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CONCEPT OF VYADHIKSHAMATVA W.R.T. AUTOIMMUNITY AND CONTEMPORARY REVIEW OF ROLE OF PATHYA KALPANA IN IT

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ABSTRACT

Ayurveda, since it is well known as life science, having tremendous importance of pathya-apathya. The diet beneficial to an individual is Pathya and contrary is Apthya. The diseased, rather every individual needs to follow a healthy diet and regimen so as to prevent any consequences in their life or to maintain good health and here deals the Ayurveda. Slight detriment to the diet and life style pattern may results in decrease in Vyadhikshamatva (immunity) and leads to various Rogas (disorders). Autoimmune diseases are burning worldwide disease nowadays. In immunodeficiency Disorders, loss of ojas or bala is a constant feature, people are known to be susceptible to various

other diseases or recurrent infections. Adaptations for specific diet pattern which can be habited without any inconvenience and healthy life style may nullify the aggrevated *dosha* and beneficial as curative aspects of *rogas*. Hence, in this article, an attempt has been made in order to compile concept of *Vyadhikshamatva* and concise the implications and importance of *Pathya kalpana* which can be easily adaptable by an individual in day to day life.

KEYWORDS: *Vyadhikshamatva, Oja, Aama, Agni,* Autoimmunity, *Pathya,* Immune tolerance.

INTRODUCTION

Immune system is defined as a sophisticated and highly evolved network of integrated body system including organs, tissues, cells and cell products with a mission to provide resistance and or retaliation to foreign agents or invaders physiologically.^[1]

When the immune system does not function properly it leaves the body open for attacks from a vast array of ailments. Therefore, a healthy immune system is like a carefully balanced teeter totter. Tip it one way, thus immune system weakens leaving an individual vulnerable to pathogens. Tip it the other way to tend immune system to become over active and attacks one's own healthy tissues. Such overactive immune system causes a spectrum of autoimmune diseases.

Immune system disorder – Autoimmunity

Disequilibrium in immune system can gives rise to vast array of diseases. This disequilibrium can be in two directions, where it can cause abnormally low activity or over activity of the immune system. In case of immune system over activity, the body attacks and damages its own tissues (autoimmune diseases or to an extend hypersensitivity reactions).

Hypersensitivity is a state of altered reactivity in which the body reacts with an exaggerated immune response to what is perceived as a foreign substance, this fits into the concept of *Asatmya*. Immune deficiency diseases decrease the body's ability to fight invaders ending in immune deficiency disorders, which in Ayurveda designates as *Ojokshaya*.

In *Ayurveda*, *Ojas* has been considered vital in the defence mechanism of the body. It resides in the heart (hridya), but also circulates (vyapata) all over body and maintains healthy status of the person. If this is lost, life also is lost and if this intact, life also continues.^[2]

In normal circumstance, there will be absence of activation of pathogenic auto reactivity and is termed as immune tolerance. But, when there is an abnormal activation of T or B – cells or both with no evidence of other causes such as infection or malignancies or mechanisms breaking the equilibrium of immune tolerance of the body is called autoimmunity. [3]

Immune tolerance arises due to certain mechanisms. First is the theory of clonal elimination. T – cells maturing in the thymus acquire the ability to distinguish self from non – self. These T – cells are then eliminated by apoptosis for the tolerant individual. Second is the concept of clonal energy in which the T – lymphocytes which have acquired the ability to distinguish self from non – self are not eliminated but instead become non – responsive and inactive.

The third mechanism is through suppressor T– cells. According to this mechanism, the tolerance is achieved by a population of specific suppressor T – cells which does not allow the antigen responsive cells to proliferate and differentiate.^[4]

Theories of Autoimmune Pathogenesis

When mechanism of immune tolerance fails, autoimmunity breaks off. Those mechanisms or theories through which autoimmunity can raise include immunological factors where there is failure of immunological mechanism of tolerance initiating auto immunity.

Genetic factor also plays a role in pathogenesis of autoimmunity by increased expression of class II HLA antigens on tissues involved in auto immunity and increased familial incidence of some of the auto immune disorders. The third probable mechanism is through microbial factors – where there is an infection with micro-organisms particularly viruses and less often bacteria and mycoplasma has been implicated in pathogenesis of auto immune diseases.^[5]

Types of Autoimmune diseases

Depending upon the type of auto antibody formation, the auto immune diseases are broadly classified into two groups – organ specific diseases and organ non – specific (systemic) diseases.

In organ specific diseases, the auto antibodies formed react specifically against an organ or target tissue component and cause its chronic inflammatory destruction. Whereas, organ non – specific diseases, the auto antibodies are formed which react with antigens in many tissues and thus cause systemic lesions.^[6]

Ayurvedic overview on Immunity

The modern understanding of immunity fits in the broad concept of *Vyadhikshamatva* in Ayurveda. The process of preventing of disease development and capacity to resist disease are jointly known as *Vyadhikshamatva*.^[7]

Chakrapani has described this in two aspects – antagonistic to the strength and virulence of disease (Vyadhi Bala Virodhitva) and the capacity to inhibit, contain or bind the causes on factors of disease (Vyadhi Utpadaka Vibandhakatva).

