

EFFECT OF RASAYANA IN ALLERGIC DISEASES

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ABSTRACT

Rasayana is the way of obtaining good quality *Rasa*. This *Rasa* is responsible for the *Poshana* of the subsequent *Dhatu* present in the body. The *Sara* or essence of these *Dhatu* are said as *Ojus* which contribute to the *Vyadhikshamatwa* or immunity of the body. *Naimittika Rasayana*, one among the types of *Rasayana*, are disease specific *Rasayana* which not only maintain the quality of *Rasa* and preserve health and immunity but also act disease specific due to the action of the specific ingredients present. Allergic diseases are those which occur in immune deficit persons due to hypersensitivity to allergens. Since *Rasayana* maintain health and promote immunity by adequate *Dhatuposhana* can be highly beneficial in treating allergic diseases.

Keywords: *Rasayana*, Immunity, Allergic diseases

INTRODUCTION

Every system of medicine emphasizes on disease management but in *Ayurveda*, maintaining and preserving health is the first objective rather than treating the disease. Allergic diseases are caused due to the reaction to allergens from the external environment due to the failure in maintaining and preserving the health. *Rasayana* is one of the comprehensive disciplines of *Ayurveda* to achieve the optimum state of tissues and systems of the body so that there is the least effect of etiological factors in the body. *Acharya Dalhana* says that *Vayasthapana* means prolonging the life upto hundred years. *Rasayana* means the way of obtaining good quality *Rasa* which in turn cause *Dhatuposhana*. *Rasayana* deals with delaying of ageing process, increasing of intellect and strength, prolongation of life and curing of disorders.⁽¹⁾ *Rasayana*

is always preceded by *Shodhana* as a preparatory procedure because this process detoxifies the body. One of the results of *Rasayana* is *Ojus*, which is the factor responsible for *Vyadhikshamatwa*⁽²⁾. *Rasa* represents the seven *Dhatu* because they are all nourished by *Rasa* yield of *Ahararasa*.⁽³⁾ The quality of *Rasa* in the body directly governs the state of health of an individual. So, by *Rasayana*, optimum standard of *Rasa* is obtained (immunity). When the quality of *Rasa* is deranged it leads to defective *Poshana* of the subsequent *Dhatu* which in turn cause immune deficiency. This immune deficiency is the cause for allergic diseases. Allergic diseases are common and increasing cause of illness, affecting between 15% and 20% of the population at some time. They comprise a range of disorders from mild to life-threatening and affect many organs.

Allergic disease can be defined as the clinical manifestation of inappropriate IgE immune response.⁽⁴⁾ Normally the immune system does not make detectable responses to the many environmental substances to which it is exposed daily. However, in an allergic reaction, initial exposure to an otherwise harmless exogenous substance (known as allergen) triggers the production of specific IgE antibodies by activated B cells. These IgE antibodies bind to the surface of mast cells via high-affinity IgE receptors. Upon re-exposure, the allergen binds to membrane bound IgE which activates the mast cells, releasing a variety of mediators. This type 1 hypersensitivity reaction is the basis of the symptoms of allergic reactions, which range from sneezing and rhinorrhoea to anaphylaxis.

In some patients, the early phase response is followed by persistent activation of mast cells, manifest by ongoing swelling and local inflammation. This is known as the late phase reaction and is mediated by basophils, eosinophils and macrophages. Long-standing or recurrent allergic inflammation may give rise to a chronic inflammatory response characterised by a complex infiltrate of macrophages, eosinophils and T lymphocytes, in addition to mast cells and basophils. Once this has been established, inhibition of mast cell mediators with antihistamines is clinically ineffective. Occasionally, mast cell activation may be non-specifically triggered through other signals, such as neuropeptides, anaphylotoxins and bacterial peptides. Common allergic diseases are Urticaria, Angioedema, Atopic dermatitis, Allergic conjunctivitis, Allergic rhinitis, Allergic asthma, Food allergy, Drug allergy, Allergy to insect venom and Anaphylaxis. An allergic reaction usually occurs within minutes of exposure and provokes predictable symptoms. Investigations for allergic diseases include Skin prick test, Specific IgE test, Mast cell tryptase, total serum IgE and eosinophilia.

