilaterally as distal acupoints. LI4 and LIV3 were used if there was pain and used only four sessions. ST 36 was used in every session with electroacupuncture. ST2, ST3, ST4, ST5, ST6, ST7, LI20, BL2, TW23, GB1, GB14, SI18, CV24, GV26 points were selected and the affected face side was stimulated with electroacupuncture. Electroacupuncture was used depending on patient durability using by 2-4 hertz stimulation and continous wave for six sessions. After these when muscle tonus came recovery, four sessions cosmetic acupuncture aplied to lift up for the face. BL3, BL4, extrensek 5 was used bilaterally, GV24, GB2, ying tang, TW 17, TW21, SI19 were used on the selected affected face points side. In addition, 0.16*7 mm. needles were used on the affected face points side, and three separate needles sank to extrensek 2, 3, 4 and local eye and mouth points Figure 1. As we told, face symmetry is a determinant of facial beauty Figure 2, 3.



Figure 1. Patient is receiving acupuncture in the clinic.

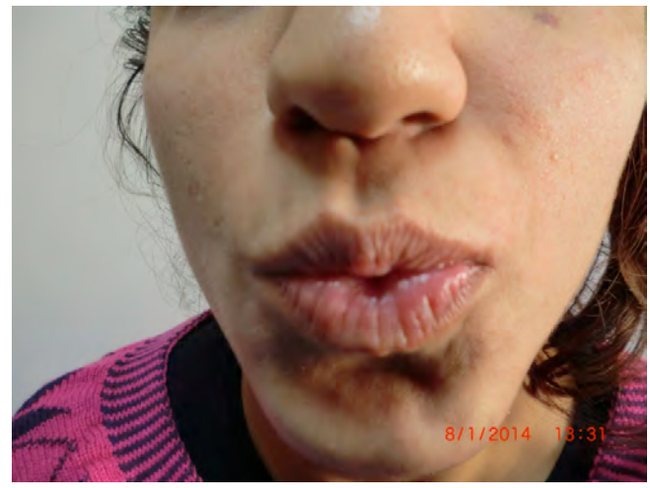

Figure 2. After acupuncture treatments.



Figure 3. After acupuncture treatments.

Discussion

The mechanism of Bell's palsy is an inflammatory process of the facial nerve leading to its compression along this narrow segment of the fallopian canal [4]. Clinical trials have found that acupuncture is at least as effective as corticosteroids in treating Bell's palsy [5], and that eletroacupuncture treatment at the

Zusanli ST36 acupoints of rats could restore the balance to the Th1/Th2/Th17/Treg T helper cell responses by stimulating the hypothalamus to increase ACTH production. This is of importance since the hypothalamus is considered to be a key regulator of various physiological and pathophysiological processes including emotion, autonomic activity, and pain. β-endorphin is an important opioid present in brain, and electroacupuncture stimulation could serve as an analgesic function by activating ACTH and/or beta-endorphin release by the brain so resulting in increased hormone release [6]. In this respect ACTH and ST 36 points can be used to reduce this inflammation, like steroids. Although, the etiology of BP is unknown but viral infection, vascular ischemia, or autoimmune disease has been postulated as possible pathomechanisms [7], for this reason it is prefered to use Interferone and Main Omega points to treat viral infection and stimulate body immune system. In order to reduce patient's upset Anti agression and Anti depression points are used. And it is thought that endomorphin-1, beta endorphin, encephalin, and serotonin levels increase in plasma and brain tissue through acupuncture application. Increases of endomorphin-1, beta endorphin, encephalin, serotonin, and dopamine cause analgesia, sedation, and recovery in motor functions. And they also have immunomodulator effects on the immune system [8]. Face acupoints were prefered on or near locations acupoints, especially impaired movements area. Because, a collection of the activated neural and neuroactive components distributed in the skin, muscle, and connective tissues surrounding the inserted needle is defined as a neural acupuncture unit (NAU). The neuroactive components are mast cells, sympathetic nerve-rich blood vessels, and small lymphatic vessels. In addition to mast cells that release many neuroactive mediators, including histamine, substance P (SP), and other immune factors via a degranulation mechanism in response to acupuncture stimulation, other non-neuronal cells, including macrophages, fibroblasts, lymphocytes, platelets, and keratinocytes are also involved in the modulation of local and afferent signals of NAUs. These cells release various transmitters, modulators, inflammatory and immune factors, which directly or indirectly act at corresponding receptors on the surface of peripheral afferent fibers [9]. For stimulated these neural acupuncture unit effectively used electroacupuncture. This application is, significant clinical efficacy on peripheral facial paralysis and there are no any significant differences in the efficacy among the different waveforms [10]. This is especially true for muscles under continuous tonic contraction. The inhibition of the muscle tone by acupuncture stimulation may be related to the functional recovery of the facial nerve and associated muscles [11]. Also, the post-stroke depression (PSD) can be ameliorated by electro-acupuncture treatment and that the PSD improvement of stroke patients with good motor grade is greater than that of stroke patients with poor motor grade [12]. As a result, we evoked the suffering damage or not to recovery completely nerves, also, acupuncture arenged the humoral mechanism. Our aim is to evaluate the safety and efficacy of acupuncture on the sequelae of BP, patients' happiness and face's beauty. Especially, if patients do not to want to use medical treatments or their special conditions (child, pregnancy, another disease or diseases) do not suitable for to use medical treatments or if there was a complications, acupuncture should prefered. We thought that, all methods should use for the disease treatment is important. But, of course, studies may require large, randomized, and placebo-controlled clinical trial with sufficient, efficacy and its mechanisms follow-up time. And to choose a valid and credible control procedure and to follow CONSORT checklist and STRICTA recommendations will improve the quality of acupuncture studies [13].

Competing interests

The author declare that they have no competing interests.

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