Vyadhi Bala Virodhitva is concerned with the action or process after the disease has manifested in the body. This process indicates the further escalation of the virulence of the disease is inhibited and the diseases process is contained. Vyadhi Utpada Vibandhakatva controls the disease during the Samprapti only. This is actually the prevention of the manifestation of disease. [8]

Substances, which have opposite qualities to those of bodily tissues (or *deha-dhatu-pratyanik bhutani*), when gain entry into the body encounter the opposition by the *dehadhatu* (bodily tissues).^[9]

According to *Charaka*, all human beings are not equally capable of *Vyadhikshamatva*. This is due to the different nutritional status of the individuals because *Ojas*, *Bala* and *Vyadhikshamatva* are dependent on nutritious food. A change in the nutritional capacity of food leads to the change in the *Bala* and *Vyadhikshamatva*. It may also be further pointed out that the constitutional status or *Prakruti* also differs from individual to individual and therefore the *Vyadhikshamatva*.

In Ayurvedic literature, the natural inherent strength or power of the body which is responsible for the health is termed as *Bala*. *Bala* depends upon the health status of *Dhatu*, *Prakruti*, *Desha*, *Kala* and *Ojas*.

Bala is classified into three types – Sahaja, Kalaja and Yukti Kruta. [10]

Sahaja Bala refers to the inherent characteristics property of an individual present since birth. And this is formed from the time of formation of *Garbha* based on excellence of *Shukra* and *Artava*. The understanding of *Sahaja Bala* resembles to the innate immunity. Innate immunity refers to nonspecific defense mechanism that come into play immediately or within hours of an antigen's appearance in the body. These mechanisms include physical barriers such as skin, chemicals in the blood and immune system cells that attack foreign cells in the body.

Kalaja Bala refers to the strength attained by the individual due to the impact of seasonal variation and ageing phenomenon.

The third type mentioned is the *Yuktikruta Bala*. It is gained by the planned implementation of combination of diet, medication and other regimen by the patient as planned by the physician.

The manifestation of diseases – spectrum of autoimmune disorders in different body parts depend on the cause and the site engaged by the cause. To be precise the area where *Kha Vaigunya* has been manifested progress to the *Dosha Dushya Samurchana* and ultimately culminates in the manifestation of disease. Even in the modern medical literature the

autoimmune disorders are classified as organ specific and organ non – specific or systemic based on the auto antibodies engaging the site.

Role of Pathya in autoimmune disorder

Autoimmune diseases diagnosis are often given with no recommended treatment but food can play a role in helping the body heal.

Autoimmune diseases are on the rise in a significant way.

Worldwide, upto 700 million peoples are estimate to be suffering from autoimmune diseases right now. And in US, Autoimmune diseases are third most common category of illness, after Ca and Heart disease. About 78% of autoimmune diseases takes place in women.^[11]

But as the science is showing, food can play role in helping sufferers of autoimmune diseases feel better and heal their body.

Lifestyle changes, particularly food choices, can play a key role in managing or even reversing many of these autoimmune disease.

Ahara is the main pillar of a body so called as *mahabhaisajya*. The nutritious aharas and viharas which gives happiness to the mind is known as *Pathya* and the inverse is called as *Apathya*. Unhealthy diets and regimen is the root cause of many ailments.

According to the principles of Ayurveda derangement of the digestive power (*Agni*) creates any diseases which is the prime reason for the formation of vitiated *Dosha*, *Aam* (toxic substances) and malformation of *Dhatus* (body tissues).^[13] Thus it is critical to reestablish harmony of the digestive power. This goal can be achieved by utilizing a legitimately oversaw diet regimen as indicated by state of *Doshas* and kind of the sickness.

Acharya Charaka describes various hitkara (useful) and ahitkera (harmful) dravyas as in Sutrasthana as Matrashitiya, Tasyashitiya, Yazyapurshiya, Annapaniya chapters etc.

Pathya kalpana described in Sharangdhar Samhita should be adopted in such kind of Autoimmune disease can implant best result by equalizing Aam in the body.

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Pathya Kalpana^[14]

1. Manda

Method for preparation: The rice is boiling with fourteen parts of water and the solid part has been taken out.

Uses: Carminative, Digestive.

2. Peya

Method for preparation: One part of rice is boiled with fourteen parts of water.

Uses: Stops loose watery consistency, quickly digestible, nourishes the tissues.

3. Vilepi

Method of preparation: One part of rice is cooked with four parts of water.

Use: Strengthening, nourishing, good for heart, Delicious, Diuretic.

