

# ALLERGIC RHINITIS

we shall discuss the following topics:

- Allergic rhinitis in Western medicine;
- The theory of Bi Yuan in Chinese medicine;
- Differences between allergic rhinitis and Bi Yuan;
- A new theory of allergic rhinitis in Chinese medicine.

## 1. ALLERGIC RHINITIS IN WESTERN MEDICINE

The main clinical manifestations of allergic rhinitis are nasal congestion, a watery nasal discharge and sneezing. In a few cases it affects the eyes and the conjunctiva may become red and itchy. In 20% of cases there is also asthma in conjunction with the rhinitis.

### a) AETIOLOGY

Allergic rhinitis is due to an antigen-antibody reaction in the nasal mucosa. If the antigens responsible are only pollen particles then it is called seasonal allergic rhinitis (hay fever). If the antigens are dust, house-dust mites' faecal matter, fungal spores and animal dander, it is called perennial allergic rhinitis. As for furry animals such as dogs and cats, the most allergenic substances are protein from their skin, urine and saliva. In perennial rhinitis the nose becomes more reactive to non-specific stimuli such as cigarette smoke, petrol fumes, perfumes and, in the case of acupuncturists, moxa smoke.

### b) PATHOLOGY

Allergic rhinitis develops as a result of the interaction between the inhaled allergen and adjacent molecules of IgE antibodies. These adhere to the surface of the mast cells which line the nasal epithelium with the first exposure to the offending allergen (Fig. 1). After the first exposure, the mast cells are 'primed', i.e. high levels of IgE antibodies adhere to their surface. With subsequent exposure to allergens, the IgE antibodies provoke an "explosion" in the mast cells with the massive release of histamine. Histamine itself causes an increase in permeability of the epithelium allowing allergens to reach IgE-primed mast cells. Sneezing results from overstimulation of the afferent nerve endings and starts within minutes of the allergens entering the nose. This is followed by a greatly increased nasal secretion and eventually nasal blockage about 15-20 minutes after contact with the allergen.

The grossly swollen mucosa in allergic rhinitis may obstruct drainage from the sinuses causing sinusitis in half the patients. Thus, infection of the paranasal sinuses is a frequent complication and consequence of allergic rhinitis. This is an important point to remember when discussing the differences between allergic rhinitis and Bi Yuan. Some individuals may also lose the sense of taste and smell.

The Western treatment of allergic rhinitis relies mostly on the use of antihistamine agents. These work by preventing histamine from reaching its site of action, i.e. the H1 receptors and hence they are called H1-receptor blockers. Side-effects include sedation, dizziness, fatigue, insomnia, nervousness, and gastro-intestinal disturbances. Failure to respond to antihistamines is due to the fact that active substances other than histamine are released in allergic states.

Steroids by nasal inhalation are also used for allergic rhinitis: these do not seem to have the same general, systemic effect of oral steroids.

## 2. THE CHINESE THEORY OF 'Bi Yuan'

The main clinical manifestations usually mentioned in connection with Bi Yuan are a purulent nasal discharge with a foul smell, a stuffed nose, a runny nose, headache and sneezing.

### a) AETIOLOGY

"Bi Yuan" is due to repeated invasions of Wind-Cold in the Lung channel which are not treated properly. After some time, Cold turns into Heat, the Lung cannot diffuse and descend Qi and local stagnation of Qi and Blood develops in the nose. All these factors lead to nasal discharge. The Gall-Bladder channel carries Heat upwards to the brain, and as the Governing Vessel also flows into the brain and the nose, this therefore causes a purulent yellow nasal discharge. In Chinese medicine this condition was in fact also called 'brain flooding' or 'brain discharge'.

### b) PATHOLOGY

Thus two channels and organs are involved: Lungs and Gall-Bladder. After several years, the Spleen will usually also become involved and a Spleen deficiency leading to Dampness further aggravates the condition.

The Manifestation of this condition consists of symptoms of Wind-Cold or Wind-Heat. The Root of the condition is a deficiency of the Lung in diffusing and descending Qi and, in some cases, Gall-Bladder Heat.

The treatment is variously aimed at expelling Wind-Cold, clearing Gall-Bladder Heat or clearing Spleen-Heat according to the pattern involved.

