

Research Progress on the Treatment of Urticaria with Traditional Chinese Medicine (TCM) Characteristics

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Abstract: Urticaria is a common allergic skin disease, characterized by a long course, tendency to relapse, and difficulty in healing. The pathogenesis of urticaria is not yet fully understood. Modern medicine mainly believes that it is related to the activation of mast cells, which leads to increased vascular permeability and consequently causes localized edematous reactions in the skin. The treatment primarily relies on traditional drugs, but the therapeutic effects are generally unsatisfactory, and the condition is prone to recurrent episodes. In contrast, traditional Chinese medicine (TCM) has unique advantages in the treatment of urticaria. This article aims to summarize the current TCM-based treatment strategies for urticaria, providing a reference for future clinical practice.

1. Introduction

Urticaria is known in traditional Chinese medicine as "yin zhen." The term "yin zhen" was first mentioned in the "Suwen · Sishen Ciling Lun Pian," which states, "When the Shaoyin is in excess, it causes skin numbness and urticaria." In ancient literature, the disease has also been referred to by various names based on its symptoms, such as "feng bei lei," "chi bai you feng," "gui fan ge da," and "feng cheng ge da." Urticaria is a common skin disease in clinical practice. It is characterized by transient edematous wheals that vary in shape, occur unpredictably, and disappear without a trace, often accompanied by severe itching. In severe cases, it may be associated with fever, shortness of breath, abdominal pain, diarrhea, and other symptoms, which can significantly affect the patient's daily life and work.

2. Etiology and Pathogenesis

The pathogenesis of urticaria is not yet fully understood. In clinical practice, about three - quarters of patients cannot identify a definitive cause of the disease. Western medicine believes that various common factors (such as food, infections, drugs, physical factors, psychological and endocrine factors, systemic factors, etc.) can lead to the activation of mast cells and other

inflammatory cells. These activated cells release chemical mediators with inflammatory properties, which cause temporary vasodilation and increased vascular permeability in the skin and mucous membranes, resulting in localized edema.

In the Traditional Chinese Medicine book "Zhu Bing Yuan Hou Lun Feng Zhen Shen Ti Yin Zhen Hou" written by Chao Yuanfang during the Sui Dynasty, it is stated: "When pathogenic factors invade the skin and are compounded by wind - cold, wind - itchy urticaria will occur." The book "San Yin Ji Yi Bing Zheng Fang Lun Yin Zhen Zheng Zhi" mentions: "Physicians in the world discuss urticaria... Internally, one should examine the deficiency or excess of the viscera; externally, one should differentiate between cold, heat, wind, and dampness. By adjusting according to the symptoms, there is no case that cannot be cured." These statements indicate that traditional Chinese medicine believes that the disease is generally caused by congenital insufficiency, visceral dysfunction, and the invasion of external pathogens. Congenital insufficiency leads to weakened vital energy, which fails to protect the exterior of the body. This allows wind pathogens to invade the skin surface, often combined with other pathogens such as cold, heat, dampness, and dryness, leading to disharmony between the nutritive and defensive qi and the onset of the disease. Visceral dysfunction is also related to the occurrence of the disease. For example, "When the kidney (Shaoyin) is in excess, there will be skin numbness and urticaria," "urticaria is often related to the spleen," "red and white wandering wind (a type of urticaria) is due to spleen and lung qi deficiency with loose interstitial tissues...", "red and white wandering wind is related to liver fire," and "red and white wandering wind... may be caused by yin deficiency with internal heat, external pathogen invasion; or liver fire with wind - heat, blood heat." These statements also indicate that improper diet and emotional injury can trigger the disease. Overconsumption of greasy and rich food can lead to accumulated heat in the stomach and intestines. When combined with wind pathogens invading the exterior, the heat cannot be evacuated internally or released externally, thus accumulating in the skin and interstitial tissues and causing the disease. Emotional injury can lead to disharmony of the Chong and Ren meridians, blood deficiency with wind - dryness, and obstruction in the skin, which can also lead to the disease. In summary, the pathogenesis mainly includes invasion by the six exogenous pathogenic factors (wind, cold, summer - heat, dampness, dryness, and fire), combination with other pathogens, visceral dysfunction, emotional injury, congenital abnormalities, and the combination of internal and external pathogens.

