

A case report of chronic allergic rhinitis treatment in a 29-year-old woman based on Iranian traditional medicine

Mehrdad Karimi¹, Sima Kolahdooz^{2,*}

¹ Assistant Professor, Department of Traditional Medicine, School of Persian Medicine, Tehran University of Medical Sciences, Tehran, Iran.

² MD, PhD in Persian Medicine, Department of Traditional Medicine, School of Persian Medicine, Tehran University of Medical Sciences, Tehran, Iran.

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ABSTRACT

Background: Allergic rhinitis is one of the most commonly diagnosed allergic diseases, the prevalence of which is increasing globally. The purpose of this case report is to outline the Iranian traditional medicine (ITM) approach to diagnosis and treatment of chronic allergic rhinitis.

Case Presentation: A 29-year-old woman with a long history of symptoms of runny nose, sneezing and itchy throat was diagnosed with seasonal allergic rhinitis and treated with antihistamines. Since 9 years ago, the disease pattern changed from seasonal to a year-round state and the patient referred to the traditional medicine clinic due to inadequate response to conventional therapies and reluctance to consume oral corticosteroids. Initially, the six lifestyle essentials and prohibited foods were explained to the patient, followed by drug therapy to cleanse the head region and body and to eliminate the underlying causes of the disease. The post45-day treatment assessment showed a significant reduction in the severity and frequency of symptoms.

Conclusion: Clinical decision-making in ITM is based on a holistic view of the patient rather than the disease, which is the case in conventional medicine. This case report is an example of a patient-based treatment protocol in the Iranian medical system. The systemic approach of ITM in dealing with a patient with allergic rhinitis and simultaneous attention to brain and whole-body cleansing along with the six essentials of lifestyle modification resulted in significant improvement.

Keywords: Allergic Rhinitis, Conventional Medicine, Iranian Traditional Medicine

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Corresponding Author:

Mehrdad Karimi, MD, PhD in Persian Medicine, Department of Traditional Medicine, School of Persian Medicine, Tehran University of Medical Sciences, Tehran, Iran. Email: simakolahdooz@yahoo.com



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Introduction

Allergic rhinitis (AR) is an inflammation of the nasal mucous membranes due to the reaction of the immune system to allergens (1) that can be limited to the brain or be associated with other systemic manifestations of inflammation and allergies in the body (2). The disease prevalence rate is about 10-30% in adults and 40% in children in different societies (3). Given the role of genetics for this disease, there is a familial history of atopy including asthma and eczema in most cases of allergic rhinitis (4). Symptoms may occur seasonally or year-round (5), and clinical manifestations vary from person to person, ranging from mild to severely debilitating (6). Symptoms of mucous membrane inflammation manifest as itching, runny nose and nasal congestion (7). In some individuals, this inflammation may also involve other members of the head and neck, including the eyes, ears and pharynx, and induce symptoms such as itching, redness and feeling of a foreign body in the eye, swelling, bruising and under-eye darkness, sore throat, and clogged or itchy ears (8-10). Chronic sinusitis is the most common type of disease associated with allergic rhinitis, while complications such as otitis media, sleep disorders or apnea, dental problems and palate disorders can also occur at a lower incidence rate (11, 12). Although AR is not a fatal disease, it can greatly affect quality of life in patients (13, 14). The disease imposes significant costs on the patients and the society both in terms of the treatment and loss of individual performance caused by sleepiness and drugs complications (15-18). Given the chronic nature and the lack of definitive treatment for this disease in conventional medicine, it would be very helpful

to get familiar with the treatment methods used in traditional and complementary medicine schools. In ITM literature, AR symptoms are described under the title catarrh. The term “catarrh” refers to the discharge or build-up of mucus in the nose or throat, or adjacent organs such as the chest, ears, eyes, etc., and the mechanism of disease induction, diagnostic criteria and treatment have been discussed extensively (19). The underlying cause of the discharge accumulation in the nasal region is considered to be due to a weakness of brain digestion in providing its food from mucosa or the reduced and excessive mucosa received from the body. In such conditions, the brain excretes this excessive mucosa to other organs in order to protect the health of the intended organ (20). Depending on the location of the discharge and the quality of the temperament involved, catarrh can manifest various symptoms including nasal congestion and runny nose, itching and burning nose, red eyes, epiphora, itching ear, hoarseness, loss of taste, saliva accumulation, post-nasal drip, and a feeling of heaviness in the head and neck regions (21). Since many complications are ascribed to this condition, Iranian physicians endeavored to cure (21). Familiarity with catarrh treatment in ITM can provide physicians and researchers with new perspectives for a more systematic look at AR and its permanent treatment, and reduce the high costs and complications of the disease and its existing therapies.

