

# Acupuncture Treatment of Urticaria

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**A**cupuncture has long been used to treat urticaria in the Asian world. Acute urticaria can be easily and effectively treated with acupuncture. LI11 (*Quchi*), Sp10 (*Xuehai*), Sp6 (*Sanyinjiao*), and S36 (*Zusanli*) are the 4 acupuncture points most commonly prescribed. Chronic urticaria is a challenge for medical therapy. There are at least 6 kinds of acupuncture methods developed to overcome this challenge. The combination of ordinary acupuncture and auricular acupuncture has been observed to be a highly effective cure of chronic urticaria. Acupuncture point injection with thiamine hydrochloride (vitamin B<sub>1</sub>) is also an effective treatment. However, results of these clinical observations have not been systematically confirmed for lack of a control group and the need for standard classification of urticaria. Although these observational results have clinical limitations, they do offer insight into an alternative to conventional treatment of urticaria. In the future, acupuncture or acupuncturelike techniques may provide an effective alternative for treatment of patients with urticaria, particularly those refractory to medication therapy.

*Arch Dermatol.* 1998;134:1397-1399

Urticaria is also known as *Fong-Tzen-Kwai* (wind-rash-patch) by the Chinese. This Chinese term *Fong* (wind) describes the onset of urticaria as appearing so fast—like wind coming so quickly.<sup>1</sup> Tracing back the history of traditional Chinese medicine, the description of urticaria can be found as early as 1346 years ago in a famous book of traditional Chinese medicine, entitled *Qian-Jin-Yao-Fang* (*Thousand-Ducat-Important-Prescriptions*).<sup>2</sup>

In traditional Chinese medicine, there are 2 diversified systems to treat urticaria. One is herbal medicine, another is acupuncture. In this article, we focus on acupuncture. The term *acupuncture* is derived from 2 Latin words—*acus* (needle) and *punctura* (puncture), which means using needle to puncture the body (at specific acupuncture points). However, acupuncture has been applied more broadly to include not only the ordinary acupunc-

ture (*acus-punctura*) but also many related methods, such as moxibustion, cupping, acupuncture point injection, and acupuncture point bleeding, among others.

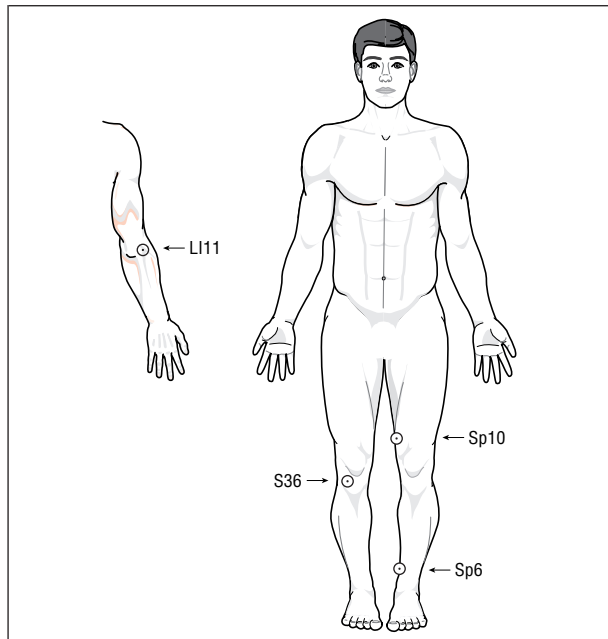
## ACUTE URTICARIA

Acute urticaria is very common. It is estimated that about 15% to 23% of the population may have had this condition in the Western world.<sup>3,4</sup> It is also common in the Asian world. The most common cause of acute urticaria is a state of hypersensitivity to food or drugs, and it may also result from viral, bacterial, or parasitic infection.<sup>5</sup>

In modern medicine, most patients with acute urticaria usually can be treated successfully with antihistamines or a short course of glucocorticoids. In traditional Chinese medicine, acupuncture usually works well too.

