

Regulation and Guideline

Clinical Practice Guideline for Allergic Rhinitis Treatment with Acupuncture*

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ABSTRACT With reference to international guidelines for the development of tools—Grading of Recommendations Assessment, Development and Evaluation (GRADE) system approach and reasoning, this practice guideline has been drafted reflecting the characteristics of acupuncture to improve effectiveness and safety of acupuncture treatment for allergic rhinitis. This guideline includes outlining the acupuncture diagnosis and treatment principles for allergic rhinitis, suggesting recommendations and related evidence for the acupuncture treatment of allergic rhinitis, and defining operating methods and precautions for the acupuncture treatment of allergic rhinitis.

KEYWORDS clinical guideline, Chinese medicine, acupuncture, allergic rhinitis

The use of acupuncture in the treatment of allergic rhinitis (AR) has been increasing in recent years showing satisfactory results in short-term as well as long-term efficacy. In 2015, acupuncture has been recommended as one of the optional treatments for the first time in American clinical guideline for AR.⁽¹⁾ A large number of studies indicate that acupuncture treatment of AR has the advantages of rapid relief of symptoms such as nasal congestion, nasal itching, sneezing and rhinorrhea, as well as shortening and reducing the frequency of rhinitis attacks, thus improving the patients' quality of life. Acupuncture application is straightforward with no adverse reaction such as fatigue and lethargy therefore being a suitable alternative to conventional medicine, especially as conventional medicine treatment efficacy is limited in treating this condition.

This guideline was undertaken to optimize the intervention plan of clinical doctors in the treatment of AR with acupuncture and to improve safety and efficacy in the acupuncture treatment of this condition. Acupuncture can be applied to both mild and severe AR and at any stage of the disease development, however, its efficacy is usually higher with milder severity and a shorter evolution. For patients with coexisting conditions such as chronic rhinitis, vasomotor rhinitis, eosinophilic nonallergic rhinitis, hormonal rhinitis, sinusitis or nasal polyps, the same treatment plan can be used for reference.

METHOD AND PROCESS

Identification of Clinical Topic

The research group, including otorhino-laryngology, clinical acupuncture and research management experts,

has determined clinical issues through a large literature search, a systematic understanding of the current status of acupuncture treatment for AR, based on targeted population, intervention, assessment, outcomes, health economics and other criteria in order to bring forward solutions to those clinical issues. A doctor and patient based survey was conducted targeting those clinical issues with a total of 28 questionnaires for doctors and 90 for patients. After analyzing the survey, 17 clinical issues were obtained which provided guidance for the preparation of the guideline.

Evidence Collection, Screening and Evaluation

Gathering evidence for the clinical guideline development strategy was based on data extracted from modern and classical literature. Retrieval of evidence about the treatment of AR with acupuncture was collected through group meetings, expert discussions, e-mail and other methods including search tools, search scope, search terms, search strategy (Appendix 1), literature inclusion and

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exclusion criteria. A preliminary expert meeting was held to determine the importance of the clinical outcome indicators of the disease, with different grading such as key outcomes and important but non-critical outcome indicators, as an important basis for assessing the quality of literature. Two evaluators (Zhang JJ, Qu SH) used the Grading of Recommendations Assessment, Development and Evaluation (GRADE) system for evaluating the quality of modern medical literature. Evidence of quality literature was divided into high, medium, low and very low grade (A, B, C, D, respectively).

Preliminary Creation of Recommendations and Programme Review

After using the GRADE system to evaluate the evidence of literature quality, a preliminary project was formed through group meetings and expert questionnaires. A recommended programme included suitable population groups for acupuncture intervention, intervention time, intervention principles, acupoints selection, acupuncture method, appropriate precautions, efficacy and evaluation indicators. When writing the initial draft, the study group found out that there was no significant difference in the treatment of the distinct phases or types of AR. In conclusion, after reaching the experts consensus, we decided to make recommendations based on the different types of treatment and characterizing the strength as strong and weak recommendations.^(1,2) Each recommendation was based upon criteria such as grading of evidence in modern literature, the pros and cons of interventions, patient values and opinion, and costs.

The preliminary programme outline submitted to the "Acupuncture standards and clinical practice guidelines project review meeting" for reviewing. Following the meeting, the research group revised the guideline based on the opinions of the experts.