Patient Introduction

1- History and examinations based on the modern medicine school

The patient is a single 29-year-old woman born and resident in Tehran with a master's degree in management who works as a sales staff member

in an airline company. She had allergic symptoms including severe sneezing, runny nose, redness and itching of the eyes, itching of the throat and hives in the spring since she was 13 and was later diagnosed with seasonal AR and treated with antihistamines. Since the age of 20, the frequency of allergic symptoms gradually increased in the patient who was at the present suffering from excessive sneezing, nasal congestion and runny nose, swollen throat, feeling of congestion in facial sinuses and upper respiratory tract and shortness of breath in all seasons and at intervals of every 2 to 3 days. Patient symptoms were more severe during the night and in the morning. The patient's symptoms began with a feeling of itching in the nose and throat, which urged her to use Flusinose spray to prevent progression of symptoms to blockage of the upper respiratory tract and shortness of breath. Normal saline serum was also used to remove discharge through irrigation and gargling. Spices such as pepper, garlic, ginger, turmeric (to some extent), strawberries, eggplants, fragrances, *Peganum harmala* L., cigarette smoke, polluted air and the smell of strong detergents triggered or exacerbated symptoms. The patient had a history of surgery and hospital admission due to rhinoplasty at thirteen years of age. There is a family history of similar symptoms with less severity in the patient's mother, uncle and grandmother.

2- History and examinations based on traditional medicine school

History and general examinations

The patient's weight and height were 70 kg and 170 cm, respectively. She was overweight and highly prone to weight gain. She was intolerant to cold weather, and her allergic symptoms exacerbated in warm temperatures or inhalation of warm

smells. Eating warm-tempered foods like hot spices also exacerbated the symptoms. The patient was moderately cold and relatively dry to touch in the forearm region. Her pulse length was two and a half fingers, relatively short and slow. The wastes excreted from the body through urine and stool and sweat was neither colored nor strong-smelling. She did not have a hot or cold feeling in the body and the extremities, but occasional hot flashes were mentioned. She was an extrovert person and she quickly became angry and calm. She also complained of slowness in performing her daily affairs and being numb, tired and bored. Feeling of heaviness upon waking up in the morning was also mentioned. The redness of the cheeks, the dark facial color and the darkness of the eyes were evident while observing the head and neck region. There was mild moistness on the face and eyelids of the patient. All of the facial signs had developed gradually during the last two years and the allergic symptoms were exacerbated ever since. Other symptoms in the head and neck regions included ear pruritus and increased wax, a painful palate, runny nose and nasal congestion. In addition to the above symptoms, nasal dryness with occasional epistaxis, a sense of oral viscosity upon waking up, occasional hypersalivation with fairly dilute consistency, and white thick postnasal mucus. She also had no problem in falling asleep, but stated that she was annoyed by sound and light when falling asleep. She had to wake up at night for urination. The sleeping depth and theme of her dreams were mostly related to daily events. Tongue examination revealed a scalloped tongue with a pale pink color, along with an evident increase in the moisture content, and a dispersed white coating on the entire surface, more prominently in the posterior part. The results of chest examination showed shortness of breath and development of allergy symptoms caused

by the lack of using drugs. Digestive symptoms included post-eating drowsiness, intense thirst with high appetite for drinking cold water and no relief from thirst despite cold water consumption. The patient preferred sour and somewhat bitter foods. The patient experienced excessive thirst after consumption of kebab and dry foods and preferred dilute watery food to dry ones. While examining the lower gastrointestinal tract, she complained of rumbles and the examining the stool excretion pattern showed highly consistent stool with a great deal of delay within one to four days and the feeling of lack of complete evacuation. The patient had black, conditioned hair and dry skin. The results of examining uterus and ovaries showed regular period with 24-day intervals and menstruation length of 7 days (the first 2 days of moderate hemorrhage followed by spotting) and severe dysmenorrhea on the first two days. The hemorrhage volume was gradually reduced from the 3 months before the visit. The patient was treated with spironolactone due to acne, unwanted hair and polycystic ovary since one and a half years before the visit.

