



Concept of Vyadhikshamatva wsr to Immunity and management of diseases through enhancement of Vyadhikshamatva prabhav

Dr. Suresh Kumar Jat, Associate Professor, Dept. of Roga Nidana Evam Vikriti Vijnana, Jayoti Vidyapeeth Women's, University, Jaipur

Dr. Shikha Sharma, Associate Professor, Dept. of Samhita & Siddant, Jayoti Vidyapeeth Women's University, Jaipur

Rashi Tripathi, BAMS intern (2015 batch), Jayoti Vidyapeeth Women's University, Jaipur.

Abstract - The word immunity means the state of protection from an infectious disease. The immune system evolved as defense system to protect animals from invading microorganisms and malignant disorders. Immunology is a branch of biomedical science that covers the study of all aspects of the immune response in all organisms. The study of the molecular and cellular components that comprise the immune system, including their function and interaction, is the central science of immunology. Ayurvedic system of medicine not only deals with treating the diseases but also aims to prevent the onset of a disease. The concept of *Vyadhikshamatva prabhav* described in Ayurveda may be considered as equivalent to Immunity. Hence an attempt has been made here to compare and correlate the Ayurvedic concept of Vyadhikshamatva with the immunity.

Key words - Vyadhikshamatva ,Bala; Agni , Rasayana

I. INTRODUCTION

This may be defined as the body's ability to identify and resist large numbers of infectious and potentially harmful microorganisms, enabling the body to prevent or resist diseases and inhibit organ and tissue damage. defined *Ayus*(life) as combination of the body, sense organs, mind and soul. In other word, Ayurveda has given much priority to live healthy and joyful long life. Concepts related to health and diseases are discussed with detail in nearly all classical texts of Ayurveda. These concepts include knowledge of etiology, symptomology, therapeutics, various measures to maintain healthy status and reasons behind falling sick. In Ayurvedic practice, the objective of immune enhancement is achieved through the use of the *Rasayana* and *Vajikarana* therapy, following *AcarRasayana* measures and also by use of *Ojovardhaka* remedies. *Vyadhi-ksamatwa*, as it is understood in Ayurveda has much wider implications than the term "Immunity" used in modern medicine. *Chakrapanidatta* has interpreted the term *Vyadhi-ksamatwa* as *VyadhibalaVirodhitwa* i.e., antagonistic to the strength and virulence of the disease and *VyadhyutpadaPratibandhakatwa* i.e., the capacity to inhibit and bind the causes and factors of the disease. *Charakah* has also described *Bala* as the factor, that destroys the *Dosas* or disease causing factors. The most important thing in relation to health and disease is immunity of the body. Concept of Vyadhikshamatva (Immunity) described in the classical texts of Ayurveda is similar to immunity.

Food versus Immunity –

Wholesome food is the only sole cause for the growth of a living being. There are three factors that support life i.e. *ahara* (food), *svapna* (sound sleep) and *brahmacarya* (one who is having control over the senses and full of spiritual bliss). The body will be possessed with strength, good complexion, growth and longer life, provided the person does not indulge in factors which deteriorate health. Consumption of proper amounts of food certainly helps the individual in bringing strength, good complexion, happiness and longevity .

Concept of swasthya in ayurveda –

A person is called healthy or *swastha*, if he possesses an equilibrium state of the *doshas* (body humors), *agni* (bio-digestive fire), *dhatu*s (tissues), and *malas* (waste products of body) associated with a pleasant state of soul, sensory organs and mind. It is the basis for normal immunity. Disequilibrium or derangement of *doshas* etc. causes diseases.

Role Of *Doshas* On Immunity –

Proper elimination of waste products, equilibrium state of *dhatu*s and *dosh*as, normal appetite, proper perception of taste, digestion of food in a stipulated period and proper absorption/assimilation to nourish the body, sound sleep, coordinated sensory perception, and good humor/temperament, all, indicate a healthy person. *Vata*, *pitta* and *kapha* are physical *dosh*as i.e. *sharirika doshas*, and *raja* and *tama* are the mental *dosh*as i.e. *manasika doshas*. It is very difficult to understand the movements of wind, sun and moon, similarly the activities of *vata*, *pitta* and *kapha* are difficult to ascertain. *Dosh*as support the body just like a house is supported by three pillars. They are called pillars because they support and maintain the firmness of the body. *Dosh*as are also called *dhatu*s because they support the body. *Dosh*as are also called *malas* due to their vitiation property. One that pollutes the body is called *mala*, being the waste product of food, and so also equated to *dosh*as due to their tendency to vitiate others. The *dosh*as may be termed as antibodies because these identify and neutralize foreign objects such as, fungus.

Role of normal *vata* in immune system –

Vata supports the body by performing functions like movement, perception, filling, separation and retaining. The normal functions of *vata* are enthusiasm, inspiration, expiration, movements, normal formation of *dhatu*s, and proper eliminations of excreta. When *vata* combines with *agni*, it produces heat but in combination with *soma* (*kapha*) produces cold, that is why it is called *yogavahi* (synergist) .