For the management of allergic diseases in *Ayurveda*, *Rasayana* which are disease specific are used which induce specific immunity and bio-strength to combat the disease. Such *Rasayana* is called *Naimittika Rasayana*. The tissue specific *Rasayana* drugs can be

administered along with the treatment of the underlying disease to enhance the tissue strength and disease combating power so that faster and better relief may be provided, and recurrences may be prevented.⁽⁵⁾

Naimittika Rasayana identified by an appropriate trial and few researches in the past have proved their anti-histamine and immune-modulating actions which is highly essential in allergic disorders. Clinical trials have shown that the use of appropriate *Rasayana* drugs such as *Ashwagandha* (*Withaniasomnifera*), *Guduchi* (*Tinosporacordifolia*) and *Pippali* (*Piper longum*) to the treatment of allergic disorders such as eczema, urticaria, allergic rhinitis and bronchial asthma helps for better and faster relief and prevents recurrences.⁽⁶⁾ It has been reported that the *Rasayana* are rejuvenators, nutritional supplements and possess strong antioxidant activity. They also have antagonistic action on the oxidative stress which gave rise to the formation of different free radicals.⁽⁷⁾ *Rasayana* activate mononuclear cells to produce cytokines in a dose dependent manner. These results indicate it is possible that the *Rasayana* primarily activate immune cells leading to secretion of cytokines. Administration of *Rasayana* has been found to enhance natural killer cell activity in normal as well as in tumour bearing animals.⁽⁸⁾

BrahmaRasayana and *AswagandhaRasayana* were found to activate antibody dependent cytotoxicity significantly. *AswagandhaRasayana* also found to activate macrophages.⁽⁹⁾ The *Rasayana* herbs seem to exert their effect through immune-suppressant, immune-stimulant and immune-adjuvant activities or by affecting the effector arm of the immune response. It has been found that nervous, endocrine and immune systems are all interrelated. Immune products like various cytokines have been found to stimulate the hypothalamus- pituitary adrenal axis and the corticotrophin release factor (CRF), which ultimately enhances the production of adrenal corticotrophic hormone (ACTH) resulting into increased secretion of glucocorticoids which have an overall suppressive effect on the immune system.⁽¹⁰⁾

Thus, we can infer that other drugs having similar qualities will also be highly beneficial in managing allergic diseases.

Materials and methods

The related references have been collected from different modern and *Ayurvedic* texts and online articles. The collected references have been critically observed, compiled and discussed thoroughly.

DISCUSSION

Allergic diseases are caused due to the *Agantuja Karana* and in case of *Agantuja Vyadhi* the *Dosha* get involved later in the disease process and the clinical manifestations accordingly will be produced. The internal environment of our body is controlled by the *Dosha*. Whenever the *Dosha* will be in normal conditions, they maintain the body properly by keeping the *Dushya*, *Srotas* as well as *Agni* in normal position. But when the aggravation of *Dosha* occurs they lead to the derangement of the *Dushya*, *Srotas* and *Agni* thereby causing the diseases. ⁽¹¹⁾This depends on the *Vikaravighatabhava* otherwise known as *Vyadhikshamatwa* of the body. *Vyadhikshamatwa* is interpreted as *VyadhiBalaVirodhitwa* (antagonistic to strength and virulence of diseases) and *VyadhiUtpada Pratibandhakatwam* (the capacity to inhibit or neutralise or resist or overcome diseases causing agents). ⁽¹²⁾

Vyadhikshamatwa or resistive power against diseases varies with individuals as it depends upon nutritional, environmental and individual factors. *Vyadhikshamatwa* or *Bala* is stated to be of three types

- 1) *SahajaBala* – It is genetic and inborn resistance to diseases which exists since birth
- 2) *KalajaBala* – This type of immunity is influenced by seasonal traits and the age of the person
- 3) *YuktikritaBala* – This type of *Bala* refers to modulation of body's resistance against diseases by resort to appropriate *Ojovardhaka* diet, physical exercise, restorative and *Rasayana* therapies in keeping with seasonal needs. ⁽¹³⁾

Mechanism of action of Rasayana

Rasayana promotes nutrition by direct enrichment of the nutritional quality of *Rasa*, thereby formation of *Rakthadi Dhatu*, by promoting nutrition through im-

proving *Agni* (digestion, metabolism) and by promoting the competence of *Srotas* (microcirculatory channels) of the body.