History of patient's sixth essentials

The patient consumed fast food and mushrooms frequently. She also consumed foods creating harmful vapors, such as walnuts in breakfast, garlic and cress with some foods. There were some problems with regard to eating and drinking habits, such as not chewing food properly, fast eating and salad and pickle consumption. Drinking a lot of cold water (12 glasses a day) and consuming water upon waking up, after bathing, and during exercise were among the patient's bad drinking habits. In terms of physical activity level, she regularly played basketball and volleyball during the teenage years but quit the sport since the age of 20. About a few months before the

visit, she went to the gym and performed aerobic activity three times a week. The air pollution rate of the patient's place of residence (Tehran) was relatively high. Average sleep range was 7 hours (11:00p.m. to 6:00 a.m.) She did not sleep during the day.

3- Therapeutic measures

The catarrh is caused by a kind of material dystemperament of the brain, so dilution and cleansing is necessary to treat this kind of dystemperament. To achieve the permanent recovery for the disease, in addition to organ cleansing, special attention must also be paid to removing the internal (inside the body) and the external causes of substance formation. Modification of the external causes is carried out by altering the six lifestyle essentials and provision of health and nutrition measures. If there is excessive moisture in the body, sputum dilution and cleansing should be carried out to eliminate internal causes to prevent relapse. In the second place, it is necessary to correct the dystemperament and tonify the organs responsible for the first digestion (stomach) and the second digestion (liver) and the affected organ (brain) so that re-accumulation of moisture doesn't occur in the body and brain.

Measures of health and nutrition

External causes can exacerbate catarrh symptoms with direct or indirect effect of the internal causes on the brain.

External causes with an intermediate effect on the brain

The patient was recommended to avoid consuming thick and viscous foods and mucus producing foods such as mushrooms, cheeses,

yogurt, beef, camel meat, fish and shrimp, boiled egg whites, cucumbers, tomatoes, Olivier salad, pasta, lasagna, pizza, fast food, *halim*, *kalleh pacheh*, chicken, jelly and ice cream and pastry sweets in order to reduce liver load and satiety and provide an opportunity for the removing and cleansing of the waste material in the body. In addition to the foregoing, to prevent overproduction of vapors in the body and their ascending to the brain, the patient was recommended to avoid consuming foods that produce vapors in the body, such as walnuts, old cheese, cress, turmeric, garlic and onions. The use of warm spices such as pepper and ginger, by heating the liver and the whole body, can warm the phlegm and exacerbate catarrh symptoms in prone individuals and are included in the list of foods that should be avoided by the patient. The patient was advised to avoid using cold water and, when thirsty, drink a little bit of warm water and not drink water at fasting times, after bath and exercises. The following recommendations were given to the patient in order to improve first digestion (gastric) and second digestion (liver) and prevent production of thick phlegm and accumulation of excess moisture in the body: the need to avoid doing things like overeating, eat a meal without appetite as well as taking water, dough, soft drinks, salads, pickles and yogurt with food and eating two different kinds of meals at one serving (fish and chicken, soup with rice, etc.), avoid drinking cold water, as well as at fasting times, during sleeping, between or after exercise and after bathing. In addition to the above measures, the patient was advised to dedicate enough time to each meal, chew well, and stop eating food before full satiety, while there is still some appetite for food, avoid heavy physical activity after meals, observe at least 2 hours between meals and affairs like sleep, bath,

exercise, and fruit and fluid consumption. Since quitting regular exercise was one of the reasons for the accumulation of excessive moisture in the patient's body, she was advised to have fast-paced walking at least once a day for half an hour.

External causes with a direct and intermediate effect on the brain

Inhalation of warm smells through lead to dilution of moistures and their flow from the throat and brain and thus catarrh symptoms in the patient. The patient was advised to avoid these fragrances to the end of the therapeutic period. Exposure to cold can prevent vapor reduction by obstructing the head pores, on one hand, and weaken its severity by creating a cold dystemperament in the brain. Hence, the patient was advised to avoid sudden changes in ambient temperature from hot to cold and exposure to cold wind.

Drug Precautions

Based on the measures taken for catarrh remedy and material dystemperaments, the following goals were considered:

The first main goal: Affecting the material causes and reducing the feeling of heaviness in the body and brain.

