

Successful Treatment of Herpetic Itch with Traditional Chinese Acupuncture and Cotton-Moxibustion Therapy: A Case Report

Tingting Maa^{1*}, Man Yub², Mei Yanga¹ and Li Hua¹

¹Center of Preventive Medicine, Hospital of Chengdu University of Traditional Chinese Medicine, China

²Department of Dermatology, Hospital of Chengdu University of Traditional Chinese Medicine, China

*Corresponding author: TingTing Ma, Center of Preventive Medicine, Hospital of Chengdu University of Traditional Chinese Medicine, 39 Shi-er-qiao Rd, Chengdu, Sichuan, China



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ABSTRACT

We presented a case of severe itching in acute herpes zoster, successfully treated with traditional Chinese acupuncture and cotton-moxibustion therapy. The therapeutic approaches are different and indefinite in herpetic itch cases. More reports are needed to provide evidence for herpetic itch treatment strategies.

Keywords: Herpetic Itch; Acupuncture; Cotton Moxibustion; Case Report

Introduction

Herpetic itch is a complication associated with herpes zoster. The prevalence of herpetic itch was 62%, 37% and 45% at the acute, subacute, and chronic stages, respectively [1] Like the post-herpetic neuralgia, herpetic itch also greatly reduces the quality of patient's life, leading to sleep disturbance or even depression [2] Although herpetic itch was recognized as a result of virus inflammation and nerve damage as similar as herpetic neuralgia, its etiology remains unclear and its therapeutic approach has not been established [3] In many cases, herpetic itch was not resolved even after the application of neuropathic pain therapy, which makes the treatment of herpetic itch challenging. Here, we report a case of herpetic itch in good therapeutic effect by traditional Chinese acupuncture and cotton-moxibustion therapy, providing a new and effective treatment choice for herpetic itch patients.

Case Report

A 33-year-old woman was admitted in Hospital of Chengdu University of Traditional Chinese Medicine as herpes zoster with the complaint of intense pain in the left forehead for 3 days. She had a medical history of systemic lupus erythematosus, lupus nephritis, rheumatoid arthritis and took prednisone (30mg daily) as a routine treatment. Once the rash appeared, she added the treatment with gabapentin (0.3g, three times daily) and valaciclovir (0.6g daily). Acupuncture (Figure 1) on DU24 (shenting), EX-HN5 (taiyang), EX-HN3 (yintang), topical moxibustion and bleeding on the pain point once per day were also applied to relieve the pain after the admission into hospital.



Figure 1: Herpes zoster in acute stage with filiform needling.

Therapeutic Intervention

Three days after treatment, the patient reported a greatly relief of pain but new symptom---itch in this area, rated by the patient as 8-9/10 on the visual analog scale. The itch caused her scratching and a secondary pain in the left forehead. The patient suffered anxiety and insomnia because of persistent itch. Based on previous treatment, we tapped the itch area with plum-blossom needle lightly without bleeding for five minutes and then applied cotton-moxibustion therapy (Figures 2a & 2b). Cotton-moxibustion therapy is one kind of firing treatment with thin dry cotton pieces on the skin. Defated dry cotton was made into pieces as thin as possible to

ensure a quick burning without scald. Blew out sparkles if patient complained burning pain during combustion. The cotton pieces covered all itch skin except the hair. Cotton-moxibustion therapy was applied once rather than repeatedly on itch skin in the same day to avoid fire burn. After the combination of these interventions, her itch stopped for 6 hours, and was 5/10 for the left hours of the day. In the following 5 days of initiating acupuncture and topical cotton-moxibustion therapy (once per day) while keeping all other medications at previous doses, the itch completely disappeared. There was only discomfort around the left eye with average score from 2/10 to 3/10 when her dismissal.



Figure 2:

- Preparation of thin defated dry cotton pieces.
- The burning of thin defated dry cotton pieces on itch skin.

Follow-Up and Outcome

The patient stopped gabapentin and valaciclovir after dismissal and reported occasional mild discomfort around the left eye at one month follow-up after discharge.