3. Treatment Methods

3.1. Western Medicine

The principle of Western medicine treatment is mainly to combat allergies and provide symptomatic treatment. Typically, second-generation antihistamines are used as the first-line treatment. These drugs act quickly but have a short duration of effect, and some may lead to relapse after discontinuation. If symptoms cannot be controlled with routine medication, the dose can be doubled or combined with other drugs. For refractory urticaria that remains uncontrolled despite these measures, third-line treatments such as omalizumab, cyclosporine, montelukast, and corticosteroids are used [1]. However, the safety and efficacy of combined or doubled drug use and third-line treatments lack support from large-scale data and thus cannot be widely applied. In summary, Western medicine treatment methods are relatively limited, with generally average clinical efficacy and insufficient improvement in patients' quality of life. Further research and innovation are still needed in the treatment of urticaria.

3.2. Traditional Chinese Medicine

The principle of Traditional Chinese Medicine (TCM) treatment is to identify the cause and provide targeted treatment. TCM emphasizes a holistic approach and focuses on syndrome differentiation and treatment. It has shown better efficacy in relieving symptoms and preventing relapse, with fewer side effects, thus offering certain advantages [2]. Additionally, TCM can employ various adjuvant therapies such as acupuncture, auricular therapy, bloodletting with cupping, and herbal fumigation and washing.

4. Traditional Chinese Medicine Characteristic Diagnosis and Treatment

4.1. Treatment of Internal and External Wind

So far, most physicians believe that wind pathogen is the core etiology and pathogenesis of urticaria. Wind is known as the leader of all pathogens, characterized by its rapid and variable nature, which corresponds well with the clinical manifestations of urticaria, such as its sudden onset and disappearance, variable locations, and intense itching. Treating from the perspective of wind has always been the primary approach for many practitioners. External wind can be contracted alone, or it can be combined with cold, heat, or dampness. Internal wind can be caused by liver wind or spleen wind due to organ dysfunction, or it can arise from blood deficiency or yin deficiency with dry blood. Therefore, treatment focuses on dispelling wind, dispersing wind, or supporting the body's vital energy [3].

Mr. Zhao Bingnan [4] believed that wind pathogen is inseparable from the etiology and pathogenesis of urticaria, and thus established the “Three Wind-Treating Formulas,” namely Jingfang Formula, Mahuang Formula, and Quanchong Formula, which correspond to the wind-heat syndrome, wind-cold syndrome, and damp-toxicity syndrome of urticaria, respectively. In addition to these formulas, Mr. Zhao also added ingredients for cooling and nourishing blood, tonifying qi and blood, regulating qi and improving appetite, and awakening the spleen and transforming dampness. This indicates that he also paid attention to internal wind and organ-related wind. While targeting external wind, he also took internal wind into account [5], fully reflecting the holistic view of traditional Chinese medicine. Professor Bai Yanping also treats urticaria from the perspective of “wind.” She believes that acute urticaria is mostly caused by external wind, while chronic urticaria is mainly due to internal wind. When the body is exposed to wind-cold, wind-heat, or wind-dampness, the defensive yang of the muscles and skin becomes weak, the interstitial spaces are not tight, and the defensive qi or yang of the muscles and skin is deficient. The body's defensive function is weakened, and the body's vital energy is unable to expel the external pathogens, leading to a situation where both deficiency and pathogenic factors coexist, making the condition lingering and recurring. Scholar Sun Shidao [6] also believes that in the acute phase of urticaria, it is mostly due to external wind invasion, while in the chronic phase, it is due to lingering wind and weak vital energy. “Deficiency of vital energy” is the fundamental reason for the recurrence of chronic urticaria. Professor Liu Aimin [7] believes that the recurrence of chronic urticaria is due to the prolonged presence of wind pathogen in the body, which cannot be expelled. This is the key pathogenesis of chronic urticaria. After years of clinical observation and thinking, Professor Liu believes that the main reasons for the prolonged presence of wind pathogen and the recurrence of wheals are mainly due to “dampness” and “deficiency,” as well as the existence of “disharmony between ying and wei” [8]. At the same time, based on years of clinical experience and the concept that humans and nature form an organic whole, Professor Liu found that natural wind is caused by uneven air temperature and the movement of air. Combining this with the human body and clinical cases, Professor Liu believes that internal wind is closely related to the liver. As stated in

