

Clinical Report

Treatment of "itching symptom" of allergic rhinitis from the perspective of "wind"

从“风”论刺过敏性鼻炎之“痒症”

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ABSTRACT

Objective To observe the clinical efficacy of "itching symptom" of allergic rhinitis treated from the perspective of "wind". **Methods** Forty patients were given acupuncture therapy. Fēngchí (风池 GB 20, bilaterally), Dàzhū (大椎 GV 14), Fēngmén (风门 BL 12, bilaterally), Fèishū (肺俞 BL 13, bilaterally) and Shàngyīngxiāng (上迎香 EX-HN8, bilaterally) were selected. After needle withdrawal, a fire cup was applied between GV 14 and BL 13, and the cup was retained for 10 min. Treatment for 15 times was considered as 1 course of treatment. Three days were free from treatment between 2 courses, and 3 courses were needed. The curative effect was evaluated after treatment ends, and follow-up visit was performed one year after treatment. **Results** The scores of nasal symptom and itching symptom after treatment ends and one year after treatment significantly reduced when compared with that before treatment (all $P < 0.05$), the difference was not statistically significant when compared the scores of nasal symptom and itching symptom one year after treatment with that after treatment ends (both $P > 0.05$). According to the follow-up visit performed one year after treatment, the markedly effective and effective cases reduced, ineffective cases increased, and the total effective rate declined slightly. The serum IgE levels, after treatment ends [(164.79±44.29) IU/mL] and one year after treatment [(180.71±52.81) IU/mL], both significantly reduced when compared with that before treatment [(380.12±61.45) IU/mL, both $P < 0.05$], the serum IgE level one year after treatment increased when compared with that after treatment ends, but the difference was not statistically significant ($P > 0.05$). **Conclusion** (1) Significant short-term and long-term curative effects have been obtained during the treatment of "itching symptom" of allergic rhinitis from the perspective of "wind", (2) the mechanism of action may be related with the decrease of serum IgE level, (3) it is indicated that there are correlations between allergic rhinitis and atopic diseases such as atopic dermatitis and allergic conjunctivitis, etc.

KEY WORDS: allergic rhinitis; itching symptom; wind-evil; serum IgE

Allergic rhinitis (AR), a kind of allergic disease of nasal mucosa involving various immunocompetent cells and cytokines^[1], is mediated by IgE, with rhinorrhea, sneezing, runny nose, eye itching, and throat itching, etc. as the major symptoms. Both AR and atopic dermatitis (AD) are allergic diseases, which are related with type I allergic reaction, with the same pathogenesis^[2]. It has been found according

to investigation^[3] that AR is closely related with such diseases as AD, allergic conjunctivitis, and drug allergy, etc. AD is considered as the skin manifestation of "atopic diseases"^[2]. Clinically, a part of AR patients visit the department of dermatology for treatment due to "itching symptom", thus neglecting the therapy for allergic rhinitis. The author has obtained satisfactory curative effect during the treatment of "itching

symptom" of AR patients from the perspective of "wind", and the details are summarized as follows.

CLINICAL DATA

Forty patients, including 15 males and 25 females, were from the outpatient service who visited Hebi Jingli Hospital, Rehabilitation Department from March, 2014 to June, 2016, with the age of 22–61 years old, and the mean age of (39 ± 12) years old. The shortest course of disease was 1 year, and the longest was 10 years, with an average of (6.5 ± 1.4) years. All the cases conformed to the criteria in *Diagnostic and Treatment Guidelines for Allergic Rhinitis*^[1]. (1) with two or more symptoms of sneezing, watery nasal discharge, nasal congestion, and rhinorrhea, etc., concomitantly with such ocular symptoms as eye itching, conjunctival congestion, etc., (2) pale nasal mucosa with edema and watery secretions, (3) positive result of skin prick test, (4) specific serum IgE detection result can be used as one of the laboratory indices of diagnosis of allergic rhinitis. Allergic rhinitis was diagnosed on the premise of consistency between the clinical manifestations and skin prick test result or specific serum IgE detection result. All the 40 patients were manifested as obvious "rhinorrhea, eye itching, throat itching, skin itching" and other symptoms. The patients with nasal tumor or other nasal mucosa lesions, severe physical or mental diseases were excluded.

METHODS

Acupoint selection: Fengchi (风池 GB 20, bilaterally), Dazhui (大椎 GV 14), Fengmen (风门 BL 12, bilaterally), Feishu (肺俞 BL 13, bilaterally) and Shengyingxiang (迎香 EX-HN8, bilaterally).