The treatment of acute urticaria by acupuncture is easy and effective, and is performed routinely by most experienced

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**Figure 1.** Illustration of 4 important acupuncture points for acute urticaria. The nomenclature of the acupuncture points is according to the recommendation of the World Health Organization.<sup>8</sup>

acupuncturists. More than 90% of patients with acute urticaria experience complete relief with acupuncture therapy.<sup>6</sup> In acupuncture practice, the key to effective treatment for acute urticaria is to puncture the proper acupuncture points. There are 4 acupuncture points most commonly prescribed for acute urticaria: LI11 (*Quchi*), Sp10 (*Xuehai*), Sp6 (*Sanyinjiao*), and S36 (*Zusanli*)<sup>7</sup> (**Figure 1**).

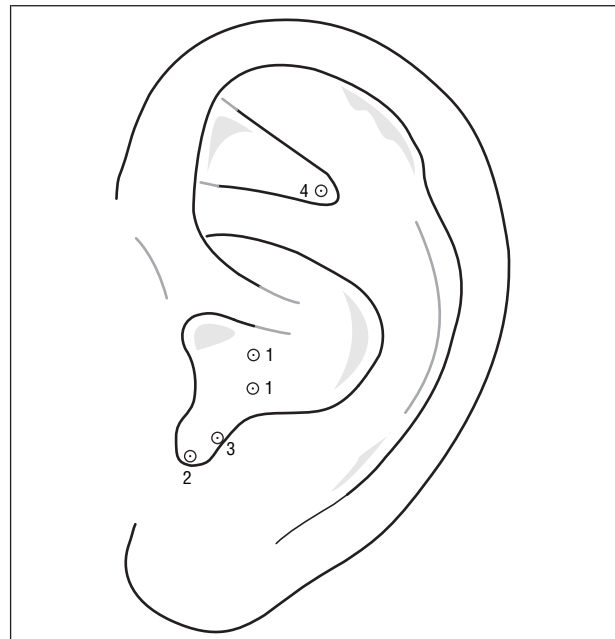
### CHRONIC URTICARIA

Chronic urticaria is defined as the occurrence of widespread wheals daily or almost daily for at least 6 weeks.<sup>9</sup> The causes of chronic urticaria are unknown in most cases. However, a recent study has shown that about one third of patients with chronic urticaria have circulating functional histamine-releasing autoantibodies that bind to the high-affinity IgE receptor (FcεRI) or, less commonly, to IgE.<sup>10</sup>

Chronic urticaria can be extremely troublesome for patients. Moreover, the treatment of chronic urticaria presents a challenge for physicians. In acupuncture therapy, several strategies have been developed to treat different cases of the condition, as listed and described below.

- Ordinary acupuncture
- Combination of ordinary acupuncture and acupuncture point bleeding
- Combination of ordinary acupuncture and auricular acupuncture
- Acupuncture point injection with thiamine
- Acupuncture point injection with autologous blood
- Cupping of acupuncture point

Initially, ordinary acupuncture has been tried for the treatment of chronic urticaria. In addition to the common 4 acupuncture points described in Figure 1, other acupuncture points, such as LI4 (*Hegu*), B40 (*Weizhong*),



**Figure 2.** Illustration of 4 common points of auricular acupuncture prescribed for chronic urticaria. 1 indicates the lung point; 2, the endocrine point; 3, the subcortex point; and 4, the shenmen point.

G20 (*Fengchi*), and G31 (*Fengshi*), have been added to augment the acupuncture effect. However, only 30% to 50% of patients experience complete cure of chronic urticaria using ordinary acupuncture.<sup>11</sup>

Acupuncture point bleeding is 1 of the 9 classic acupuncture methods. It is believed to be able to benefit some refractory disease. Kao<sup>12</sup> reported that a combination of ordinary acupuncture and acupuncture point bleeding cured 83% of patients with chronic urticaria. In this report,<sup>12</sup> 2 acupuncture points, P3 (*Quze*) and B40 (*Weizhong*), were used for bleeding. This method definitely has improved the efficacy of acupuncture for chronic urticaria. However, not all patients, and even some acupuncturists, can tolerate the bleeding.