Role of abnormal *vata* in causing diseases-

Abnormal *vata* generates various afflictions to the body, thereby producing various diseases. It affects the strength, complexion, happiness and longevity. It disturbs the functions of mind, afflicts all sense faculties, deforms and destroys the embryo for long periods of time. As a result it gives rise to fear, grief, confusion, anxiety, excessive delirium, and finally stops the vital breath. Abnormal and vitiated *vata* causes derangement of the immune system that produces diseases. Hence Ayurveda states that this *dosha* is the prime because it controls all body systems.

Role of normal *pitta* in immune system-

Pitta supports the body by performing functions such as coloring, digestion, production of *ojas*, vision, intelligence, body temperature, along with other functions of *agni* that are of five types. The normal functions of *pitta* are clarity in vision, good digestion, regulation of body temperature, hunger and thirst; softness in body parts, luster, happiness and intelligence.

Role of abnormal *pitta* in causing diseases-

Agni is represented by *pitta* in the body and produces good or bad effects depending on its normal or abnormal state, i.e. digestion or indigestion, vision or loss of vision, normal or abnormal temperature, normal or abnormal complexion, valor or fear, anger or joy, confusion or clarity, and other such dual functions. Abnormal and vitiated *pitta* greatly disturbs the digestion and metabolism leading to development of diseases.

Role of normal *kapha* in immune system-

An equilibrium state of *kapha* promotes strength that is why normal *kapha* is called *ojas*. Hence it is the master of the human immune system. Functions of normal *kapha* are like that of *ojas*. *Kapha* supports the body by performing functions like binding of joints, unctiousness, healing, saturation, giving strength and stability to the body and such other functions of water, and it is of five types. The normal functions of *kapha* are unctiousness, cohesion, firmness, heaviness, potency, strength, forbearance, patience and absence of greed.

Role of abnormal *kapha* in causing diseases-

Soma, which is represented by *kapha*, gives rise to good or bad effects depending on its normal or abnormal state i.e. firmness or laxity, plumpness or emaciation, enthusiasm or laziness, potency or impotency, knowledge or ignorance, understanding or confusion, and such other dual functions. Abnormal and vitiation of *kapha* greatly alters the immune system resulting in disease.

Importance of *dosh*as in the development of diseases –

*Dosh*as, if aggravated, manifest signs and symptoms in accordance with the degree of aggravation i.e. excessive, moderate and slight aggravation of the *dosh*as reflect itself in the form of excessiveness,

moderateness and slightness (weakness) in the signs and symptoms. *Doshas*, if diminished manifest signs and symptoms in a feeble manner or cease to manifest even their normal signs and symptoms. Diminished state of *doshas* is not capable of vitiating other *dhatu*s, as a result disease will not manifest. But once *doshas* cease their normal functions, it will disturb the entire physiological functions and as a result, may cause disease or may not be capable to counteract the pathogenic causative agents thus also resulting in disease. An equilibrium state of *doshas* where there is normal function, represents a healthy state of body and mind. Sixty-two varieties of permutation and combination of *doshas* definitely manifest symptomatology. *Doshas* recognize a unique part of the foreign target and tag a microbe or an infected cell for attack by other parts of the immune system, or can neutralize its target directly and attach them to prevent the manifestation of diseases. Three different *doshas* are known in mammals, which perform different roles, and help direct the appropriate immune response for each different type of foreign object they encounter. There is a great deal of synergy between the three *doshas* and defects in either *doshas* can provoke illness or disease, such as autoimmune diseases, immunodeficiency disorders and hypersensitivity reactions.

Dhatu versus immunity –

Nourishment is intrinsic to life and an important tool in the fight for survival against pathogenic microorganisms. Whenever the expression or function of one of these tissues is impaired (provided the function is non-redundant), immune disturbance occurs and develops diseases i.e., *dhatupradoshajavikara*.

Mala versus immunity –

Purisha (stools) provides strength and supports *vata*, *agni* and *pitta*. *Mutra* (urine) fills the urinary bladder and eliminates excess moisture in food. *Sweda* (sweat) provides moistness and softness to skin and supports hair. Hence proper elimination of the *malas* indicates good health, and any abnormality is the cause of disease development i.e. *malapradoshajavikara*.

Bala versus Immunity –

Strength is of three types i.e. *sahaja* (constitutional), *kalaja* (temporal) and *yuktikrita* (acquired). A. *Sahajabala* is an inherent characteristic property in an individual present from birth. It occurs with an equilibrium state of *doshas*; B. *Kalajabala* is dependent upon season and age. loss of strength observed in *adanakala* (hot and dry), gaining of strength observed in *visargakala* (cold and wet), and middle age considered as being full of strength. C. *Yuktikritabala* or acquired strength is attained by healthy practices related to diet, activities, and performing exercises with proper methods by having rest in between different exercises etc. Some consider yoga as a *rasayan* therapy. *Vajikaranayogas* help to acquire strength by fulfilling necessary deficiencies in insufficient *dhatu*s.

Immunity is intrinsic to life and an important tool in the fight for survival against pathogenic microorganisms. The human immune system can be divided into two major components: the innate immune system and the adaptive immune system.

