Research Progress on External Treatment of Allergic Rhinitis with Traditional Chinese Medicine

Yang Ziyue¹, Zhang Xiong^{2,*}

¹Shaanxi University of Chinese Medicine, Xianyang, Shaanxi, 712046, China

Abstract: Currently, the prevalence of allergic rhinitis is increasing year by year, with symptoms such as itchy nose, stuffy nose, runny nose, etc., which cannot be cured, and frequent attacks, causing great disruption to the daily life and work of people suffering from the disease. It is not curable, and frequent attacks cause great disturbance to the daily life and work of people with the disease. This article reviewed and summarized the traditional Chinese medicine external treatment of allergic rhinitis in the last 5 years, in order to provide more methods and ideas for clinical treatment.

Keywords: Allergic rhinitis; External treatment of TCM; Clinical treatment

1. Introduction

Allergic rhinitis (AR) is a non-infectious chronic inflammatory disease. After susceptible people with low immune function and allergic constitution are exposed to sensitizers, the nasal mucosa is mediated by immunoglobulin E (IgE) and other immunoglobulins. Influence of induced autoimmune reaction inflammatory manifestations appears. Sudden sneezing is not only the main symptom of runny nose, but also the basis for auxiliary dia gnosis. It can be divided into two types: seasonal allergic rhinitis and perennial allergic rhinitis. At present, antihistamines, glucocorticoids, leukotriene receptor antagonists, and surgical correction have become routine clinical treatments [1]. Although the symptoms can be relieved quickly but cannot be solved fundamentally, the condition is lingering and difficult to be cured, and some patients will have more obvious other uncomfortable reactions. After clinical application, it has been proved that the treatment methods of Chinese medicine have significant effects and less counterproductive, with a wide range of therapeutic means, huge space for in-depth excavation, and good research potential in scientific research, and the study of Chinese medicine is conducive to the further development of Chinese medicine culture in the motherland [2].

2. Analysis of the etiology and pathogenesis in Chinese medicine

In Chinese medicine, AR is called congested nose. Ancient people in the Western Zhou Dynasty found that the occurrence of congested nose was closely related to changes in the natural environment and climate. According to TCM, the external etiology of congested nose is mainly wind-cold, followed by dryness, fire, dampness and heat, and the pathogenesis is mainly due to the weakness of lung qi and the sensation of wind-cold, with the lungs, spleen and kidneys as the disease sites. The onset of the disease is not limited to cold and heat, solid and deficiency. Therefore, the treatment program is based on promoting the lung, strengthening the spleen, benefiting the kidneys, expelling cold and replenishing the deficiency [3].

3. Acupuncture method

3.1. Filiform needle

Filiform needle refers to the method of stimulating specific parts of the human body with Filiform needles through certain maneuvers to prevent and treat diseases. Liang Wei et al ^[4] treated 75 AR patients with nasal three-point, i.e., penetrating Yingxiang(LI20), Shangyingxiang(EX-HN8), and Yintang(DU29), with a treatment cycle of 6 months and a follow-up after 6 months. The results of the

²Department of Otolaryngology, Affiliated Hospital of Shaanxi University of Chinese Medicine, Xianyang, Shaanxi, 712000, China

^{*}Corresponding author

total effective rate of 73.3%, suggesting that the efficacy of nasal three-point penetration in the treatment of AR is exact, and the effect is stable and better than that of the western medicine group in 6 months. Wang Peng [5] treated 30 AR patients with spleen qi weakness using Wang Leiting's "Old Ten Needles". The treatment cycle lasted for 1 month, and no adverse reactions occurred during the period. The total effective rate was 88.9%, and the results showed that Wang Leiting's "old ten needles" was effective in the treatment of AR, which could improve the symptoms of AR patients, the quality of sleep and the quality of life of the patients, and it was better than that of the western medicine group. Shao Suju et al. [6] treated 28 AR patients with Shao's five-needle treatment, and laboratory analysis showed that the serum SP-A and SP-D content of the observation group and the control group decreased significantly, and the decrease of the observation group was more obvious. It is suggested that Shao's five-needle method is effective in treating allergic rhinitis, and its main mechanism of action is to improve the capillary permeability of AR patients, which affects the expression of SP-A and SP-D content in the serum of AR patients. Bao Jiaving et al [7] treated 40 AR patients with modified acupuncture sphenopalatine ganglion, the total effective rate of the observation group was 92.5% after 1 month of treatment, and the recurrence rate was assessed after I month, the recurrence rate of the observation group was 13.5%, and the recurrence rate of the control group was 44.8%, suggesting that modified acupuncture sphenopalatine ganglion energy can effectively alleviate the symptoms of patients with AR, which is better than that of the western medicine group, and the recurrence rate is low.