CLINICAL FEATURE

Medical History

Medical history is an important basis for diagnosis of AR and should not be only focused on symptoms reporting, but should also consider seasonal outbreaks, trigger factors (hot and cold, mold in the clothing, dust, strong odors), allergens in the patient environment (domestic pets, birds, indoor flowers, damp and dark house) and reaction to previous treatments. Detailed history taking and a short medical interview will give a diagnosis impression.

Symptoms and Signs

Typical AR symptoms include nasal congestion

(intermittent or persistent, unilateral or bilateral, mild or severe), nasal itching (nasal itching is present in most patients, ocular and auricular itching may appear in pollen-induced rhinitis), sneezing (occurs more than 3 times daily, with a higher recurrence in the morning, at night or after exposure to allergens) and rhinorrhea (excessive clear nasal secretion, the patient sometimes is not conscious of his runny nose). Some patients may present anosmia. Typical signs of AR include pale discoloration of the nasal mucosa, bilateral inferior nasal turbinate edema, clear or sticky mucosa in the nasal passages and nasal floor.

Exams and Tests

(1) Standard allergen are used for skin prick testing (SPT), pricking the skin on the palmar side of the forearm and checking the results 20 min after the skin prick. Interpretation of the reaction should consider positive and negative controls. Positive control uses histamine solution whereas negative control uses an allergen vehicle. The result is determined according to the corresponding allergen reagent instructions. SPT should be carried out after the patient stopped the antihistamines medication for at least 7 days. (2) Allergen-specific immunoglobulin E (IgE) blood test is one of the laboratory indicators for AR diagnosis. (3) Nasal endoscopy, sinus CT scan and imaging studies: pale coloration of the nasal mucosa, edema, and watery secretion from the nasal cavity are frequent signs in AR where the above exams is appropriate. (4) Nasal provocation test is the golden standard for AR diagnosis, but because of a certain degree of risk it is not used as a routine clinical examination method.

DIAGNOSTIC CRITERIA

Diagnostic Criteria and Classification According to Western Medicine

Diagnostic Criteria

Diagnostic criteria based on "Guidelines for the diagnosis and treatment of AR" revised in 2009⁽²⁾ by the Chinese Medical Association of Otolaryngology and Neck Surgery is recommended. (I) Symptoms: sneezing, watery rhinorrhea, nasal obstruction, nasal itching, etc. Two or more symptoms (including 2 symptoms), symptoms persist for more or up to 1 h a day. Other ocular symptoms may be present such as ocular itching and conjunctival hyperemia. (II) Signs: pale discoloration of the nasal mucosa, edema, watery secretion from the nasal cavity. Nasal endoscopy and sinus CT scan are thus appropriate. (III) Exams and tests: SPT and serum specific IgE testing refer to "Exams and Tests" listed above. For SPT, skin prick test should be carried out after the patient stopped the antihistamines medication

for at least 7 days. Correct diagnosis of AR requires consistency between clinical manifestations and the results of SPT or serum specific IgE testing.

Classification of Subtypes and Severity

Since 1994 in accordance with the International Rhinitis Management Working Group, AR can be classified by the temporal pattern of exposure to a triggering allergen as seasonal (pollens) or perennial. The "AR diagnostic criteria and treatment efficacy criteria" final revision by the Chinese Medical Association of Otorhinolaryngology, Head and Neck Surgery recommend the following classification. (1) Perennial AR (PAR): (a) The disease persists throughout the year with sneezing fits (more than 3 times in a row), with clear rhinorrhea and edema of the nasal mucosa as the three main clinical manifestations. The total number of days of active symptoms is superior than 6 months in a year with an occurrence of more than 0.5 h a day; (b) the disease evolution is at least 1 year. (2) Seasonal AR (SAR): (a) the disease occurrence is seasonal, it usually occurs every year during the same season and is consistent with sensitized pollen pollination; (b) symptoms appear 2 years in a row in the same season.

However, in some cases symptoms can appear with seasonal AR patients outside of the pollen season, furthermore there are seasonal exacerbation in PAR patients.⁽³⁾ The above classification is not fully satisfactory. In 2001 the "ARIA" (Allergic rhinitis and its impact on asthma) classification of AR⁽⁴⁾ suggested "intermittent" and "persistent" according to AR symptoms duration. (1) Intermittent: symptoms < 4 days a week or lasting for 4 consecutive weeks. (2) Persistent: symptoms $\geq$ 4 days a week and lasting for 4 consecutive weeks.

"ARIA" classified the disease according to its severity as "mild" and "moderate-severe", considering whether it affects the quality of life including sleep, daily activities, work and study. (1) Mild: symptoms are mild with no impact on quality of life. (2) Moderate-severe: symptoms are evident or severely impairing the quality of life.