Manipulations: The patient was asked in sitting position. After conventional disinfection, disposable

0.30 mm×25 mm filiform needles were adopted at GB 20, BL 12, BL 13 and EX-HN8, and a disposable 0.30 mm×40 mm filiform needle was used for needling at GV 14. When needling at GB 20, oblique insertion was carried out with a depth of 13–20 mm towards the direction of nasal tip, twirling for reducing method was adopted to make the needling sensation spread to eyes. Perpendicular insertion was carried out with a depth of 25–30 mm at GV 14, and 13–20 mm at BL 12 and BL 13. Even reinforcing and reducing method was adopted at the three points to the extent that heavy and swelling sensation generated in the point areas and chest. Downward penetration needling towards Yingxiang (迎香 LI 20) was carried out with a depth of 13–20 mm at EX-HN8, and twirling method was performed to the extent that sore and swollen sensation generated in the nose. Acupuncture was conducted for once a day with the needle retention of 30 min, and manipulation was carried out for twice during needle retention. After needle withdrawal, a fire cup was applied between GV 14 and BL 13, and the cup was retained for 10 min. Treatment for 15 times was considered as 1 course of treatment. Three days were free from treatment between courses, and 3 courses were needed. The curative effect was evaluated after treatment ends, and follow-up visit was performed one year after treatment.

OBSERVATIONAL INDICES

Symptom score criteria

The score of "itching symptom" was refined by reference to the criteria in *Diagnostic and Treatment Guidelines for Allergic Rhinitis*^[1], and the details are shown in Table 1 and Table 2.

Efficacy evaluation criteria

By reference to the criteria in *Diagnostic and Treatment Guidelines for Allergic Rhinitis*^[1]. Curative

Table 1 Score criteria of itching symptom for allergic rhinitis

Symptom	Mild (1 point)	Moderate (2 points)	Severe (3 points)
Rhinorrhea	Intermittent	Tolerable formation sign	Intolerable formation sign
Eye itching	Intermittent	Tolerable	Intolerable
Throat itching	Intermittent	Tolerable	Intolerable
Skin itching	Intermittent	Tolerable	Intolerable

Table 2 Score criteria of nasal symptom for allergic rhinitis

Symptom	Mild (1 point)	Moderate (2 points)	Severe (3 points)
Sneezing	3–4 times/day	10–14 times/day	Over 15 times/day
Runny nose	4 times/day	5–9 times/day	Over 10 times/day
Nasal congestion	Occasional	Between mild and severe	Breathing through the mouth almost all the day

effect was evaluated according to the nasal symptom score and itching symptom score. Curative effect index = $[(\text{Total score before treatment} - \text{Total score after treatment}) \div \text{Total score before treatment}] \times 100\%$. Markedly effective: curative effect index $\geq 66\%$; effective: $65\% >$ curative effect index $\geq 26\%$; ineffective: curative effect index $\leq 25\%$.

IgE detection method

Serum IgE level was detected after the treatment ends by adopting Siemens IMMULITE2000 fully automatic chemiluminescence immunoanalyzer through the manipulations strictly conforming to the apparatuses and reagents specification. Reference range: 0–87 IU/mL.

Statistical analysis

SPSS 13.0 statistical analysis software was adopted. The scores and serum IgE levels before and after treatment and one year after treatment were compared by using *t*-test, and the differences were statistically significant when $P < 0.05$.

RESULTS

Scores of nasal symptoms and itching symptom of patients with allergic rhinitis

According to the comparison of scores in Table 3, the scores of nasal symptoms and itching symptom after treatment and one year after treatment significantly reduced when compared with that before treatment (all $P < 0.05$), the difference was not statistically significant when compared the scores of nasal symptoms and itching symptom one year after treatment with that after treatment (ends both $P > 0.05$).

Overall curative effect

According to Table 4, and the follow-up visit performed in the patients with allergic rhinitis one year after treatment, the markedly effective and effective cases reduced, ineffective cases increased, and the

total effective rate declined slightly.

Serum IgE detection results

The serum IgE levels both after treatment $[(164.79 \pm 44.29) \text{ IU/mL}]$ and one year after treatment $[(190.71 \pm 52.01) \text{ IU/mL}]$ significantly reduced when compared with that before treatment $[(380.12 \pm 61.43) \text{ IU/mL}]$, both $P < 0.05$, the serum IgE level one year after treatment increased when compared with that after treatment, but the difference was not statistically significant ($P > 0.05$).