- Whole body cleansing by altering the material to a consistency that can be excreted through urine, sweating, diarrhea, menstruation (*Nozj*).
- Cleansing the wastes from the brain region through changing substance consistency and opening the excretion pathway of nasal discharge through cleansing of the nose and throat
- Preventing vapor ascend from the stomach and the whole body to the brain

Second main goal: Affecting the internal causes (correction of the status of the organs involved in the digestion process)

- Ameliorating brain dystemperament and

tonifying so that it does not create excessive moisture and does not absorb moisture, phlegm, and excessive vapors from the body.

- Ameliorating hepatic dystemperament and tonifying it as an organ responsible for the second digestion and the main cause of the phlegm production in the body.

- Acting on the stomach as the starting point of digestion in the body where chyle production takes place

- Resolving constipation and defects in other excretory pathways in the body with the aim of disposing of wastes and prevention of retention.

Considering the priority of cleansing the body and brain from phlegm, the logical choice of herbs and drugs was made accordingly but the composition of the compounds was in such a way as to cover the goals of the second stage.

Prescribed drugs included the following:

1- Decoction of a combination of marjoram, anthemis tinctoria, jujube, celery seed, anise, quince consumed upon waking up

The main use of the above compounds in the decoction focuses on the delicacy, fragmentation, reduction and dilution of moisture and its excretion through urination and sweating, and to some extent diarrhea. All the plants in the decoction also played a role in improving its function by having different effects on the liver, such as removing of wastes, resolving obstructions, tonifying and correcting the liver temperament. Anise and marjoram were used in the decoction because they play an effective role in expelling discharges from the head by opening the blockage of the respective paths.

2- A tablespoon of jujube syrup (containing jujube and root of licorice) and *Sekanjabin Onsoli* (containing the *Sekanjabin* and *Drimia*) in the morning and at night

Jujube syrup was prescribed to help the

Nozj process and remove excessive wastes, and *Sekanjabin Onsoli* was used to reduce and decompose excessive body moistures. *Sekanjabin Onsoli* also plays a role in resolving hepatic obstructions.

3. *Rahat* capsule (containing Chinese rhubarb paste, terminalia chebula, Senna, aloe Vera) 2 capsules in the morning and 2 capsules at nights

Each of the four plants in the *Rahat* capsule act as laxatives, with rhubarb also removes wastes in addition to causing diarrhea. This compound also helps with the transmission of substance from the head and upper parts of the body to the lower extremities and the digestive tracts, specifically improving the liver and stomach condition.

4. Sweet almond oil, 2 drops per nostril once a day

Sweet almond oil was prescribed to relieve dryness of the nasal mucosa caused by frequent nasal spray application. The mechanism of action of each plant used on the material and physical causes of the disease is derived from the reference books and described in detail in Tables 1 and 2.

4. Treatment outcomes

One and a half months after the start of treatment, the change in the patient's symptoms were as follows:

The morning swelling of the face and the lower eyelids were slightly reduced.

Regarding the gastrointestinal symptoms, it should be noted that patient's thirst was satisfied only by drinking 5 glasses of cold water per day instead of initial 12 glasses. She also had bowel movement once a day, but stomach rumble did not change significantly. In terms of general symptoms, the feeling of tiredness, boredom and a feeling of heaviness in the body did not change significantly.

Table 1: Effects of plants on material causes

Plant	Organ	Cleansing body moistures	Cleansing brain moistures	Preventing vapor ascend
Marjoram		+	+	
Chamomile		+	+	
Celery seeds		+		
Anise		+	+	
Quince		+		+
Jujube		+		+
Licorice		+	+	
Sekanjabin		+		
Onsoli		+	+	
Chinese Rhubarb		+		+
Aloe vera		+	+	
Senna		+	+	
Terminalia chebula		+	+	+

Table 2: Effects of plants on organs

Plant	Organ	Brain		Liver		Stomach	
		Ameliorating dystemperament	Tonic	Ameliorating dystemperament	Tonic	Ameliorating dystemperament	Tonic
Marjoram		+		+	+		+
Chamomile		+	+	+			
Celery seeds				+	+	+	+
Anise		+	+	+	+	+	+
Quince			+	+	+		+
Jujube				+			
Licorice		+		+			
Sekanjabin				+			
Onsoli		+	+		+		+
Chinese rhubarb				+	+	+	+
Aloe vera		+		+	+	+	+
Senna		+					
Terminalia chebula		+	+	+	+	+	+