Discussion

Herpes zoster is caused by reactivation of Vari-Cella Zoster Virus (VZV) and occurs when VZV cell-mediated immunity wanes with age or immunocompromise [4,5]. Although acute pain and postherpetic neuralgia are the most common symptoms in herpes zoster patients, patients may also suffer from itch at each stage. Severe disabling herpetic itch even make patients injure themselves by scratching itchy skin. Reduced quality of life, impairment of sleep and social activities are presented in most patients. It is reported that herpetic itch is more likely to occur in cases where the head, face, and neck are affected, with independence of age and sex for its incidence [6]. To date, there is virtually less epidemiologic, anatomic, physiologic, or treatment studies about herpetic itch, and few cases are reported. Herpetic itch, as neuropathic itch, is believed to be due to peripheral sensorineural injury, and currently available treatment strategies are to calm excess neuronal firing with topical or systemic medications. Antihistamines, corticosteroids, and neuro-pain medications are typical treatment for herpetic itch, but are not adequately effective [6]. We summarized the cases of herpetic itch before June 2021 as shown in Table 1 [7-14]. 75% (6/8) herpetic itch happened in the the head, face, or neck, and the occurrence of herpetic itch ranged from 3 days to 9 years. Cases reported to be helpful for herpetic itch include oral taken of pregabalin [11], gabapentin [9,12], opioid [10], benzodiazepine [10], hydroxyzine [12,13] or acyclovir [12]; operation of related nerve block [7,10] or spinal epidural infusion [8]; topical use of amitriptyline and ketamine [14]; physical treatment as the pulsed

radiofrequency [7].

Due to the probable difference of neural pathways for pain and itch, it is necessary to investigate further herpetic itch-focused therapies. In our case, the female patient suffered from acute itch after the greatly reduce of herpetic pain, which indicated that the continual use of corticosteroids, antiviral and neuro-pain medications was ineffective. The traditional Chinese acupuncture is widely used in herpes zoster treatment, especially for acute pain or postherpetic neuralgia in clinics in China, with a general acceptance of acupuncture analgesia mechanism. Although little was known for mechanism of acupuncture in itch relief, acupuncture, moxibustion and related techniques are used extensively. In this case, for itch, we applied filiform needling on DU24 (shenting), EX-HN5 (taiyang), EX-HN3 (yintang) to calm down the mind, with the theory of "all kinds of diseases with pin, itching and sore are exclusively related to the Heart (spirit)". After withdraw of needles, the itch skin was tapped with plum blossom needle (a special needle with seven small needles at one end of the handle) gently for five minutes without bleeding. Then, topical cotton-moxibustion therapy was used on the same area of skin. Cotton-moxibustion therapy was the application of ignited thin defated dry cotton pieces on itch skin for one time within few seconds. The dry cotton pieces were as thin as possible to ensue the burning as fast enough therefore to avoid fire burns. The heat and toxin are the reason for the onset of herpes zoster in traditional Chinese medicine theory, and the generation of "wind" during the process of disease development results in itch. The plum blossom needle tapping can free the meridian to expel heat, and cotton-moxibustion will quench the wind and reduce the heat through firing another heat. The itch stopping mechanism of cotton-moxibustion therapy may be associated with calmness of excess neuronal firing by using heat stimulation.

Table 1: Cases of herpetic itch in the published work.

Case no.	Authors	Age (years)/sex	Comorbidities	Disease course	Location of itchy skin	Itchy degree (vas)	Treatment of Itchy skin	Treatment frequency	Treatment duration	Itchy degree (vas) after treatment
1	De-Fang Ding et al. [7]	56/male	No description	10 months	Left vertex and frontal region	5-7	The pulsed radiofrequency + the great occipital nerve block (1 mg Diprosan, 0.5 mg Vit B12 and 1 ml of 1% lidocaine plain)	Once a day	3 days	0
2	Mohamed A et al. [8]	73/female	Metastatic melanoma of the left middle cranial fossa	1 month	Left scalp extending to the occiput	8-9	Thoracic epidural infusion with clonidine at 1 g/mL + 0.05% bupivacaine at a rate of 5 mL/h	Continuous infusion	1 day	0
3	Daniela Kroshinsky et al. [9]	40/female	Advanced HIV and toxoplasmosis	2 years	Left shoulder	Persistence of the severe	Gabapentin	No description	3 weeks	0
4	Ryan C. Peterson et al. [10]	10/male	Fanconi's syndrome and severe aplastic anemia	3 weeks	Posterior neck, posterior back, and posterior scalp	No description	Left stellate ganglion block + opioid+benzodiazepine		3 times within 2 weeks	Greatly relieved
5	Nobuhiro Shimada et al. [11]	52/female	myelodysplastic syndromes, cerebral infarction, and dysthymia	1 month	Left pinna and cheek	8-10	Pregabalin (25 mg) oral taken	Once a day	1 month	1
6	Shahzeb Hassan et al. [12]	57/female	cervical cancer, diabetes mellitus (type 2), scleroderma, and systemic lupus erythematosus	9 years	Right back, flank and abdomen	No description	Gabapentin(600 mg,three times a day), prednisone (2.5 mg, once daily), Hydroxyzine (25 mg,three times a day) + Acyclovir (800 mg, five times a day)		8 weeks	Significant improved
7	Valentina Semionov et al. [13]	22/male	non-Hodgkin lymphoma, chronic renal failure peritoneal dialysis dependent	1 week	Left eye and forehead	10	Carbamazepine 200-400mg/d+hydroxyzine 75-50 mg/d	No description	2 weeks	0
8	John R Griffin et al. [14]	64/male	Crohn disease	3 days	Left V1 distribution	10	Topical 2% amitriptyline/0.5% ketamine gel	Twice daily	1 week	Modest improvement