AR can be classified combining the subtype and severity criteria, i.e, mild intermittent, mild persistent, moderate-severe intermittent and moderate-severe persistent.

Diagnostic Criteria and Pattern Differentiation According to Chinese Medicine

The reference text of the State Administration of

Traditional Chinese Medicine⁽⁵⁾ in the diagnostic criteria for Bi Qiu disease corresponding to AR in Western medicine states the following: due to specific physical constitution, the pathogen invades the nasal orifice causing paroxysmal nasal itching and sneezing fits.

Diagnosis

(1) Paroxysmal nasal itching, sneezing fits, nasal obstruction and excessive watery rhinorrhea are the main symptoms. Secondary symptoms can appear such as anosmia, ocular and throat itching. (2) Rapid onset: symptoms usually persist for less than 10 min; symptoms are absent during the remission period; co-morbidity can be present such as urticaria or asthma. (3) Exposure to pollen, smoke, chemical agents and other allergenic substances, other disease and sometimes temperature changes can be triggering factors. (4) Examination of the nasal cavity shows a pale mucosa, sometimes hyperemia, edema of the nasal turbinate. During onset there is excessive nasal secretion. (5) When possible nasal discharge smears, allergen skin test, serum or nasal secretion IgE exams should be carried out to confirm the diagnosis. (6) Differential diagnosis should be made to eliminate nasal obstruction caused by cold, chronic nasal obstruction or vasomotor rhinitis.

Pattern Differentiation

(1) Cold with Fei (Lung) deficiency: the disease is frequently triggered by catching a cold, aversion to wind and cold, pale color of the face, shortness of breath, cough, white expectoration; thin and white tongue coating, floating pulse. (2) Pi (Spleen) qi deficiency: nasal itching and sneezing fits, excessive watery rhinorrhea, weakness of the limbs, watery stool; pink color of the nasal mucosa; white tongue coating, thin and weak pulse. (3) Shen (Kidney) yang deficiency: nasal itching, nasal obstruction, excessive sneezing, the disease is triggered when there is wind and cold; cold aversion and limbs hypothermia, polyuria, watery stool; pale coloration of nasal mucosa, edema of the nasal turbinate; pale tongue, white tongue coating, filiform and sinking pulse.

ACUPUNCTURE TREATMENT AND RECOMMENDATION PROGRAMME

Principle and Method of Acupuncture Treatment Treatment General Principles

Acupuncture general principles for the treatment of AR are based on the following: treating the stem-cause in case of acute onset, treating the root-cause in case of moderate onset; strengthening the body defense and expelling the pathogen, dispersing Fei and drain the orifices.

Characteristics of Acupoint Prescription

The acupuncture treatment for AR is based on the disease identification. Moreover, acupoint selection during the disease onset should be based on the symptoms, whereas during the remission period acupoint selection should be based on pattern differentiation.⁽⁶⁾

Needling Method—Acupuncture Methods

The use of filiform needles,⁽⁷⁻¹⁵⁾ application of cataplastm on acupoints,⁽¹⁶⁻²⁴⁾ moxibustion,⁽²⁵⁻³⁰⁾ auricular seeds method,⁽³¹⁻³⁴⁾ and acupoint injection^(35,36) are recommended. Two or more acupuncture methods can be combined. Drug treatment can be applied when acupuncture result is unsatisfactory.

Acupuncture Frequency and Treatment Course

During exacerbation period or with more severe symptoms the patient can be treated daily; during remission or with mild symptoms the patient should be treated once every other day or twice weekly. Most of the literature report 4 to 6 weeks as a total course treatment but it is important to consider the patient condition before deciding the treatment course.

Acupuncture Intervention Time

Acupuncture intervention can be carried out at the various stages of AR. In the exacerbation phase acupuncture can quickly relieve nasal symptoms, and in the remission phase it can decrease the occurrence of relapse, as well as reducing onset symptoms.

Main Outcome Measures

The main outcome indicators are usually divided into subjective evaluation indicators and objective evaluation indicators. Subjective evaluation indicators include the patient self-assessment regarding the relevant symptoms, medication and quality of life. Objective evaluation indicators include nasal functional test, nasal provocation test and blood test.⁽³⁷⁾

Recommendation Scheme

Filiform Needle Insertion

Standard Filiform Needle Insertion

Yingxiang (LI 20), Yintang (GV 29), Fengchi (GB 20), Hegu (LI 4), and Zusanli (ST 36) are recommended as the main acupoints. Acupoint association based on pattern differentiation is listed in Table 1. Specific operation methods are listed in Appendix 2. Treatment course should be 10 sessions applied daily or every other day.