The main patterns encountered in Bi Yuan are:

- Lung invaded by Wind-Heat
- Liver and Gall-Bladder Heat
- Lung-Heat
- Stomach- and Spleen-Heat

In chronic conditions, there may be any of the above patterns of Heat plus or one of the following patterns:

- Qi and Blood stagnation
- Liver- and Kidney-Yin deficiency
- Lung- and Spleen-Qi deficiency

## 3. DIFFERENCES BETWEEN ALLERGIC RHINITIS AND Bi Yuan

I shall explore first the differences between allergic rhinitis and Bi Yuan and then the Chinese theory of Bi Qiu ('Stuffy Nose').

### a) DIFFERENCES BETWEEN ALLERGIC RHINITIS AND Bi Yuan

The use of the theory of Bi Yuan to treat allergic rhinitis presents several problems.

The theory of Bi Yuan presents no clear explanation of the allergic nature of rhinitis and no explanation of its aetiology. Some of the patterns described in Bi Yuan are not allergic rhinitis but sinusitis. In fact, all of them, except for Lung invaded by Wind-Cold, include runny nose with a yellow, sticky, purulent and foul-smelling discharge. This is very clearly a

symptom of sinusitis, not rhinitis, as it is the infection of the sinuses, not rhinitis, that produces the yellow and purulent discharge.

#### b) THE CHINESE THEORY OF Bi Qiu ('STUFFY NOSE')

All modern Chinese books equate allergic rhinitis to Bi Yuan but this disease corresponds more to sinusitis rather than to allergic rhinitis. There is, in fact, an ancient Chinese disease entity called Bi Qiu which actually corresponds more closely to allergic rhinitis. Bi Qiu means 'Stuffy Nose' and it is characterized by a profuse, thin, clear nasal discharge, stuffed nose and sneezing. Another Chinese disease category which may correspond to allergic rhinitis is called Qiu Ti which may be translated as 'Stuffy Nose and Sneezing'.

The only exception is the modern book 'New General Outline of Chinese Medicine' by the Guangzhou Army Health Department which attributes the pathology of allergic rhinitis to a Kidney deficiency and a deficiency of the Governing Vessel (as I do). The book also says specifically: "The Kidneys control sneezing. The Governing Vessel flows to the upper lip. Sneezing, stuffed nose, runny nose with a watery, clear nasal discharge is due to a deficiency of the Kidneys and of the Governing Vessel. Itchy nose is due to Wind."<sup>1</sup>

This book mentions four patterns for allergic rhinitis, two clearly 'borrowed' from the theory of Bi Yuan and two different ones that are a deficiency of the Kidneys and of the Governing Vessel and a deficiency of the Spleen with Dampness.

Bi Qiu ("Stuffy Nose") is characterized by itchy nose, sneezing, profuse, white-watery nasal discharge, and stuffy nose. On examination, the nasal mucosa is swollen but not inflamed. The patterns of Bi Qiu are:

- Lung-Qi deficiency and weakness of the Defensive Qi
- Spleen-Qi deficiency
- Kidney-Yang deficiency and weakness of the Governing Vessel
- Qi deficiency and Blood stasis

#### 4. A NEW THEORY OF ALLERGIC RHINITIS

Allergic rhinitis is due to an over-reactivity of the immune system to certain allergens. Like asthma, this is due, from the Chinese point of view, to a deficiency of the Lung's and Kidneys' Defensive-Qi systems, a deficiency of the Governing Vessel combined with retention of chronic Wind in the nose.

##### a) AETIOLOGY

The deficiency of Lung's and Kidneys' Defensive-Qi systems is either hereditary or due to problems during the pregnancy or childbirth. The aetiological factors are exactly the same as for asthma.

Repeated invasions of Wind which are not treated properly, combined with a pre-existing deficiency of Lung and Kidney's Defensive-Qi systems, lead to the retention of what could be described as chronic Wind in the nose, similar to what happens in asthma when Wind is retained in the chest.

##### b) PATHOLOGY

Allergic rhinitis is therefore characterized by two factors: a deficiency of Lung's and Kidneys' Defensive-Qi systems and retention of Wind in the nose. As mentioned for asthma, a deficiency of the Kidney's Defensive-Qi system involves only this particular aspect of its

function and not others. One would not expect therefore to see symptoms such as tinnitus, dizziness, night-sweating, weak back and legs, etc.