TYPICAL CASE

Patient CAI, female, 35 years old, worker, visited the hospital on August 2, 2015. Chief complaint: she has suffered from sneezing, runny nose, eye itching and skin itching after smelling off-odor for 5 years, and aggravated for 10 days. Five years ago, the patient suffered from sneezing concomitantly with eye itching and skin itching on the back and arms and legs without any obvious inducement. She was diagnosed with urticaria in the department of dermatology of a prefecture-level hospital. She was given anti-allergy drugs (oral administration). The symptoms were controlled when she was taking medicines, but they relapsed after drug withdrawal. Ten days ago, the patient suffered from frequent sneezing, eye itching and skin itching after smelling off-odor. She took anti-allergy drugs, but the efficacy was not obvious, so she came to our hospital for treatment. Physical examination: rhinoscopy showed pale mucosa, moderate swelling in the inferior nasal concha, and small gap between the inferior nasal concha and nasal septum. The tongue was light red, the coating was thin and white, and the pulse was floating and moderate. Western medicine diagnosis: allergic rhinitis. TCM diagnosis: *Biqin* (wind-pathogen invading the lung). Treatment principles: diffusing the lung and dispelling the pathogen, dispelling wind and relieving itching. Acupoint selection: GB 20 (bilaterally), GV 14, BL 12 (bilaterally), BL 13 (bilaterally) and EX-HN8

Table 3 Comparison of scores of nasal symptoms and itching symptom of patients with allergic rhinitis (G₄)

Symptom	Patients	Before treatment	after treatment	follow-up visit
Nasal	40	7.41±0.07	3.13±0.42 ¹⁾	3.27±0.51 ¹¹⁾
Itching	40	5.53±0.26	1.82±0.54 ¹⁾	2.03±0.62 ¹¹⁾

Note: Compared with the score before treatment, ¹⁾ $P < 0.05$, ¹¹⁾ $P < 0.05$, compared with the score after treatment, ¹²⁾ $P > 0.05$.

Table 4 Comparison of the curative effect of patients with allergic rhinitis after treatment and one year after treatment

Time	Patients	Markedly effective	effective	ineffective	Total effective rate (%)
After treatment	40	13(32.5)	15(37.5)	12(30)	91.0
One year after treatment	40	10(25.0)	13(32.5)	17(42.5)	87.5

(bilaterally). Manipulations: the patient was asked in sitting position. After disinfection on the acupoint areas, disposable 0.30 mm × 25 mm filiform needles were adopted for needling at GB 20, BL 12, BL 13 and EX-HN8, and a disposable 0.30 mm × 40 mm filiform needle was used for needling at GV 14. At the time of needling at GB 20, oblique insertion was carried out with a depth of 20 mm towards the direction of nasal tip, twirling for reducing method was adopted to make the needling sensation spread to eyes. Perpendicular insertion was carried out with a depth of 25 mm at GV 14, and 15 mm at BL 12 and BL 13. Even supplementation and drainage method was adopted at the three points to the extent that heavy and swelling sensation generated in the point areas and chest. Downward penetration needling towards Yingxiang (迎香 LI 20) was carried out with a depth of 15–20 mm at EX-HN8, and twirling method was performed to the extent that sore and swollen sensation generated in the nose. Acupuncture was conducted for once a day with the needle retention time of 30 min, and needling manipulation was carried out for twice during needle retention. After needle withdrawal, a fire cup was applied between GV 14 and BL 13, and the cup was retained for 10 min. Acupuncture for 15 times was 1 course of treatment. After treatment for 10 times, sneezing and eye itching disappeared, and skin itching was relieved, after treatment for another 5 times, skin itching disappeared without relapse of eye itching. In order to consolidate the curative effect, another course of treatment was given. Follow-up visit was performed one year after treatment, which showed that sneezing and runny nose attacked for 3 times without relapse of eye itching and skin itching.

DISCUSSION

AR belongs to the category of *huan* in traditional Chinese medicine^[1], and itching symptom is caused by AD and allergic conjunctivitis which are related with AR. This disease is related to wind-cold invading the lung, so treatment should be conducted from the perspective of “wind”. Shao’s “five-needling method” was invented by professor SHAO Jing-ming, the founder of “Henan Shao’s Acupuncture-moxibustion School”, based on the theory of “the lung is related to the nose”. Professor SHAO Jing-ming has obtained distinguished curative effect in treatment of allergic rhinitis from the perspective of “lung”^[6]. “Wind is the primary pathogen”, which invades the body from mouth, nose and skin. Firstly, the wind invades the skin and hair, and “hides in the skin, which cannot unblock internally or discharge externally”, thus affecting the diffusing and dispelling functions of the lung. Secondly, the wind invades the nasal passage

and arrives at the lung through the throat and air passage, further affecting the diffusing and dispelling functions of the lung. Therefore, sneezing, runny nose and itching symptom will be induced. Professor CHAO En-xiang, a TCM master, believes^[7] that rhinorrhea, sneezing, and skin itching, etc. induced by allergic rhinitis are characterized by paroxysm and symptom diversity, which are identical to the feature that “wind is swift and changeable”, thus good efficacy can be obtained during the treatment from the perspective of “wind”.