Table 1. Acupoint Association

Syndrome or symptom	Acupoint
Fei deficiency	Feishu (BL 13), Taiyuan (LU 9)
Pi deficiency	Pishu (BL 20), Taibai (SP 3), Qihai (CV 6)
Shen deficiency	Shenshu (BL 23), Guanyuan (CV 4), Fuli (KI 7)
Lasting block produces heat	Quchi (LI 11), Dazhui (GV 14)
Severe nasal obstruction	LI 20, Shangxing (GV 23), Sibai (ST 2)
Excessive rhinorrhea	Yinlingquan (SP 9), Sanyinjiao (SP 6)
Headache and ocular itching	Tongtian (BL 7), Cuanzhu (BL 2)
Cough	Lieque (LU 7), Tiantu (CV 22), BL 13
Dyspnea	Dingchuan (EX-B 1), Shanzhong (CV 17)
Depressed mood and hypogastric congestive pain	Ganshu (BL 18), Taichong (LR 3)

Precautions

Fewer acupoints should be selected and stimulation amount should be reduced in weak and elder patients that show a lower pain threshold. Medicated patients can be given lower doses accordingly to symptoms reduction, but medication should not be decreased too quickly.

Recommendations: this programme is suitable for the distinct types or phases of AR. Attention should be paid to select acupoints according to disease identification and to associate additional acupoints according to pattern differentiation or symptoms. (GRADE 1C)

Point-through-Point Needling Technique Prescription

GV29 through Bigen (nose root), LI 20 through Bigen, LU 7, LI 4, GB 20 are recommended as the main acupoints. Acupoint association are listed in Table 2. Treatment course should be 10 sessions applied daily with a minimum of 2 treatment courses.

Precautions are the same as above.

Recommendations: this programme is suitable for the distinct types or phases of AR. Attention should be paid in case of perennial AR to adapt the treatment, selecting the acupoints based on the main prescription with appropriate variation according to pattern differentiation. (GRADE 1D)

Heat Dissipating Needling Technique Prescription

GB 20, LI 20, GV 29, BL 13, BL 20, LI 10, and ST

Table 2. Acupoint Association of Filiform Needle

Syndrome	Acupoint
Qi deficiency	ST 36, Qihai (CV 6), Baihui (GV 20)
Yin deficiency	Guanyuan (CV4), Taixi (KI 3)
Yang deficiency	BL 23, CV 4
Blood deficiency	Xuehai (SP10), Geshu (BL 17)
Wind-cold	Fengmen (BL 12), BL 13
Wind-heat	GV 14, Yuji (LU 10)
Phlegm-heat	Fenglong (ST 40), Neiting (ST 44)

36 are recommended as the main acupoints. Acupoint association include: Taiyang (EX-NH 5) for ocular itching, Sore Throat Point [straight below Daying (ST 5) at the same level as Lianquan (CV23)] for sore throat. Needling techniques are shown in Appendix 2. Treatment course should be 10 sessions applied daily.

Precautions

It is important to comply with the heat dissipating needle technique and needle rotating according to reinforcing or reducing techniques to obtain the treatment efficacy. For the rest of the treatment the same criteria should be applied as the above programme.

Recommendations: this programme is suitable for AR with cold and Feideficiency pattern. Attention should be paid to adapt the treatment, selecting the acupoints based on the main prescription with appropriate variation according to appearing symptoms. (GRADE 2D)

Sphenopalatine Ganglion Needling Technique Prescription

Sphenopalatine ganglion is recommended as the main acupoint. Acupoint association refers to the recommended acupoint association in the above programme. Operation methods are listed in Appendix 2. Treatment course should be 10 sessions applied 2–5 times weekly.

Precautions

Because of the abundance of blood vessels and nerves in the pterygopalatine fossa, rotating needle techniques are preferred to lifting and thrusting in order to avoid damaging the blood vessels, causing hematoma and infection. This technique involves a strong needle sensation, therefore during needle manipulation it is important to observe the patient's reaction. In case the patient experience dizziness during the session, the needles should be immediately removed, and treatment should be interrupted.