Even more than asthma, a Kidney deficiency is involved in the pathology of allergic rhinitis. This is so because, in allergic rhinitis, the Kidneys are involved not only in the Root of the disease, but also in the Manifestation through the Governing Vessel. The Governing Vessel emerges from between the Kidneys and flows up the spine to the top of the head and then down to the nose and lips. It is therefore the channel connection between the Kidneys and the nose. For this reason the Kidneys are responsible not only for breathing, due to their function of grasping Qi, but also sneezing. Sneezing itself is also directly linked to the Kidneys and not necessarily due only to Wind. Chapter 23 of the 'Simple Questions' says: "The Kidneys control sneezing."<sup>2</sup> Chapter 64 of the 'Simple Questions' discusses the consequences of inserting a needle into an organ and, for the kidneys, it says: "If we pierce the kidneys, this will cause sneezing and death will ensue within 6 days."<sup>3</sup>

Thus the hyper-reactivity of the immune response of allergic rhinitis is due to a deficiency of the Kidney's Defensive-Qi system and Governing Vessel. With regard to the role of the Governing Vessel in allergic rhinitis, it is interesting that many of the herbs which Li Shi Zhen connected with this vessel are expelling-Wind herbs which act on the nose. These herbs are Fang Feng Radix Saposhnikoviae, Cang Er Zi Fructus Xanthii, Jing Jie Herba Schizonepetae, Qiang Huo Rhizoma seu Radix Notopterygii, Xi Xin Herba Asari and Gao Ben Rhizoma Ligustici.<sup>4</sup>

The symptoms and signs of allergic rhinitis are those of Wind-Cold as the nasal discharge is always white and watery. This indicates a deficiency of Defensive Qi which is spread by the Lungs but has its root in the Kidneys<sup>5</sup>. Thus, although some books do refer to a Kidney deficiency as the Root of allergic rhinitis, the Kidneys are responsible not only for the Root of this disease (because of the deficiency of the Kidneys' Defensive-Qi system), but also for the Manifestation through their direct connection with the Defensive Qi and sneezing and with the Governing Vessel (which flows through the nose).

Allergic rhinitis often starts in early childhood but it may also start later in life, with a progressive decline of Kidney-Qi or perhaps with a decline of Kidney-Qi connected to the beginning of sexual activity. In fact, in men over 40 suffering from allergic rhinitis there is often a direct connection between sexual activity and an attack of rhinitis. Thus, although rhinitis is obviously a much less severe disease than asthma, when compared with it, it indicates a more severe deficiency of the Kidneys.

As for the difference between seasonal and perennial allergic rhinitis (hay fever), the latter simply occurs when there is a more severe Kidney deficiency. Obviously, in patients aged 50 or over the pathology will be complicated by other factors, the most common of which is a Spleen deficiency which produces more mucus and therefore a runny nose. Also, allergic rhinitis causes a congestion of the nasal mucosa which may prevent proper drainage from the sinuses: this may lead to a secondary sinus infection complicating the clinical manifestations as the patient will display the symptoms of both allergic rhinitis and of sinusitis.

As for the Manifestation, the main pathogenic factor is Wind invading the Lung channel in the nose. However, this is due not only to repeated invasions of Wind, as in the theory of Bi Yuan, but primarily to the inherent deficiency of the Kidneys' Defensive-Qi system and Governing Vessel in the nose which mimics symptoms of invasion of Wind-Cold. As mentioned above, sneezing itself is also directly due to the Kidneys and not necessarily only to Wind.

## 5. TREATMENT OF ALLERGIC RHINITIS

As for treatment, it is important to distinguish seasonal from perennial rhinitis. In seasonal rhinitis we should apply different principles of treatment according to the season. In perennial rhinitis, the principle of treatment is irrespective of the season.