Subsequently, by using auricular acupuncture, which stimulates the acupuncture point of the ear, in combination with ordinary acupuncture, which stimulates several points of the body, a new combination therapy was developed. It has been reported that the combination of ordinary acupuncture with auricular acupuncture is able to cure 96% of patients with chronic urticaria.<sup>13</sup> In acupuncture practice, there are 4 points commonly prescribed from chronic urticaria, namely, lung, endocrine, subcortex, and shenmen (**Figure 2**).

Acupuncture point injection with fluid, also called "water acupuncture," is another method used in the treatment of chronic urticaria. In 1986, Tong and Song<sup>14</sup> reported results of a new acupuncture strategy by injecting thiamine hydrochloride (vitamin B<sub>1</sub>) into regular acupuncture points to treat 40 cases of chronic urticaria, with disease duration of 2 to 30 years. Thirty-one patients (77.5%) were cured of chronic urticaria. During 2 years of follow-up, 4 patients (12.9%) had relapse of urticaria, and 27 patients (87.1%) were in remission.<sup>14</sup> This method is regarded as practical, convenient, and effective.

Lin<sup>15</sup> reported another type of acupuncture point injection. In his study, 38 patients with chronic urticaria were treated with autologous blood injection into acupuncture points. Another 38 patients with chronic urticaria were treated with ordinary acupuncture. The first group had a 76.3% cure rate, which was significantly ( $P < .05$ ) higher than the 50.0% cure rate in the latter group. Although acupuncture point injection with autologous blood is effective, it is used less often than acupuncture point injection with thiamine.

Cupping therapy is an old method of acupuncture that treats disease by causing local congestion around specific areas. It was reported that the cupping on acupuncture point CV8 (*Shenque*) improved symptoms in 93.8% of patients with chronic urticaria. However, only 35.8% of patients were cured.<sup>16</sup> Although this method is somewhat effective, the low cure rate prevents its common use.

### MECHANISMS OF ACUPUNCTURE

Based on the above clinical observations, we can recognize that acupuncture is effective for both acute urticaria and chronic urticaria. But the effective mechanisms of acupuncture on urticaria have never been investigated directly. However, several basic studies may help us to understand its mechanisms indirectly.

It was found that adrenal production of corticosterone and cortisol in vitro was enhanced by acupuncture at acupuncture point S36 (*Zusanli*) in female rabbits.<sup>17</sup> Furthermore, it was found that this effect could be blocked by lesions in the ventromedian nucleus of the hypothalamus.<sup>18</sup> In humans, after acupuncture treatment for 15 and 45 minutes, the serum cortisol level increase was 28% and 58%, respectively, as compared with results of self-control (placebo acupuncture) studies.<sup>19</sup> Malizia et al<sup>20</sup> found that large amounts of  $\beta$ -endorphin and corticotropin are secreted concomitantly into peripheral blood during electroacupuncture. These above studies provide reasons to speculate that acupuncture may activate the hypothalamus-pituitary-adrenal axis and result in secretion of glucocorticoids, which suppress the immunological reaction of urticaria. However, the activation of hypothalamus-pituitary-adrenal axis may be just a part of the effective mechanisms of acupuncture on urticaria. Whether other mechanisms are also involved is not yet clear. Further studies are recommended.

### PROSPECTS FOR ACUPUNCTURE TREATMENT OF URTICARIA

Based on the experiences from the Asian world, acupuncture is effective for the treatment of urticaria, both the acute and chronic forms.<sup>6,7,11-16</sup> However, can this effect be confirmed in the Western world? Only use of the technique over a period of time and future studies will tell. However, our clinical observations do have drawbacks, such as the lack of a control group and the need for standard classification of urticaria.

Results of these clinical observations seen during the past 50 years are far from perfect. However, they provide us with an alternative way to treat patients with urticaria, especially those with chronic urticaria that is refractory to medication therapy. More attractively, several new techniques

based on acupuncture theory and having acupuncturelike effects without needle insertion are being developed and assessed. These newer techniques include acupuncturelike transcutaneous electrical nerve stimulation (TENS), infra-red therapy, and low-level laser therapy.<sup>21,22</sup>

In the future, acupuncture or acupuncturelike techniques may provide important contributions in the treatment of patients with urticaria, particularly those refractory to medication therapy.

Accepted for publication April 10, 1998.