Recommendations: this programme is suitable for the distinct types or phases of AR. It can be considered as a complement with the previously described associated acupoints based on disease identification, pattern differentiation and symptoms. (GRADE 2D)

Application of Cataplasms on Acupoints

Prescription

Dazhui (GV 14) or Dazhu (BL 11), Fengmen (BL 12), Feishu (BL 13), Pishu (BL 20), and Shenshu (BL 23) are recommended as the main acupoints. Acupoint association are listed in Table 4.

Table 4. Acupoint Association for Cataplasms

Syndrome	Acupoint
Fei deficiency	CV 17, Tiantu (CV 22)
Pi deficiency	ST 36
shen deficiency	Gaohuang (BL 43), Mingmen (GV 4), Yongquan (KI 1)
Asthma	Dingchuan (EX-B 1)

Drug Composition

Make the herbal medicines (*Semen Sinapis*, *Rhizoma Corydalis*, *Radix Kansui*, and *Herba cum Radix Asari*) in powder with the following proportion: 7:7:4:4, add fresh ginger juice to the powder and mix it into a thick and dry paste.

Operation Mode

After disinfecting the skin area where the cataplasms will be applied with 75% ethanol, place the dry paste with a 2-cm diameter and a 5-cm thickness about on a 5 cm × 5 cm desensitized plaster and apply it on the acupoint.

Application at Different Treatment Time Ordinary Days

Cataplasms application can be carried out at any given day. It should be applied once every 7–10 days and held in place during 2–6 h on each selected acupoint. The standard treatment course includes usually 3 times applications and 1 treatment course.

Three-Period of the Hottest Days in Summer

The cataplasms should be applied accordingly with the lunar calendar starting on the first day of initial, middle and final hottest summer periods with 1–3 times each period for a duration of 2–6 h. The criteria of duration of cataplasms application is based on local skin burning sensation, hyperemia and apparition of small blisters adjusted to the patient tolerance threshold. The cataplasms

application in the 3-period of the hottest day in summer described above is considered a full treatment course.

Precautions

Before applying the cataplasm, it is important to make sure that there is no sweat or lesion on the skin surface and the skin is clean and dry. After the cataplasm application, excessive use of the fan or air conditioning should be avoided, and the patient should abstain from washing, swimming and scratching the skin area for at least 6 h after the cataplasm application. In some patient itching or blisters appear on the skin where the cataplasm contacted, which is considered a normal reaction, the cataplasm should be removed, and the blisters should be treated accordingly.

Recommendations: this programme is suitable for the distinct types or phases of AR. It can be used for prevention or treatment. It can be applied on the three hottest periods or on ordinary days. (GRADE 1C)

Moxibustion

Thunder-Fire Moxibustion (Lei Huo Jiu) Therapy Prescription

Moxibustion materials are thunder-fire herbal moxibustion rolls. The operation should be applied on the areas of nose, forehead and ears, from GV 30 to LI 20, from Yintang (GV 29) to LI 20, and GV 29, and other acupoints including Jingming (BL 1), LI 20, GV 23, and LI 4. Specific operation steps are shown in Appendix 5. Treatment course should be 7 sessions applied daily or every other day, repeating the treatment for 3 courses.

Precautions

Do not apply this treatment with patient suffering from moxa smoke intolerance.

Recommendations: this programme is suitable for the distinct types or phases of AR. (GRADE 2C)

Heat Sensitive Moxibustion

Prescription

Moxibustion materials are heat sensitive moxibustion rolls. The moxibustion should be applied on the heat sensitization region of the head, face, abdomen and lumbar areas on the points showing the heat-sensitization phenomenon. The heat sensitive point mostly appears in the area of LI 20, GV 29, GB 20, BL 13, CV 8 and BL 23 acupoints. Operation methods are listed in Appendix 2. Treatment course should be 10 sessions applied daily.

Precautions

The adequate amount of moxibustion application is based on the completion of the transmission sensation. Precautions for the thunder-fire moxibustion therapy should be applied here.

Recommendations: this programme is suitable for the distinct types or phases of AR. (GRADE 2D)

Indirect Moxibustion Method

Prescription

CV 8 is recommended as the main acupoint. GV 23, BL 13, BL 20, and BL 23 are recommended as the match acupoints. Operation methods are listed in Appendix 2. Treatment course should be 7 sessions applied daily or every other day.