GB 20 is the intersecting point between the foot-shaoyang meridian and yangwei vessel, and a key point for the wind invading the body. As a vital point for treatment of internal or external wind-pathogen, acupuncture at GB 20 can dispel wind and dispel pathogen, calm the liver and open the orifices. GV 14 is the intersecting point between the three yang meridians of the hand and foot and governor vessel, acupuncture at which can remove the wind and release the exterior, diffuse yang and dissipate cold. WU Ji-hong’s study^[8] have demonstrated that acupuncture at GV 14 of the guinea pig with asthma can significantly reduce the total serum IgE level. BL 12 is the intersecting point between the foot-taoyang bladder meridian and governor vessel, and a key point for the wind-pathogen invading the body. Acupuncture at BL 12 can scatter the wind and release the exterior, and rectify the lung qi. BL 13, with the functions of rectifying lung qi, fill up the interstitial space and consolidating wei qi, is a main point for treatment of lung diseases, which can treat the internal injury and externally-contracted diseases of the lung^[9]. Professor SHAO Jing-ming^[10] has found according to plenty of clinical observation that “Shao’s five-needling method” can significantly reduce the serum IgE level of patients, and return it to the normal level. EX-HN8 is an extra point, which locates at the nose, and the adjoining part of the hand-yangming meridian and the foot-yangming meridian. The anterior-posterior relationships between the lung and large intestine as well as between the spleen and stomach guarantee that acupuncture at EX-HN8 can unblock the meridians of lung, spleen, stomach and large intestine, diffuse lung qi, unblock the nasal cavity and dispel wind-pathogen. EX-HN8 is a key point for treatment of various nasal diseases^[11]. Study^[12] have confirmed that the mechanism of acupuncture at the perirhinal points for treatment of allergic rhinitis is to reduce the generation and release of histamine through regulating the autonomic nervous system and the permeability of capillary in the nasal cavity, further controlling the exudation of inflammatory substances.

The result of the study indicates that significant short-term and long-term curative effects have been obtained during the treatment of "itching symptom" of allergic rhinitis from the perspective of "wind", and its mechanism of action may be related with the reduction of serum IgE level of patients with allergic rhinitis.

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ABSTRACT IN CHINESE

[摘要] 目的：观察从“风”论治过敏性鼻炎患者之“痒症”的临床疗效。方法：对40例患者采用针刺风池（双）、风热、风门（双）、肺俞（双）、上迎香（双）进行治疗，去针后在大椎、肺俞之间加拔1号大罐一个，留罐10 min。治疗15次为1疗程，疗程间休息3天，共治疗3个疗程。治疗结束后评价疗效，治疗结束后1年进行随访。结果：治疗后即刻与治疗1年鼻部症状、痒症评分较治疗前评分均显著降低（均 $P<0.05$ ）；治疗后1年鼻部症状、痒症评分与治疗后即刻评分比较无统计学意义（ $P>0.05$ ）。患者治疗后1年随访，显效、有效例数有所下降，无效例数有所升高，总有效率稍有下降。治疗后即刻血清IgE水平（ 164.79 ± 44.29 ）IU/mL、治疗后1年血清IgE水平（ 180.71 ± 52.81 ）IU/mL与治疗前血清IgE水平（ 380.12 ± 61.45 ）IU/mL比较均显著下降（均 $P<0.05$ ）；治疗后1年血清IgE水平较治疗后血清IgE水平显著有所升高，而治疗后1年血清IgE水平与治疗前血清IgE水平比较无显著差异（均 $P>0.05$ ）。结论：从“风”论治过敏性鼻炎患者之“痒症”能有效缓解鼻部症状，降低血清IgE水平。结论：（1）从“风”论治过敏性鼻炎之“痒症”有良好的近期、远期疗效；（2）其作用机制可能与降低血清IgE水平有关；（3）提示过敏性鼻炎与特应性皮炎、过敏性鼻炎等特应性疾病之间存在相关性。

[关键词] 过敏性鼻炎 痒症 风邪 血清IgE