We thank John Jun-Yang Chen, MA, June Cheng, and Yen-Cheng Chen for their help in the preparation of the manuscript.

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### REFERENCES

1. Tsan IJ. Urticaria. In: Chin WX, ed. *Dermatology Investigation* [in Chinese]. Taipei, Taiwan: Ze-Yin Publisher; 1995:404-417.
2. Sun SM. *Qian-Jin-Yao-Fang* [in Chinese]. 3rd ed. Taipei, Taiwan: Freedom Publishers; 1982.
3. Sheldon JM, Mathews KP, Lovell RG. The vexing urticaria problem: present concepts of etiology and management. *J Allergy*. 1954;252:525-560.
4. Swinney B. The atopic factor in urticaria. *South Med J*. 1941;34:855-858.
5. Goldstein SM. Urticaria and angioedema. In: Lawlor GJ Jr, Fischer TJ, Adelman DC, eds. *Manual of Allergy and Immunology*. 3rd ed. Boston, Mass: Little Brown & Co; 1995:228-243.
6. Wang KD, Wang H. Acupuncture and moxibustion treatment of acute urticaria: 114 cases. *J Yunnan Coll Chin Med*. 1995;18:32.
7. Shanghai College of Traditional Medicine. *Acupuncture: A Comprehensive Text*. Seattle, Wash: Eastland Press; 1987:664-666.
8. World Health Organization. *Regional Working Group on the Standardization of Acupuncture Nomenclature*. Manila, Philippines: World Health Organization, Regional Office for the Western Pacific; 1984.
9. Greaves MW. Chronic urticaria. *N Engl J Med*. 1995;332:1767-1772.
10. Sabroe RA, Greaves MW. The pathogenesis of chronic idiopathic urticaria. *Arch Dermatol*. 1997;133:1003-1008.
11. Dai SM. *Acupuncture Reports: 2300 Cases* [in Chinese]. 4th ed. Taipei, Taiwan: Chie-Yeiblishers; 1993:118.
12. Kao FT. Acupuncture treatment of refractory urticaria: 36 cases [in Chinese]. *J Zhejiang Coll Chin Med*. 1984;19:64.
13. Kao HB. Acupuncture treatment of chronic urticaria: 48 cases [in Chinese]. *J N Chin Med*. 1983;1:36.
14. Tong YL, Song DK. Acupuncture point injection with vitamin B1 to treat chronic urticaria: clinical observation of 40 cases [in Chinese]. *J Clin Dermatol*. 1986; 15:102-103.
15. Lin L. Observation on therapeutic effects of auto-hemo-injection into points on chronic urticaria [in Chinese]. *Chin Acupunct Moxibustion*. 1994;14:75-76.
16. Yang YL, Lo HC. Cupping of shenque point to treat chronic urticaria [in Chinese]. *Chin Acupunct Moxibustion*. 1993;13:51.
17. Liao YY, Seto K, Saito H, Fugita M, Kawakami M. Effects of acupuncture on adrenocortical hormone production, I: variation in ability of adrenocortical hormone production in relation to the duration of acupuncture stimulation. *Am J Chin Med*. 1979;7:367-372.
18. Liao YY, Seto K, Saito H, Kawakami M. Effect of acupuncture on adrenocortical hormone production in rabbits with a central lesion. *Am J Chin Med*. 1981;9:61-73.
19. Lee SC, Yin SJ, Lee ML, Tsai WJ, Sim CB. Effects of acupuncture on serum cortisol level and dopamine beta-hydroxylase activity in normal Chinese. *Am J Chin Med*. 1982;10:62-69.
20. Malizia E, Andreucci G, Paolucci D, Crescenzi F, Fabbri A, Fraioli F. Electroacupuncture and peripheral  $\beta$ -endorphin and ACTH levels. *Lancet*. 1979;2:535-536.
21. Pomeranz B. Electroacupuncture and transcutaneous electrical nerve stimulation. In: Stux G, Pomeranz B, eds. *Basics of Acupuncture*. New York, NY: Springer-Verlag; 1988:230-240.
22. Pöntinen PJ. *Low Level Laser Therapy as a Medical Treatment Modality*. Tampere, Finland: Art Upro Ltd; 1992.