Medication for Intermediate Layer

Ginger slice or medicated slice are used for the indirect moxibustion. (1) Fresh ginger slice: cut ginger in to slice with a 2–3 cm diameter and approximately 0.2–0.3 cm thick, punched with many small holes in the middle. (2) Medicated cake: select one or more substance such as *Radix Astragalus*, *Fructus Mume*, *Herba Ephedrae*, *Herb Cum Radix Asari Cortex Cinnamomi*, and *Radix Aconiti* with antihistaminic and immune-regulating action. Grind the substances to powder and mix it with fresh ginger juice, then make a 2–3 cm diameter slice with a 0.8-cm thickness, punched with many small holes in the middle.

Precautions

Precautions for the thunder-fire moxibustion therapy should be applied here.

Recommendations: this programme is suitable for the distinct types or phases of AR. It is particularly indicated for perennial AR and population with low immunity. (GRADE 2D)

Ear Seed Treatment

Prescription

Auricular acupoints prescription: Lungs, Spleen, Kidneys, Inner Nose, Outer Nose, Sympathetic, Feng Xi, Adrenal Glands, and Endocrine are recommended as the main acupoints.

Select 4–6 of the above points and fix a seed of *Semen vacaria* (Wang Bu Liu Xing) or a metallic bead on a 0.6 cm × 0.6 cm plaster. After skin standard disinfection, use tweezers to stick the plaster on the acupoint. Instruct the

patient to press on the seeds 3–5 times a day, with every presson lasting about 30–60 s. Every application should be done on a single ear, changing ear at every treatment. Treatment course should be 5 applications with ear seeds changed every 3–5 day.

Precautions

Strict disinfection should be carried out to avoid infection. Make sure the patient applies pressure on the seeds several times a day as it is the key factor in the ear seed treatment.

Recommendations: this programme is suitable for the distinct types or phases of AR. It is considered as an adjuvant therapy. (GRADE 2D)

Acupoint Injection Therapy

Prescription

ST 36 and LI 20 are recommended as the main acupoints. LI 4, LI 11, and GB 20 are recommended as the match acupoints.

Disposable syringe and needles should be used. Based on literature reports, *Radix Astragalus* injection, vitamin B₁₂ injectable, BCG polysaccharide nucleic acid injection, triamcinolone acetone injection, dexamethasone injection, calciferol and calcium colloidal injection, auto-serum, etc., can be used.

Operation methods are listed in Appendix 2. Treatment course should be 30 sessions applied every other day or every 3 days.

Precautions

It is important to explain to the patient that after the injections, soreness and congestive sensation could persist and that he could experience a mild discomfort during the following 48 h.

Recommendations: this programme is suitable for the distinct types or phases of AR. It is considered as an adjuvant therapy. (GRADE 2D)

Expert Team

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Conflict of Interest

No individual or industry benefit from the development of these guidelines.

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Appendix 1. Specific retrieval strategy

#1 randomized controlled trial

#2 randomized trial

#3 random

#4 controlled clinical trial

#5 #1 OR #2 OR #3 OR #4

#6 not animal

#7 #5 AND #6

#8 allergic rhinitis

#9 rhinitis

#10 perennial allergic rhinitis

#11 seasonal allergic rhinitis

#12 #8 OR #9 OR #10 OR #11

#13 acupuncture

#14 body acupuncture

#15 auricular acupuncture

#16 acupressure

#17 electroacupuncture

#18 moxibustion

#19 cupping

#20 #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19

#21 #7 AND #12 AND #20

Data base

Cbmdisc, 1979— China national knowledge internet, 1979— China Science and Technology Journal database, 1989— Wanfang Data Knowledge Service Platform , 1998— Pubmed, 1966— EMbase, 1980— Cochrane Library.

Retrieval time

Expiry date : 2012.12.31

Appendix 2. Specific Manipulation Methods of Different Kinds of Acupuncture and Moxibustion for Treatment of Allergic Rhinitis