“Suwen · Linglan Miden,” “The liver is the general’s organ, where strategies originate.” The liver is responsible for regulating the flow of qi and storing blood. If the liver qi fails to regulate properly, the qi and blood will become disharmonious, leading to uneven distribution of cold and heat in the body and the formation of wind. Therefore, the formation of internal wind is related to the liver’s failure to regulate qi. If the liver qi is excessive, internal wind may arise, and liver fire may invade the lung, causing the lung qi to fail to disperse and descend properly. This can lead to impaired fluid metabolism and the manifestation of wheals on the skin. The main cause of liver wind is the imbalance of yin and yang in the organs and the dysfunction of the ascending and descending movements of qi in the five viscera and six bowels. Overall, dysfunction of the five viscera and six bowels can all lead to the formation of wind. Therefore, Professor Liu’s understanding of internal wind in urticaria is not limited to liver wind but also includes other organs. By regulating the yin and yang of the organs and the flow of qi and blood to calm internal wind, the body can restore balance between yin and yang, harmonize qi and blood, and strengthen vital energy. The defensive qi can then protect the body, preventing external wind from entering and expelling it naturally.

In summary, many physicians believe that whether it is internal or external wind, wind pathogen is the primary causative factor of urticaria. Therefore, in the basic formula for dispelling wind, ingredients for nourishing blood, tonifying qi, awakening the spleen and transforming dampness, activating blood and resolving stasis, and calming wind and relieving itching are added. This approach addresses both internal and external wind while expelling pathogens and supporting the body to achieve the goal of eliminating pathogens without harming the body.

4.2. Harmonizing the Ying and Wei for Treatment

Ying refers to the Nutritive Qi, while Wei refers to the Defensive Qi. After digestion by the spleen and stomach, the refined substances are transported throughout the body by the dispersing and descending actions of the Lung Qi. The lighter and clearer substances become Nutritive Qi, which nourishes the entire body and circulates within the blood vessels. The heavier and more turbid substances become Defensive Qi, which protects the body and circulates outside the blood vessels. As stated in **Lingshu · E Ke Di Qi Shi Yi**: “Nutritive Qi, by secreting its fluid, is infused into the blood vessels, transformed into blood, and nourishes the extremities, as well as the five viscera and six bowels, in accordance with the pulse rate.” **Lingshu · Ben Cang Di Si Qi** says: “Defensive Qi is responsible for warming the muscles, filling the skin, enriching the interstices, and controlling the opening and closing of pores.” In summary, Nutritive Qi has the functions of secreting body fluids, transforming into blood, nourishing the internal organs, and moistening the entire body. Defensive Qi has the functions of warming the skin and muscles, warming the pleura and abdomen, and controlling the opening and closing of sweat pores. The theory of Ying and Wei first appeared in **Huangdi Neijing** and is an important part of the basic theories of Traditional Chinese Medicine (TCM).

Zhou Haodong [9] believes that the theory of Ying and Wei not only better clarifies the concept of “Yin and Yang” in the basic theories of TCM but also serves as a powerful tool for elucidating the concept of “meridians.” Zhou Ming’ai [10] considers Ying and Wei to be the “natural scientific basis” of Yin and Yang in the human body, and they are closely related to the physiology and pathology of the human body. Zhang Jingyue said: “Wei is primarily Qi and is located externally, but it also contains blood. Ying is primarily blood and is located internally, but it also contains Qi.” This shows that although Ying and Wei have different functions, they are closely connected and inseparable. Nutritive Qi circulates within the blood vessels, while Defensive Qi circulates outside. The blood vessels divide the refined substances into Ying and Wei, but this division does not completely separate them. Instead, Ying contains Wei, and Wei contains Ying. They are

interdependent and mutually supportive [11]. When Nutritive Qi is abundant and flows smoothly, the body's vital energy is sufficient. When Defensive Qi regulates the opening and closing of pores properly, external pathogens cannot invade the body. Ying and Wei, one internal and one external, work in coordination to maintain the balance of Yin and Yang, achieving the state of "Yin and Yang in harmony." However, if external pathogens invade or the body is inherently deficient, Defensive Qi fails to protect the exterior, and Nutritive Qi cannot nourish the body, leading to a disharmony between Ying and Wei. This disharmony is closely related to the pathogenesis of urticaria. Song Zongzou [12] compared the therapeutic effects of oral administration of the Western medicine Cetirizine combined with Guizhi Tang and Danggui Yinzi versus the use of Cetirizine alone. The results showed that the former had better efficacy, improved quality of life, and reduced recurrence. Xu Pingping [13] treated urticaria based on its pathogenesis and the characteristics of Ying-Wei disharmony, using the classic formula Guizhi Tang to harmonize Ying and Wei, with significant therapeutic effects.