3.2. Bee-acupuncture therapy

Bee-acupuncture therapy is a kind of therapy in which the medical practitioner uses the stinging needle of the tail of the honeybee as a needle tool, and under the guidance of the acupuncture theory of traditional Chinese medicine, the stinging needle is made to sting the corresponding acupoints, and the pharmacological effect of bee venom is combined with the therapeutic effect of the acupoints [8]. Lai Yaoming et al [9] treated 30 patients with bee acupuncture, taking the acupoints of Fengchi(GB20), Tsusanli(ST36), and Feishu(BL13), with a treatment cycle of 3 months, and a follow-up visit after 3 months. The results of the total effective rate of 100%, recurrence rate of 3.4%, are better than the western medicine group, suggesting that bee acupuncture treatment of AR efficacy and low recurrence rate. Kong Linggiang et al [10] treated 50 cases of children with AR with bee acupuncture, and laboratory analysis showed that the IgA and IgG levels of children in the treatment group and the control group were higher than before treatment, and the IgE levels and eosinophils decreased compared with before treatment, but the IgA and IgG levels of the treatment group were higher than those of the control group, and the IgE levels were lower than those of the treatment group, suggesting that bee acupuncture treatment of AR in children has significant efficacy, and the long-term efficacy of bee acupuncture treatment is superior to Western medicine. It suggests that bee acupuncture is effective in treating AR in children, and the longterm efficacy is better than that of western medicine.

3.3. Needle knife therapy

Needle knife therapy is developed on the basis of the ancient "nine needles", which has the dual therapeutic effects of acupuncture and local minimally invasive surgery. Zhang Jianjun et al [11] used needle knife relaxation therapy for 30 AR patients, taking points for occipital treatment point, C2 spinous process point, upper cervical vertebra transverse process point, Yintang(DU29), once a week, the treatment time is 4 weeks, the results of the total apparent efficiency of 90.0%, which is better than the western medicine group, suggesting that needle knife relaxation method of treatment of AR is safe, reliable and efficacy is accurate.

3.4. Lifting needle therapy

Lifting the needle is called the "quiet to stay" acupuncture [12]. Its principleis that through the skin and collaterals, the needle is buried under the skin, and the needle stimulation is continuous and stable, thus adjusting the function of meridians and internal organs, promoting the orderly operation of meridians and qi and blood, stimulating positive qi to achieve orderly operation, stimulate positive qi to achieve the purpose of disease prevention and treatment. Sun Li et al [13] used tretinoin nasal spray combined with Yintang (DU29), Shangxing (DU23), Hegu (LI4), Chize (L15), Shangyingxiang (EX-HN8), Yingxiang (LI20) acupoints burying needle treatment for 41 AR patients, the results of the combined group of 2 weeks of treatment, 4 weeks, 16 weeks of follow-up, 28 weeks, 54 weeks of TNSS scores and TNNSS scores were lower than the drug group, suggesting that lifting the needle combined with tretinoin nasal spray for the treatment of AR efficacy is significant.

4. Acupuncture Point Patching

Acupressure refers to the method of applying medication to acupoints to prevent and treat diseases through the joint action of medication and acupoints, and in recent years, more researchers have chosen to apply acupoints to patients with AR on the dog days. Han Mo et al [14] took Yingxiang(LI20), Shenque(RN08), Feishu(BL13), Pishu(BL20), Shenshu (BL2) for 47 AR patients and used acupoint patch therapy, applying nasomintong energy patch to the selected acupoints, applying 8h/time, once a day, and consecutively treating for 4 weeks. The results of the total effective rate of 95.74%, suggesting that nasomintong energy patch treatment of AR efficacy is significant. Ren Gongping et al [15] took Shenque(RN8) for each group of 192 cases of 2 groups of AR patients, and crushed Schizonepeta, fangfeng, cicada slough, Angelica dahurica, Xinyi, Fructus into powder in a certain proportion, Group A was treated with acupoint patch made of petroleum jelly as an accessory, and Group B was treated with acupoint patch made of fresh ginger juice and petroleum jelly as an accessory, with the result that the total effective rate of Group A was 69.79%, and that of Group B was 80.20%, suggesting that acupoint patch made of different accessories can improve the symptoms and quality of life of AR patients, and the efficacy of acupoint patch made of fresh ginger juice was better. The total effective rate of group A was 69.79%, and that of group B was 80.20%, suggesting that acupoint patches made with different excipients can improve the symptoms and quality of life of AR patients, and that acupoint patches made with fresh ginger juice have better efficacy.

