

## Is Acupuncture a New Complementary Alternative Medicine Method in Hailey-Hailey Disease?

Güldehan Atış,\* MD

\*İstanbul Haydarpaşa Numune Eğitim ve Araştırma Hastanesi, İstanbul, Turkey

E-mail: guldehan.atis@gmail.com

\* Corresponding Author: Dr. Güldehan Atış, İstanbul Haydarpaşa Numune Eğitim ve Araştırma Hastanesi İstanbul, Turkey

Published:

J Turk Acad Dermatol 2018; 12 (1): 18121c5

This article is available from: <http://www.jtad.org/2018/1/jtad18121c5.pdf>

**Key Words:** Acupuncture, Hailey-Hailey disease

### Abstract

**Observation:** Hailey-Hailey disease (HHD) or familial benign chronic pemphigus is a rare inherited genodermatosis which has no satisfactory treatment. Herein we report a 50-year old woman with Hailey-Hailey disease was treated by acupuncture successfully.

### Introduction

Hailey-Hailey disease (HHD) or familial benign chronic pemphigus is a rare inherited genodermatosis that is characterized by blisters, maceration, erosions on the flexural areas. The disease impairs patients' quality of life negatively. The mainstay of treatment modalities are anti-infective agents and/or topical corticosteroids; however, these agents usually fail in the treatment of the disease [1]. Recently; injection of botulinum toxin type A, doxycycline, oral terbinafine, oral retinoids, methotrexate, dapsone, dermabrasion, topical tacrolimus ointment, photodynamic therapy are suggested such as new therapy in recalcitrant cases. Sun exposure, stress, sweating, friction and cutaneous infections are precipitants of HHD [2]. Some of therapies aim to reduce hyperhidrosis such as injection of botulinum toxin type A [3]. Acupuncture is an old Traditional Chinese Medicine method that has been used in many dermatological diseases such as psoriasis, chronic urticaria, acne vulgaris, atopic eczema, alopecia, pruritus, rosacea, herpes zoster, impetigo, vitiligo and tinea

[4,5]. Primary hyperhidrosis, sweating associated with malignancy and spontaneous polyhidrosis were treated by acupuncture successfully [6,7].

Herein we report a 50-year old woman with Hailey-Hailey disease was treated by acupuncture successfully for the first time in literature.

### Case Report

A 50-year-old woman with HHD was admitted to our dermatology out-patient clinic. Her symptoms were onset after delivery twenty-one year ago and her sister and mother had the same disease. She has epilepsy for eight years and she had taken levetiracetam 500 mg twice a day.

On her dermatological examination; erosions, macerations on the antecubital fossa, axilla, groins and sub-mammary regions (Figures 1 and 2). She reported recurrent episodes of erosions, vesicles on these sides and her lesions were exacerbating in the summer months. Her lesions were resistant to usual treatments. Acupuncture was suggested to her to reduce sweating on affected sides of body.



**Figure 1.** Erosions, macerations on the antecubital fossa



**Figure 2.** Erythema and maceration on the sub-mammary regions

Bilateral SI19, SP6, ST36, LR3, KI3 and KI7 unilateral REN10, REN17, DU20, ExHN3, were punctured perpendicular to 0,5-1 cun deep. Perilesional areas were punctured and ear acupuncture were studied. Acupuncture treatment was applied one a week during 2 month. At the end of the second month, the lesions on the antecubital fossa and sub-mammary regions healed completely (**Figures 3 and 4**). The lesions on the axilla and groins improved to heal, maceration and erosions were reduced. There was no increasing activity of disease at follow up 2 and 8 month later. She is still underwent acupuncture treatment once a month.

**Discussion**

Hailey-Hailey disease is a kind of acantholytic disorder that is caused by a mutation of the ATP2C1 gene. It is inherited autosomal dominantly with incomplete penetrance. It is characterized by recurrent painful or pruritic

blistering lesions and erosions and maceration in friction areas of the body where sweat, moisture, and friction trigger clinical manifestation [8,9]. Botulinum toxin has been used widely hiperhidrosis. Due to its effect Botulinum toxin used in HHD [3].