Technique	• Methods and steps
Filiform Needle Insertion: Standard Filiform Needle Insertion	- LI 20 or Shangyingxiang (EX-HN 8): flat insertion with the tip of the needle facing towards the nose root at a depth of 0.3–0.5 cun. After obtaining the qi sensation, neutral needling should be applied to produce a sore and congestive sensation in the nose. - GV 29: flat insertion with the tip of the needle facing towards the nose root at a depth of 0.8–1 cun. After obtaining the qi sensation, neutral needling should be applied to let the needle sensation reach the tip of the nose. - GB 20: slanted insertion with the tip of the needle facing towards the tip of the nose at a depth of 0.8–1.2 cun. After obtaining the qi sensation, neutral needling should be applied in order to let the needle sensation reach the nose root. - GV 23: flat insertion with the tip of the needle facing towards the forehead at a depth of 0.5~0.8 cun. Carry out fast needle rotating to produce the needling sensation. - ST 2: perpendicular or slightly slanted insertion with the tip of the needle facing upwards at a depth of 0.3~0.5 cun to obtain the qi response. - LU 7: fast skin-pinching needle insertion with the tip of the needle facing upwards. After obtaining the qi sensation, carry out needle rotation to let the needle sensation spread upwards following the channel path. - Standard techniques should be applied to the other acupoints, following the concept "Reduce in case of excess, and reinforce in case of deficiency". Needles should be retained 20 to 30 min and manipulated once or twice during the session. - Warm needle can be applied on ST 36 in case of deficiency pattern. - In case of severe exacerbation, electro-acupuncture can be applied bilaterally for 20 min on Yingxiang (LI 20), with a mixed dense and sparse wave form, 15 Hz frequency and with an intensity of electrical stimulation of 0.1–1.0 mA adjusted to the patient tolerance threshold. - Cupping can be associated to the treatment during either the exacerbation period or remission period, selecting the acupoint Shenque (CV 8). In case of evident external pattern, GV 14 and BL 13 can be selected. Finally, in case of chronicity BL 13, BL 20 and BL 23 can be selected.
Filiform Needle Insertion: Point-through-Point Needling Technique	- Use the 3 groups of acupoint with point-through-point acupuncture manipulation, with the needle facing towards the Bigen until strong soreness, heaviness and congestive sensation appears in the area of the Bigen and nasal cavity or until lacrimation occurs. - LI 4 with perpendicular insertion and LU 7 inserted with the tip of the needle facing upwards should produce soreness, numbness and heaviness as well as a congestive sensation. - GB 20 with slanted insertion and the tip of the needle facing towards the contralateral eye should produce a needle sensation in the homolateral eye and Bigen. - Apply the lifting, thrusting and rotating needle manipulation to all the acupoints until the apparition of numbness and congestive sensation. In case of excess pattern, reducing technique should be applied and in case of deficiency, reinforcing technique should be applied.

Heat Dissipating Needling	- GB 20 should be inserted with the patient sitting when applying the heat dissipating needle technique. Apply a strong pressure on the acupoint with either the left-hand index or thumb. The right hand holds the needle to carry out the insertion in the point with the needle tip directed towards the disease focus. After obtaining the qi response, increase the pressure with the left hand, while the right-hand press and rotate the needle with the thumb pushing forward 9 times. After a sensation of heaviness and tightness appears at the tip of the needle, vigorous thrusting and light lifting needle manipulation should be applied 9 times, as well as needle rotation with the thumb pushing forward 9 times. Apply the needle technique called “pushing the crossbow” by pushing the tip of the needle against the sensitive area to secure the qi and extend the sensation of heaviness and tightness. At this point the pressing hand should perceive the qi movements in the channel and press firmly on the acupoint until the needle sensation reaches the disease focus (in this case the nose) and produces a heat sensation. Then secure the qi for 1 min and extract the needle slowly, making simultaneously a pressure on the needle orifice. - When applying Heat dissipating needle technique on Shousanli (LI 10) and ST 36, the needle sensation should transmit through the channel path and qi should be secured for 1 min before retaining the needles. - Needle rotations with reinforcing should be applied on BL 20 and BL 13, without retaining the needles. - Needle rotations with neutral stimulation should be applied on GV 29, LI 20, EX-NH 5 and the relieving sore throat point. Flat insertion with the needle tip facing towards the nose should be applied on GV 29, LI 20 and EX-NH 5. - Slanting insertion should be applied to the Relieving sore throat point with the needle tip facing towards the throat. Needles should be retained 30 min.
Sphenopalatine Ganglion Needling	- There are 3 different types of needle insertion: (1) Perpendicular insertion at the acupoint Xiaguan (ST 7) or Quanliao (SI 18). (2) Insertion at the crossing point between the lower edge of the zygomatic arch and the front edge of the masseter muscle with the needle tip directed inward and backward or insert the needle toward the contralateral auditory pore. (3) Insertion on the upper edge of the zygomatic arch, at 0.5 cm distance of the midpoint on a line connecting the infraorbital edge to the ipsilateral entrance of the external auditory meatus. The needle tip is directed perpendicularly to the sagittal plane and slightly downward. Alternatively, the needle can be inserted directed to the contralateral inferior border of the zygomatic process. - After inserting the needle at a depth of approximately 2.5 cun, when the patient experience numbness, congestive and electric shock sensation, the needle can be removed or retained for 20-30 min.
Thunder-Fire Herbal Moxibustion	- The suspended moxibustion method should be applied on the corresponding areas or acupoints, on a sitting patient, the burning tip of the medicated moxa roll should be maintained at 2-3cm distance from the skin. - Operational steps: the moxibustion should be applied up and down from GV23 to LI20, following the channel, 15 times in a row and then apply channel rubbing once to finally repeat the whole operation 60 times. Moxa should be applied 60 times, on both side of the nose and following each oblique line that links Yintang (GV 29) to each bilateral acupoint LI 20. The moxibustion should be applied on the whole surface of the forehead following a S-shaped line, for a total of 60 times. Apply the moxibustion sparrow pecking technique on GV 29, Jingming (BL 1), LI 20 and GV 23 30 times on each point, after 10 sets of moxibustion apply a pressure on each point. Apply