5. Acupuncture point injection

Acupoint injection is a method of preventing diseases by combining the dual stimulating effects of acupuncture and drugs organically with the guidance of Chinese and Western medicine theories, based on the role of acupoints and drug properties, and injecting drugs into the acupoints. Li Fenfen et al [16] randomly divided 80 AR patients into Yingxiang acupoint group (40 cases) and Tiantu acupoint group (40 cases), Yingxiang acupoint group was treated with bilaterally Yingxiang(LI20) injection of BCG polysaccharide ribonucleic acid injection + 2% lidocaine injection, and Tiantu acupoint group was treated with Tiantu(RN22) injection of BCG polysaccharide ribonucleic acid injection + 2% lidocaine injection, and the result was that the total effective rate of Yingxiang acupoint group was 95.0%, and the total effective rate of Yingxiang acupoint group was 92.0%. The total effective rate of the tianchu acupoint group was 92.5%. Although the total effective rate of the yingxiang acupoint group was slightly higher than that of the tianchu acupoint group, the pain degree of the tianchu acupoint group was significantly lower than that of the yingxiang acupoint group during the treatment process, and the operation was more simple, therefore, the author believed that the tianchu acupoint group was more dominant in the treatment. Li Qing et al [17] treated 30 AR patients with Tsusanli(ST16)injection of tretinoin acetate injection, which resulted in a total effective rate of 86.7%, and a total effective rate of 53.3% at follow-up after 3 months of treatment, suggesting that the efficacy of Tsusanli(ST16)injection in the treatment of AR is remarkable.

6. Moxibustion

Moxibustion refers to a therapeutic method of preventing and treating diseases with the help of the heat of moxibustion fire and the effect of drugs, cauterizing and warming the acupoints or lesions. Modern research has shown that moxibustion is involved in a variety of immune responses in the body, regulating the body's immune function, can effectively treat allergic diseases.

6.1. Mild moxibustion

Mild moxibustion is to align the lit end of moxa stick to the moxibustion site, about 2-3cm high from the skin, so that there is a local warm feeling without burning pain. Wu Shukang et al [18] used gentle moxibustion on Yingxiang (LI20), Yintang(DU29), Dazhui(DU14), and Feishu(DU14) and Tsusanli(ST36) of 33 patients with AR, and the result was a total effective rate of 93.9%, which was significantly higher than that of the control group. It shows that gentle moxibustion treatment for AR can reduce the serum IgE level and EOS level of the patients, alleviate the related symptoms, improve the quality of survival, and the clinical efficacy is exact. Lin Yufen et al [19] investigated heat-sensitized acupoints on the proposed meridian acupoints according to the principles of Chinese medicine's organ and meridian identification in 35 AR patients, and applied mild moxibustion on the explored heat-sensitized acupoints, and the result was 82.86%, indicating that heat-sensitized moxibustion treatment for AR has significant efficacy and can improve the symptoms and signs of AR patients.

6.2. Spacer moxibustion

Spacer moxibustion is a method of applying moxibustion by separating moxa cones from the skin of the acupoints with drugs or other materials. Yang Hongxia [20] treated 28 cases of AR patients with the combination of Dumai moxibustion and Buzhong Yiqi Decoction therapy, during which no significant adverse reactions occurred. The results suggested that the treatment of AR with Dumai moxibustion was effective, which may be related to the fact that it is more conducive to improving the function of the human immune system. Zhang Wenxiu [21] treated 36 patients with lung qi deficiency and cold type AR by taking Fengmen (BL12), Feishu(BL13), and Gaohuang(BL43) with self-proposed traditional Chinese medicine prescription of spaced moxibustion and provided health education, and the total effective rate was 90% after 1 month of treatment, and the total effective rate was 76.7% at the follow-up visit after 1 month. It showed that self-proposed Chinese herbal formula spaced moxibustion is an effective method to treat lung qi deficiency and cold type AR, and the long-term efficacy is better.

6.3. Thunder fire moxibustion

Thunder fire moxibustion is applied by adding specific drugs to moxa floss and rolling it into a moxa roll with paper. Xian Xiaoyan et al [22] treated 64 patients on the basis of medication by taking Shangxing(DU23), Yintang(DU29), Suliao(DU25), Yingxiang(LI20), Dazhui(DU14), Qingming(BL1), Hegu(LI4), Mingmen (GV4), and Shenshu (BL23) in combination with Thunder-fire Moxibustion, resulting in a total effective rate of 90.36%, which indicates that Thunder-fire Moxibustion has a good effect in the treatment of AR.