Song Zhiqiong [14] compared the effects of Guizhi Jia Longgu Muli Tang combined with conventional Western medicine versus the use of Western medicine alone. The results showed that the former had a significantly better effect than the latter. Professor Chen Yiguo [15] proposed the view that "the pulse indicates the location, the tongue indicates the nature, and symptoms serve as a reference." He selected Danggui Buxue Tang to focus on regulating Nutritive Blood and harmonizing Defensive Qi, achieving excellent clinical efficacy. Liu Cuiyan [16] used Guizhi Jia Longgu Muli Tang with modifications and compared it with conventional Western medicine treatment. The results showed that the former had significant therapeutic effects and enhanced the body's immune function. Yang Zhongyang [17] compared the efficacy of Guizhi Tang with modifications combined with fire needle therapy versus the use of Western medicine alone. The results showed that the combination of Guizhi Tang and fire needle therapy had better efficacy and effectively alleviated patients' symptoms, with significant clinical effects. Chen Shaofei [18] used Guizhi Tang with modifications combined with acupoint patch therapy to treat chronic cold-induced urticaria and compared it with conventional Western medicine treatment. The results showed that the combination therapy had better clinical efficacy, significantly improved the quality of life of patients, and reduced recurrence. Wu Min [19] established a control group to compare the therapeutic effects of treating cold-induced urticaria with wind-cold binding the exterior syndrome. The control group used conventional Western medicine, while the experimental group used modified Guizhi Tang. The results showed that modified Guizhi Tang was safer and more effective, significantly improving clinical symptoms.

In summary, although the etiology and pathogenesis of urticaria are complex and not yet fully understood, numerous scholars' controlled experiments and clinical efficacy have shown that harmonizing Ying and Wei can better alleviate symptoms, with high safety, low toxicity and side effects, and low recurrence rate. The "method of harmonizing Ying and Wei" can be an important approach in the treatment of urticaria.

4.3. Traditional Chinese Medicine External Therapy

At present, in clinical practice, the treatment of urticaria mainly relies on the application of antihistamines, but the therapeutic effect is not significant, and recurrence is common after discontinuation of the medication. Therefore, in addition to the commonly used Western medical treatments such as antihistamine drugs, corticosteroids, and oral Chinese medicine, a combination of multiple methods is often used for treatment. For example, Traditional Chinese Medicine (TCM) external therapy is a common and effective combined treatment method. TCM external therapy is rich and diverse and can act directly on the affected area. It is currently widely used in patients with

chronic urticaria, including acupuncture, fumigation, moxibustion, acupoint pressing, cupping, acupoint embedding, umbilical application of Chinese medicine, auricular point application, etc. [20]. It can also combine different drugs with external therapy, such as using various Chinese medicines for fumigation and umbilical application [21]. External therapy also involves the combination of external drugs and acupoint selection. In general, the treatment concept of TCM external therapy is that the principle of external treatment is the same as that of internal treatment.

The excellent traditional culture of Traditional Chinese Medicine has a long history in China. From its birth, development, and inheritance, many outstanding medical practitioners and clinical prescriptions have emerged. As a TCM scholar, it is important to have a firm cultural confidence and believe in the efficacy of TCM. TCM is profound and has a long history. In addition to the methods mentioned above, there are many other ideas that have not been mentioned or are not yet mainstream. It is necessary to integrate the essence of TCM into treatment and explore suitable treatment plans.

5. Conclusion

The incidence of urticaria is increasing year by year, affecting the quality of life of more and more patients. Therefore, it has become an inevitable trend to study and explore new reliable and effective treatment methods. Whether from experimental results or clinical efficacy, TCM characteristic treatment of urticaria has achieved satisfactory results. Western medicine treatment of this disease is only symptomatic, providing rapid itch relief and pain reduction, but it is prone to recurrence after discontinuation and does not address the root cause. The combination of TCM and Western medicine for the treatment of this disease can achieve both symptomatic and radical treatment. At the same time, acupuncture, bloodletting, fumigation, and other therapies can be used as auxiliary treatments to shorten the course of the disease, alleviate symptoms, and improve the quality of life of patients.

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