4. Yavagu

Method of preparation: One part of rice is cooked with six parts of water.

Use: Strengthening, Nourishing.

Practical application of Pathya with respect to concept of Kritanna varga

All these benefits of *pathya ahara* can be ripped off with the help of *Kritanna varga* described in various ancient texts. Properties of these *Kritanna* differ from each other depending upon the method of preparation even if material used is the same. In case of *manda*, *peya*, *yavagu* and *vilepi*, the amount of water used for cooking and then amount of liquid and solid content is different for each of them. This determines qualities like heaviness or lightness of food for digestion etc. If all the *Kritanna varga* is used judiciously along with the *pathya ahara* then it will help to treat and nourish patient effectively.

Pathya-for specific disease conditions

Disease specific *pathya* (wholesome diet/ foods to be consumed) and *apathya* (un-wholesome diet/ foods to be avoided) are explained in various classical texts like *Charaka Samhita*, *Sushruta Samhita*. If we collectively go through it, we can understand, the *Ahar* which enhance the immunity simultaneously helps in treating autoimmune diseases. So we can use such kind of *pathya ahar* in regimen of such patient.

Properties of Nitya Sevaniya Ahara Dravyas^[15]

- 1. *Shashtika* is a kind of rice which grows very quickly to maturity, within sixty days (meaning of *shashtika*) and is therefore light on digestion. It is rich in carbohydrates, potassium.
- 2. Shali is a variety of rice, sometimes translated as red rice. It is rich in carbohydrates.
- 3. *Mudga* is a pulse called green gram similar to lentils which is light in digestion. It is rich in proteins, phosphorus, calcium, potassium.
- 4. *Saindhava* is called rock salt, it is powdery, light pink in color. Its composition is said to include more of potassium than of sodium. This salt is cooling unlike other types of salt.
- 5. *Amalaki* is a type of fruit indigenous to India. It is rejuvenative, antioxidant, pacifying to all *Doshas* but *Pitta* especially. It is rich in vitamin C and calcium.
- 6. *Yava* (barley) is also light, laxative, diuretic and is especially useful for removing excess *Kapha* from the body. It is rich in carbohydrates, Vit. B1, B2, phosphorus.
- 7. Rain water is the translation in the text but because of environmental pollution a better meaning would be pure water. It's interesting to note that the source of water determines its *Doshik* qualities. Well water is heavy while moving water is lighter. Hot water reduces *Kapha* and body weight while cold water increases *Kapha* and body weight. It maintain the fluid in the body and minerals.
- 8. *Paya* (milk) that comes fresh from cows udder is best among milks. It is more easily digested if brought to a boil then drunk warm. Milk is light indigestion, nourishing the body and *Tri-Doshik*. It rich in fat, protein, vitamins and minerals.
- 9. *Ghee* is clarified butter and is best among oils for pacifying *Pitta*. It also pacifies *Vata* and because it increases the digestive fire and is digested easily. It does not aggravate *Kapha*. Rich in fat.
- 10. *Madhu* (Honey) pacifies *Kapha* predominantly and *Pitta* secondarily. Honey must be raw, uncooked and never used in foods to be cooked. The lighter the color means the less sharpness in it.

Such small change in *ahar* along with adaptation of *Rasayana Yog* and some life style changes can yield best results in autoimmune diseases enhancing the individuals *Vyadhikshamatva*.

CONCLUSION

It is well known that the autoimmune diseases are incurable and relapsing in nature. So being an Ayurvedician it should be our responsibility to redeem its normal state with the help of Nidan Parivarjan and judicious use of pathyapathya. Nowadays the patient suffering from autoimmune disease have to consume lots of medication and thus if doctor advise them a life style changes they neglect it. So here small attempt is made to provide some information regarding pathya which can be easily adaptable in day to day life without any extra efforts. Pathya is the one which keeps the individual hibernate, keeps up individuals body functions prompts, appropriate working of the organs, powers the psyche and acumen. So pathyas should be chosen accordingly. One should not utilize the nourishment articles from either connection or numbness rather he should utilize the healthy one after examination on the grounds that the body and disease is a result of sustenance. (Rogastu ahara sambhvah). So pathya and apathya are equally responsible for both healthy and unhealthy person as the body is the result of ahara and ahara is the primary cause of disease. It will not merely avert the disease but also enrich the public health through Ayurveda. Life style changes particularly food choices can play a role in managing or even reversing many of these autoimmune disease enhancing once Vyadhikshamatva.

Lastly it can be concluded that, the adaptation of slight change in dietary habit by understanding Pathya kalpana and use of Ojo Vardhana Dravyasand following the lifestyle principle as per ancient Ayurvedic wisdom can improve the Vyadhikshamtva. Bala of the individual which can be the reliable answer to the world for the prevention and effective management of the autoimmune disease.

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