Discussion

Allergic rhinitis is an inflammation in the nasal mucosa that develops following the reactions of the immune system to the allergens (7). The prevalence of this disease is increasing in many parts of the world (3, 22), and imposes a lot of healthcare costs on the patient and the society (8). Inflammation of the throat and facial sinuses, nasal congestion and nasal dryness were resolved, and the post nasal drip and itching have been

reduced significantly. Following inflammation in the nasal mucosa, one or more symptoms of sneezing, itching, congestion and runny nose usually manifest. The presence of inflammatory symptoms in other parts of the head, including conjunctiva, sinus, middle ear, nasopharynx, and lower respiratory tract are often associated with the disease (22). Symptoms of this disease can be created in the head and neck area or in association with general symptoms of allergy in the body (2).

According to Iranian traditional medicine, the cause of inflammatory symptoms in the brain and other parts of the head and neck includes excessive discharge of accumulated mucosa in the head via the nose, throat and their adjacent members, and the presence of systemic allergic symptoms suggests that the accumulation of this mucosa occurs throughout the body in addition to the head. In terms of Iranian traditional medicine, allergic diseases are a kind of material dystemperaments that can be created in one organ or in the whole body, and factors such as the basic temperament and the internal and external causes of the dystemperament can affect the susceptibility of people and the course of the disease (23). The evidence of classical medicine is also indicative of the fact that a series of genetic factors, epigenetic events, and exposure to environmental factors contribute to allergic diseases (3).

Allergic rhinitis is commonly treated in classical medicine through the elimination of allergen agents and the use of antihistamines, corticosteroids, decongestants, mast cell stabilizers, anticholinergics to prevent inflammation or suppress the inflammatory response to allergens (22). From traditional medicine point of view, classical drugs can reduce the symptoms of allergic rhinitis by reducing the warmth and dilution of excessive moisture and, in some cases, by drying them, but as long as these excess moisture is not removed from the body and the underlying internal and external causes are not resolved, they accumulate in the body and head region, and the disease will not be eradicated. We later consider the Iranian traditional medicine approach to the diagnosis and treatment of the above-mentioned patient, based on the underlying cause of the disease in her. The patient's complaint list including sneezing, itching, runny nose and nasal congestion,

itching and swelling of the throat, and swelling obstruction in the facial sinuses and stomach rumble indicate the accumulation of moisture in the head and neck regions. Symptoms such as slowness in daily activities, numbness and fatigue, a feeling of heavy stomach during morning after awakening, shortness of breath, excessive thirst, stomach rumble, constipation, polycystic ovaries, and the characteristics of the patient's pulse indicate accumulation of moisture in the respiratory, digestive, urogenital and reproductive organs and the whole body. The findings in the patient's history and examinations showed her basic temperament to be warmer and wetter, but over time due to reasons such as non-observance of proper eating habits and drinking and quitting regular exercise, led to an increased moisture and coldness and accumulation of thick mucus (mostly phlegm) in the entire body and head and neck. Considering the material dystemperament in the head and body, modification of the six lifestyle essentials and drug therapy was recommended to the patient in order to cleanse excessive moisture and to eliminate the underlying causes of their accumulation in the body. For this purpose, herbs that could pave the way for the removal of the body mucosae from whole body through urination, sweating and diarrhea in order to smooth, reduce, decompose and dilute them in addition to having specific effects on the brain. Following treatment, there were no sneezing, runny nose and excess production of saliva and the need for spraying reached once or twice a day from 2-3 times a day. Through their therapeutic effect on the organs involved in the digestion process, mostly liver, the prescribed herbs were also effective in removing the underlying cause of the disease. Treatment outcomes after a forty-five-day period indicated a significant improvement in symptoms and a reduction in the frequency of allergy symptoms.

Conclusion

The Iranian traditional approach to manifestations of allergic rhinitis, through recognition of external and internal causes of the disease and the simultaneous attention to the removal of the body and the head of the phlegm, significantly improved the patient's symptoms within a relatively short time. According to the results of the treatment, it is necessary to perform combined traditional Iranian medicine and classical medicine studies aimed at discovering the underlying mechanisms of the occurrence of allergic diseases in individuals so that therapeutic strategies can be developed and personalized treatment plans designed for patients.

Contributing Contributors

The patient was treated under the supervision of Dr. Mehrdad Karimi, and Dr. Sima Kolahdooz cooperated with him in documenting and compiling the article.

Conflicts of Interest

There are no conflicts of interest.

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