Conclusion

So far, both acute herpetic itch and postherpetic itch are difficult to treat. Recommendations for herpetic itch treatment are limited to case reports, and medical management is still challenging. Traditional Chinese acupuncture is widely used for neuropruritus in China with good effect and high safety. We reviewed previous treatment options for herpetic itch and reported this case of cotton-moxibustion therapy in treating acute itch caused by herpes zoster, with the purpose of introducing a good therapeutic effect method for herpetic itch, and providing evidence for herpetic itch treatment strategies.

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Author Contributions

The acupuncture operation was made by Tingting Ma. The manuscript writing was performed by Tingting Ma and Man Yu. Mei Yang and Li Hu were responsible for follow-up outcome assessment. All authors have read and revised the manuscript critically.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

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References

1. Ishikawa R, Iseki M, Koga R, Inada E (2018) Investigation of the Correlation between Postherpetic Itch and Neuropathic Pain over Time. *Pain Res Manag* 2018: 9305126.

2. Dhand A, Aminoff M J (2014) The neurology of itch. *Brain* 137(Pt 2): 313-322.
3. Oaklander A L (2008) Mechanisms of pain and itch caused by herpes zoster (shingles). *J Pain* 9(1 Suppl 1): S10-S18.
4. Sauerbrei A (2016) Diagnosis, antiviral therapy, and prophylaxis of varicella-zoster virus infections. *Eur J Clin Microbiol Infect Dis* 35(5): 723-734.
5. O Connor K M, Paauw D S (2013) Herpes zoster. *Med Clin North Am* 97(4): 503-522, ix.
6. Oaklander A L, Bowsher D, Galer B, Haanpää M, Jensen M P, et al. (2003) Herpes zoster itch: preliminary epidemiologic data. *J Pain* 4(6): 338-343.
7. Ding D F, Li R C, Xiong Q J, Zhou L, Xiang H B, et al. (2014) Pulsed radiofrequency to the great occipital nerve for the treatment of intractable postherpetic itch: a case report. *Int J Clin Exp Med* 7(10): 3497-3500.
8. Elkersh M A, Simopoulos T T, Malik A B, Cho E H, Bajwa Z H, et al. (2003) Epidural clonidine relieves intractable neuropathic itch associated with herpes zoster-related pain. *Reg Anesth Pain Med* 28(4): 344-346.
9. Kroshinsky D, Jagdeo J (2007) A case of post-herpetic itch treated with gabapentin. *J Am Acad Dermatol* 56: AB57.
10. Peterson R C, Patel L, Cubert K, Gulati A (2009) Serial stellate ganglion blocks for intractable postherpetic itching in a pediatric patient: a case report. *Pain Physician* 12(3): 629-632.
11. Shimada N, Niwa Y, Hotta K, Igarashi T, Takeuchi M, et al. (2020) Pregabalin for postherpetic itch: a case report. *JA Clin Rep* 6(1): 24.
12. Hassan S, Cohen P R (2019) Postherpetic Pruritus: A Potential Complication of Herpes Zoster Virus Infection. *Cureus* 11(9): e5665.
13. Semionov V, Shvartzman P (2008) Post herpetic itching--a treatment dilemma. *Clin J Pain* 24: 366-368.
14. Griffin J R, Davis M D P (2015) Amitriptyline/Ketamine as therapy for neuropathic pruritus and pain secondary to herpes zoster. *J Drugs Dermatol* 14: 115-118.

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Tingting Maa. Biomed J Sci & Tech Res



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