- *Sahajabala* may be correlated to innate immunity. The innate immune system provides the rapid triggering of inflammatory responses based on the recognition (at the cell surface or within cells) of either molecules expressed by microorganisms or molecules that serve as "danger signals" released by cells under attack.
- *Yuktikritabala* may be correlated to adaptive immune system. The adaptive immune system operates by clonal recognition of antigens followed by a dramatic expansion of antigen-reactive cells and execution of an immune effector program.

There is a theory of immunity in ayurveda called the *beej-bhumi* theory, which means "seed and land." In this case, the body is analogous to the land, and infection or "bugs" are like seeds. If the body is filled with *ama* (toxins) and lacking in *ojas*, the infection will find it to be fertile ground for spreading, just as land that is fertile will sprout many seeds. If digestion is strong, and *ojas* rather than *ama* predominates in the body, then the seeds of infection will not be able to take hold, just as seeds will not take root in land that is infertile.

Medications –

There are various ayurvedic drugs in Ayurveda to enhance one's immunity among them are ashwagandha, tulsi, amalaki, turmeric, neem etc.

- **Ashwagandha** (*Withaniasomnifera*, fam. Solanaceae) is commonly known as “Indian Winter cherry” or “Indian Ginseng”. It is one of the most important herb of Ayurveda (the traditional system of medicine in India) used for millennia as a Rasayana for its wide ranging health benefits. It is known as “SattvicKaphaRasayana” Herb. Ashwagandha improves the body's defense against disease by improving the cell-mediated immunity. It also possesses potent antioxidant properties that help protect against cellular damage caused by free radicals.
- **Tulsi** also referred to as *Ocimum sanctum* or Holy Basil, is a medicinal herb that belongs to the mint family and is found in 150 different varieties worldwide. Tulsi is called the queen of all herbs, it is used widely in Ayurvedic and naturopathic medicines which helps in the healing of the human body in a natural manner. Tulsi is not only an immunity boosting herb, it is also the most commonly found plant in Indian households. There are different variants of tulsi like ramatulsi, krishnatulsi and vanatulsi that can be consumed for different health benefits. Overall, tulsi helps in relieving lung-related diseases like asthma, bronchitis, congestion, flu...etc. It also is beneficial in cramping, gastric disorders, reducing sugar, controlling blood pressure and skin-related problems as well. Not only do Tulsi leaves benefit people, but its flowers too. Tulsi can help you get rid of many health problems ranging from fever to kidney stones. Ayurvedic texts have also categorised the wonder herb as a stimulant, antipyretic and aromatic in nature.
- **Amalaki** is also known as Amla, or Indian Gooseberry and is a popular herb in Ayurvedic medicine. Amla can be used effectively to boost the immunity as they provide high amounts of Vitamin C to the body. Vitamin C not only helps in stimulating the production of antibodies but is also a great source of anti-oxidants. Amla also helps to increase the white blood cells (WBC) count in the body, which are the part of your immune system that are responsible for fighting off diseases. Finally, Amla also has strong anti-bacterial and astringent properties, which also helps your body strengthen its overall immunity.
- **Turmeric** is a rhizomatous herbaceous perennial plant (*Curcuma longa*) of the ginger family. Turmeric, or “Indian saffron,” has a long history of medicinal use. curcumin possesses anti-inflammatory, antiviral, antibacterial, and antifungal activity. turmeric acts as an antioxidant as well. This benefit is excellent news if you want to enhance your immunity. turmeric may help reduce free radical content in the body and slow the cell death process. This benefit makes curcumin an excellent contributor to overall mental and physical wellness and a potential ally against age-related diseases.
- **Azadirachtaindica**, commonly known as **neem, nimtree** or **Indian lilac**, is a tree in the mahogany family Meliaceae. Neem, also known as miracle herb' is another antimicrobial herb whose every part is therapeutic in nature. Neem cleanses the blood and clears out the body off any toxins. Neem has the ability to fight fungus, viruses and bacteria. It is known for its anticancer properties. Neem is very beneficial in treating skin ulcers, loss of appetite, cardiovascular diseases, diabetes, gum and liver diseases. Neem leaf is famous in ayurvedic texts for having an almost magical effect on the skin. It works as an antifungal, antiseptic, and anti-inflammatory agent.

Formulations –

- AshwagandhaChurna
- Tulsi Ark
- Amlakichurna
- NeemKwath
- Turmeric with milk

II. CONCLUSION

Concept of *vyadhikshamatwa* (immunity) has been widely described in detail in *Ayurvedic* texts because the main goal of Ayurveda is to optimize the health an individual and cure disease. To preserve health, one has to have a strong *vyadhikshamatwa* to combat deadly etiological agents. Sahajabala may be correlated to innate immunity. Kalajaanadyuktikritabalamay be correlated to acquired immunity. All unwholesome food articles are not equally harmful, all dosas are not equally powerful, and all persons are not capable of resisting diseases. Present article through light on the concept of immunity vis-a visvyadhikshamatwa.. Factors which contribute for vyadhikshamatva are normal dosa, equilibrium state of

dhatu, normal agni, patency of srotas etc. or factors which supports the equilibrium state of all physiological parameters.

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