Rasayana drugs have varied properties acting at levels of *Dosha*, *Dhatu*, *Rasa*, *Mala*, *Agni* and *Srotas* probably. ⁽¹⁴⁾

1. *Rasayana* may act at level of *Dosha* – The state of equilibrium of body is based on the state of *Tridosha* which is brought about by the action of *Rasayana*. E.g. *Amalaki* (*Embllica officinalis*)
2. *Rasayana* may act at level of *Dhatu-Rasayana* results in the formation of productive nutrients which are passed into each level of *Dhatu* for nourishment. Necessary nutrients for the formation and development of all *Dhatu* are supplied by one stream of pool. E.g. *Pippali* (*Piper longum*)
By improving the nutritional status of *Rasa* and in turn by improving tissue nourishment. Probably *Rasayana* drugs having *Madhura*, *Guru*, *Snigdha*, and *Sheeta Guna* may act at this level by promoting the nutritional value of *PoshakaRasa*, which in turn helps in obtaining the best qualities of *Dhatu*. E.g. *Yashtimadhu* (*Glycyrrhiza glabra*)
3. *Rasayana* may act at level of *Mala* – *Rasayana* helps in the production of well-formed *Mala*. *Rasayana* creates adequate *Dhatugata mala* and also *Sthoolamala* that is *Purisha*, *Mootra* and *Sweda*. This well-formed and properly evacuated *Mala* prevents *Srotorodha* and thereby there is no *Doshakopa*. Eg *Lasuna* (*Allium sativum*), *Haritaki* (*Terminalia chebula*)
4. *Rasayana* may act at the level of *Agni*– The *Rasayana* drugs possessing the *Ushna*, *Laghu*, *RukshaGuna* and *Katu*, *Tikta*, *Kashaya Rasa* may be acting at the level of *Agni* (digestion and metabolism) by improving the digestive capacity and by vitalizing the metabolic activities (improving *Jatharagni* and *Dhatwagni*) of the body. E.g. *Pippali* (*Piper longum*), *Haritaki* (*Terminalia Chebula*).
5. *Rasayana* may act at the level of *Srotas* – Similarly the drugs with *Katu*, *Thiktha*, *Kashaya Rasa* and *UshnaVeerya*, *KatuVipaka*, *Vishada*, *Ruksha*

and *Laghu Guna* may produce the classical *Rasayana* effect at the level of *Srotas* by improving *Sukshma Samvahana* and the quality of *Deepana* and *Pachana*. The level of action of *Rasayana* in allergic diseases is on *Pranavaha*, *Rasavaha*, *Raktavaha Srotas*. These drugs cause *Srotosodhana* (cleansing of channels) and thus allow efficient blood circulation and improve tissue nourishment and thereby maintains its structural integrity and functional capacity. E.g. *Lasuna*, *Vacha* (*Acorus calamus*), *Haritaki*

Rasayana is believed to promote the process of *Dhatuposhana* and enrich *Ojus* leading to *Vyadhikshamatwa*. The defence mechanism present in the body allows us to survive in the potentially hostile world of allergic agents. This constitutional order is immune system. Any change in this order can lead to diseases. Treating diseases with synthetic immune modulator still looks like distant dreams. The concept of strengthening of inherent defence mechanism in our body exists in *Rasayana* therapy.

As said above *Rasayana* works at various levels including *Dosha*, *Dhatu*, *Mala*, *Rasa*, *Agni* and *Srotas*. Consequently, *Vyadhikshamatwa* of the body is being improved and thus the internal environment is also improved and maintained.

CONCLUSION

Rasayana aims at the maintenance of health by acting at the level of both disease curing and prevention. *Rasayana* give the ultimate essence of *Dhatu* which form the immunity of the body. Allergic diseases caused due to the deficiency of this immunity and can be managed effectively through the implementation of *Rasayana*. Allergic diseases are wide range of diseases which range from a simple sneezing to severe anaphylaxis. The involvement of *Rasa* and thereby *Rakta* and other *Dhatus* is prevalent in allergic diseases. Because of the inadequately formed *Rasa* there is derangement in the formation of the *Sara* or the essence of *Dhatu* that is *Ojus* or immunity. *Rasayana* looks upon this by forming good quality *Rasa*. The process of *Rasayana* is always preceded by *Shodhana* which helps in removing the toxicity or the excess secretions

formed in the channels which is one of the main factors in formation of allergy. Thus, *Rasayana* acts at the level of *Dosha*, *Dhatu*, *Mala*, *Rasa*, *Agni* and *Srotas*, that helps in curing the disease and preventing its recurrence.

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