In acupuncture theory the renal meridian controls water. In literature, primary hiperhidrosis is treated by acupuncture due to the theory [6]. Water control points of the renal meridian (KI3 and KI7) were used our patient. Other acupuncture points were used to general relaxation and wellbeing. Also the perilesional areas constraining the lesions were needed to benefit from the local effect of acupuncture in healing the lesions. Local effect of acupuncture is caused because of the action mechanism of acupuncture. Needling influences cerebrospinal fluid levels of endorphin and



**Figure 3.** At the end of the second month, the lesions on the antecubital fossa healed completely



**Figure 4.** At the end of the second month, the lesions on the sub-mammary regions healed completely

enkephalin. Another imputed mechanism of action approaches the model of acupuncture needle as an electrode. Like and electrode, the needle activates changes in the ion levels of the interstitial fluid to be rapidly transmitted along the highly conductive fascial lamellar planes. These conduction trajectories -referred as- meridians can be observed by the injection of radioactive tracers. The needle also induces transcutaneous electrical nerve stimuli and cause pain blockage as nonceptive stimulation. Insertion of a foreign body however small may stimulate vascular and immunomodulatory factors, locally occurring mediators of inflammation as one. Increase in levels of adrenocorticotrophic hormone (ACTH) have been measured after acupuncture treatments. Evincing that possible adrenal activation and endogenous corticosteroids' release may have helped the ease of pain and accelerate the healing of the lesions of the patient. Quantum physics, electromagnetic force field changes wave phenomena have been used to explain and as a root for the nonlocal effects of acupuncture [10].

Although because of the invasive technique there is an extremely low possibility of risks. In our case, acupuncture has been affective without side effects and should be considered as a complementary alternative medicine method in HHD.

## References

1. Gisondi P, Sampogna F, Annessi G, Girolomoni G, Abeni D. Severe impairment of quality of life in Hai-

- ley-Hailey disease. *Acta Derm Venereol* 2005; 85: 132-135. PMID: 15823906
2. Mauzo SH, Sulit DJ. Hailey-Hailey disease exacerbated by multiple pregnancies: case report and review of the literature. *Dermatol Online J* 2014; 15: 20. PMID: 25526005
3. Lopez-Ferre A, Alomar A. Botulinum Toxin A for treatment of Familial Benign Pemphigus. *Actas Dermosifiliorg* 2012; 103: 532-535. PMID: 21872830
4. Wang L, Yang H, Li Nuo, Wang W, Bai Y. Acupuncture for psoriasis: protocol for a systemic review. *BMJ Open* 2015; 22: 1-7. PMID: 26048208
5. Tan EK, Millington GW, Levell NJ. Acupuncture in dermatology: an historical perspective. *Int J Dermatol* 2009; 48: 648-652. PMID: 19538380
6. Cayir Y, Engin Y. Acupuncture for primary hyperhidrosis: case series. *Acupunct Med* 2013; 31: 325-326. PMID: 23793090
7. Hallam C, Whale C. Acupuncture for the treatment of sweating associated with malignancy. *Acupunct Med* 2003; 21: 155-156. PMID: 14740814
8. Varada S, Ramirez-Fort MK, Argobi Y, Simkin AD. Remission of refractory benign familial chronic pemphigus (hailey-hailey disease) with the addition of systemic cyclosporine. *J Cutene Med Surg* 2015; 19: 163-166. PMID: 25775626
9. Derec BS, Jared JMD. Successful Botulinum Toxin (OnaboyulinumtoxinA) Treatment of Hailey-Hailey Disease. *J Drugs Dermatol* 2015; 14: 68-70. PMID: 25607910
10. Victor SS. Acupuncture: A clinical review. *South Med J* 2005; 98: 330-337. PMID: 15813160