7. Auricular acupoint therapy

Auricular acupoint therapy refers to the use of acupuncture or other methods to stimulate the ear acupuncture points to prevent disease, which is used to treat AR with high safety and significant efficacy. Wang Shuxiu et al ^[23] divided 100 cases of AR patients into conventional auricular acupoint therapy group and dialectical auricular acupoint therapy group according to the order of consultation, and the symptoms of dialectical auricular acupoint therapy group improved significantly after 1 month of treatment.

8. Massage therapy

Massage therapy for the treatment of allergic rhinitis has the characteristics of non-pharmacological natural therapy, and massage itself belongs to a kind of physical therapy, dredging meridians and collaterals, promoting qi and blood, and supporting injuries and relieving pain and other advantages are also more prominent. Yan Yunhua et al [24] used cetirizine hydrochloride tablets combined with massage therapy for 35 cases of children with AR, with a total effective rate of 97.14% after 1 month of treatment, and the recurrence rates after 1 month, 3 months, and 6 months of treatment were 0.00%, 2.94%, and 2.94%, respectively, with a total effective rate of 5.88%, which was significantly better than that of the control group, suggesting that the therapeutic efficacy of the auxiliary treatment of children's AR with massage was significant and worthy of popularization. It is worth promoting.

9. Scraping therapy

The treatment of allergic rhinitis with scraping therapy is based on the theory of meridians and acupoints in traditional Chinese medicine. It is achieved by using special scraping tools and professional scraping techniques, dipping a medium on the surface of the body to repeatedly scrape and rub until red granular blood dots appear in local areas of the skin, which can achieve the goal of promoting blood circulation and penetrating the skin. At the same time, combining acupoint sticking therapy can quickly improve the condition of allergic rhinitis. Subsequent irregular scraping therapy can ensure effective control of allergic rhinitis and prevent recurrence. Wang Liangmin et al [25] will 31 cases of AR patients according to the principle of meridian flow injection and holographic meridian scraping therapy, in the choice of a good time period to be holographic meridian scraping therapy, the total effective rate of 93.33% after 1 month of treatment, suggesting that the meridian flow injection time selection of the holographic meridian scraping therapy for the treatment of spleen qi weakness type of AR efficacy is remarkable.

10. Combination therapy

Clinical studies have also been conducted on the combined use of two or more types of traditional Chinese medicine external therapies for the treatment of AR. Zheng Xiaojun et al [26] treated 32 AR patients with acupoint catgut embedding at the upper Yingxiang(LI20), Dazhui(GV14), Feishu(BL13), and Gaohuang(BL43), and also selected patients to receive Dumai moxibustion from Dazhui(GV14)in the posterior midline of the back to Yaoshu(DU2) of the duscolumbar vein. The total effective rate was 93.75% after 1 month of treatment. It showed that the efficacy of the combination of Dumai moxibustion and acupoint catgut embedding in the treatment of kidney-yang insufficiency type AR was better than that of the western medicine group in terms of improving the patients' TCM symptoms, clinical signs, ROLR scores, and regulating the patients' serum IgE. Zhang Zhenfeng et al [27] treated 50 patients with AR of spleen and kidney deficiency type with bilateral Yingxiang(LI20), Shangyingxiang(EX-HN8), Fengchi(GB20), Cuanzhu(BL2), Tsusanli(ST36), Sanyinjiao(SP6), Shensh(BL23), Pishu(BL20), and Yintang(DU29) with conventional acupuncture, and at the same time, took Yingxiang(LI20), Shangxing(DU23), Suosao(DU25), Jingming(BL1), Yintang(DU29), Hegu(LI4), Shenshu(BL23), Pishu(BL20)according to the "one-point, four-lines method", and then treated once every second day with thunder-fire moxibustion, which showed an overall effective rate of 96% after three courses of treatment. The total effective rate was 96.0% after 3 courses of treatment, suggesting that acupuncture combined with thunder fire moxibustion is effective in treating AR, which can be used for clinical reference.

11. Summary

In summary, by analyzing the research progress of Chinese medicine treatment of allergic rhinitis, it can be seen that the treatment of rhinitis by external Chinese medicine has the advantages of quick effect, small side effects and controllable treatment process. In recent years, the Chinese medicine treatment of allergic rhinitis has also presented a diversified and diverse development pattern, and the clinical promotion of the specialty of Chinese medicine treatment of allergic rhinitis is extremely necessary.

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