	the moxibustion rotating method on the ante auricular and retro auricular area of both ears until the skin becomes red, followed by a pressure every 10 sets of moxibustion. Proceed 40 times on each side and apply the moxibustion sparrow pecking technique on the center of ear for 30 times. Finally apply the moxibustion sparrow pecking technique bilaterally on LI 4, 30 times each. • Moxibustion technique execution should not be excessively fast or slow, but moxibustion should be applied until the skin becomes red with a heat sensation reaching the deep tissues. The whole operation should last approximately 20-25 minutes.
Heat Sensitive Moxibustion	• Locating the heat sensitive point: First apply circling moxibustion for 1 min to heat the area, then apply sparrow pecking moxibustion for 1 min to increase the heat-sensitization, finally apply the moxibustion with a back and forth movement on the channel path for 1 min to stimulate qi. Afterwards apply mild moxibustion in order to trigger the sensation transmission and dredge the channels. The spots where sensations such as heat penetration, heat expansion, heat transmission, non-thermal sensation (or light heat sensation), distal heat, non-thermal sensation on the skin surface (or light heat sensation) appears, are the heat-sensitization acupoints. • Moxibustion should be applied on these points until the disappearance of the sensation and a burning feeling appears on the skin. • Subsequently find and apply moxa on every heat-sensitization acupoint. The time of heat sensitive moxibustion application varies from patient to patient, generally 40-50 minutes each time. Usually moxibustion application on each point is stopped when the heat-sensitization phenomenon disappears.
Indirect Moxibustion	• There are two techniques: (1) Place a ginger slice or a medicated slice on CV8. Select an ignited moxa roll with appropriate length and insert it into a single hole moxibustion box, placing the box on CV8. Let the moxibustion ignited tip burn at approximately 1.5 cm distance from the ginger slice or the medicated cake. During the process the distance between the moxa roll and the intermediate layer should be changed according to patient tolerance to heat in order to avoid burns. (2) Place a moxa cone, with the appropriate size, on the medicated cake to carry out the indirect moxibustion. • During the process, the ginger slice or the medicated cake should be moved accordingly with the patient tolerance to heat in order to avoid burns. Moxibustion should be applied until the patient feels the heat diffusing throughout the abdomen. Generally, every moxibustion treatment should last 20-30 min.

Acupoint	Injection	• Select the appropriate syringe, needle and injectable quantity and then chose 1-2 main and association acupoints and disinfect them.
Method		• Perpendicular and rapid insertion should be carried out subcutaneously at ST 36, LI 4 and LI 11. Subsequently after inserting slowly the needle at a depth of 1-1.5 cun, thrusting and lifting should be carried out until the patient experiences a congestive sensation and numbness. Then after checking out that there is no blood when pulling back the plunger, start injecting slowly 1-1.5ml. As acupoints are bilateral, one unilateral point will be selected for injection and alternatively its contralateral point will be selected in the next treatment. • LI 20 should be inserted with the tip of the needle directed up and inside at a depth of 0.3-0.5 cun, applying the light thrusting and lifting technique until the patient feels soreness, numbness and congestive pain. Subsequently after checking out that there is no blood when pulling back the plunger, start injecting slowly 0.3-0.5 mL. • On GB 20 a slanted insertion should be applied with the tip of the needle facing towards the tip of the nose at a depth of 0.8~1.2 cun. Subsequently after checking out that there is no blood when pulling back the plunger, start injecting slowly 1-1.5 mL.