The discussion of the treatment will therefore be structured in the following way:

a) Seasonal allergic rhinitis

Treatment of the Manifestation

i. Wind-Cold

ii. Wind-Heat

Treatment of the Root

iii. Deficiency of Lung's and Kidneys' Defensive-Qi systems and the Governing Vessel

b) Perennial allergic rhinitis

Simultaneous treatment of the Manifestation and Root

a) SEASONAL ALLERGIC RHINITIS

i. Treatment of the Manifestation

In seasonal rhinitis one must adapt the treatment according to the season. During the pollen season, attention is directed at treating the Manifestation, i.e. expelling Wind-Cold or Wind-Heat. Outside the summer season, attention is directed at treating the Root, i.e. tonifying the Lung and Kidney's Defensive-Qi systems and strengthening the Governing Vessel.

Three Treasures remedy

To treat the Manifestation of allergic rhinitis, I use the remedy Jade Screen. In case of seasonal allergic rhinitis, I use Jade Screen during the hay-fever season in a relatively high dose, i.e. 9 tablets a day or more (for adults).

Jade Screen can be taken both for the manifestations of Wind-Cold and Wind-Heat.

ii. Treatment of the Root

In seasonal rhinitis, attention should be directed at treating the Root of the disease at any time outside the pollen season. The best time to do it is actually towards the end of the summer and beginning of Autumn, i.e. August, September and October.

In treating the Root, the aim is to tonify the Lung's and Kidneys' Defensive-Qi systems and strengthen the Governing Vessel. As the rhinitis is seasonal, there is no need to treat the Manifestation.

iii. Deficiency of Lung's and Kidneys' Defensive-Qi systems and the Governing Vessel

Clinical manifestations

Pale complexion, weak back, propensity to catching colds, Pale tongue, Weak-Deep pulse.

Treatment principle

Tonify the Lung's and Kidneys' Defensive-Qi systems and strengthen the Governing Vessel.

Three Treasures remedies

To treat the Root in seasonal allergic rhinitis I use the remedy Herbal Sentinel of which there are two variants, i.e. Herbal Sentinel - Yang for patients with a tendency to Yang deficiency and Herbal Sentinel - Yin for patients with a tendency to Yin deficiency.

I generally prescribe Herbal Sentinel during Autumn and Winter with the dosage of 4-6 tablets a day (for adults).

#### b) PERENNIAL ALLERGIC RHINITIS

Simultaneous treatment of the Manifestation and Root

To treat perennial rhinitis one must treat both the Root and the Manifestation simultaneously because the symptoms are evident the whole year round.

Treatment principle

Tonify the Lung's and Kidneys' Defensive-Qi systems, strengthen the Governing Vessel, consolidate the Exterior and expel Wind.

Three Treasures remedies

In perennial allergic rhinitis I treat both the Root and the Manifestation simultaneously. To treat the Root, I prescribe Herbal Sentinel (Herbal Sentinel - Yang for those with a tendency to Yang deficiency and Herbal Sentinel - Yin for those with a tendency to Yin deficiency).

To treat the Manifestation, I prescribe Jade Screen. Generally speaking, when I use two remedies I ask the patient to take at different times of day. Thus, if I was using Herbal Sentinel - Yang I would prescribe that to be taken in the morning and Jade Screen in the afternoon. If I was using Herbal Sentinel - Yin I would prescribe that to be taken in the afternoon and Jade Screen in the morning.

#### Endnotes

1. Guangzhou Army Health Department 1974 A New General Outline of Chinese Medicine, (Xin Bian Zhong Yi Xue Gai Yao [ch#]), People's Health Publishing House, Beijing, p. 676.

2. 1979 The Yellow Emperor's Classic of Internal Medicine-Simple Questions (Huang Di Nei Jing Su Wen [#ch]), People's Health Publishing House, Beijing, p. 150. First published c. 100 BC.

3. Ibid., p. 355.

4. Wang Luo Zhen 1985 A Compilation of the Study of the Eight Extraordinary Vessels (Qi Jing Ba Mai Kao Jiao Zhu [#ch]), Shanghai Science Publishing House, Shanghai, p. 89. The Study of the Eight Extraordinary Vessels was written by Li Shi Zhen and first published in 1578.

5. Another interesting connection between the Kidneys and rhinitis could be observed in the use by some Chinese doctors of injection of cortisone in the point BL-12 Fengmen with far fewer side-effects than in a systemic administration of cortisone. If we view cortisone as a kind of "Kidney tonic", it would make sense to inject it in the point BL-12 which expels Wind and spreads Defensive-Qi in the Exterior.