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Concept of immunity in Ayurveda

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ABSTRACT

Resistance to diseases or immunity against diseases is of two kinds i.e. the one which attenuate the manifested disease and other variety prevents the manifestation of diseases. During certain conditions, or due to certain factors, even unwholesome food does not produce diseases immediately. All unwholesome food articles are not equally harmful, all dosas are not equally powerful, and all persons are not capable of resisting diseases. Over obese individual; over emaciated person; whose muscles and blood are diminished markedly; debilitated person; one who consumes unwholesome food; one who consumes less amount of food; whose mental faculties are weak; on the other hand, individuals having opposite type of physical constitution are capable of resisting diseases. 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. Innate immunity may be correlated to sahaja bala described in Ayurveda. Kalaja anad yuktikrita bala may be correlated to acquired immunity. Present article through light on the concept of immunity vis-a vis vyadhiksamatwa. Author has collected many references regarding how to enhance immunity and keep body disease free by adopting ayurvedic principles.

Key words: Vyadhiksamatwa, sahaja bala, kalaja bala, yuktikrita bala, innate immunity, acquired immunity.

INTRODUCTION

During certain conditions, or due to certain factors, even unwholesome food does not produce diseases immediately. All unwholesome food articles are not equally harmful, all dosas are not equally powerful, and all persons are not capable of resisting diseases. Resistance to diseases or immunity against diseases is of two kinds i.e. the one which attenuate the manifested disease and other variety prevents the manifestation of diseases. Unwholesome food substances become more harmful depending upon the nature of the locality, time, combination, potency and excessive quantity. For example, vrihi type of corn is unwholesome because it aggravates pitta. The same become more unwholesome if consumed by marshy land (anupadesha) people, the same become less harmful if consumed by dhanvadesha people. It is more unwholesome during sharad ritu (autumn season) and less harmful in hemanta ritu (winter season). If it is consumed with curd, phanita (penidium) become more unwholesome and the same become less harmful if consumed with honey. If consumed hot it is more unwholesome and the same if taken in cold condition becomes less harmful. If consumed more in quantity become more unwholesome and become less harmful if consumed less in quantity. The dosas are exceedingly painful, acute and difficult to cure during their multiple combinations, if they require mutually contradictory therapies, if they are deep seated i.e. deeper dhatu like majja etc. are involved in the pathogenesis of disease. If disease is chronic it become very difficult to cure because they are deep seated and gives displeasure and disease becomes incurable. If dasha pranayatana are involved in the disease process along with other vital organs like hridaya etc, then disease become difficult to cure. If vital organs afflicted,

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Institute of Medical Sciences, Banaras Hindu University, Varanasi -221005, India. then disease become difficult to cure. If disease manifest instantaneously indicates disease become very difficult to cure (Byadgi, 2007).

The following persons are unable to resist diseases

Over obese individual; over emaciated person; whose muscles and blood are diminished markedly; debilitated person; one who consumes unwholesome food; one who consumes less amount of food; whose mental faculties are weak; on the other hand, individuals having opposite type of physical constitution are capable of resisting diseases (Byadgi, 2007)..

Contributing factors for Vyadhikkshamatva

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. These points are described below (Byadgi, 2007).

Vyadhisaha means one who is capable of resisting diseases. Depending on the nature of unwholesome food, condition of vatadi dosas and person who is not capable of resisting diseases suffers from diseases mild or severe, acute or chronic. Vata, pitta, kapha manifests different diseases depending upon their vitiation at various places. Equilibrium state of dhatu is called svastha. Upayogi hetu (useful etiological factors) are those useful to the body and they indulge in protection of dhatus, which is important for homeostatic condition of body and mind. Aim and object of Ayurveda is the maintenance of equilibrium state of tissue elements. Regular oil massage leads to strong body physique. Consumption of proper amount of food certainly helps the individual in bringing strength, complexion, happiness and longevity. A intelligent person should be vigilant about his duties towards his own body like an office in charge of a city and a charioteer towards the city and the chariot respectively. So, wise person should protect his body both externally and internally by adopting dinacarya in his daily routine. Person who is desirous of healthy should adopt the healthy practices related to diet, conduct and activities. Equilibrium state of dhatu is health and gives rise to pleasure. There are three factors, which supports life i.e. ahara (food), svapna (sound sleep) and brahmacarya (one who is having control over his senses and full of spiritual bliss). By this body will be endowed with strength, complexion, growth and live longer, provided if person doesn't indulge in factors which deteriorate health.

Strength is of 3 types i.e. sahaja (constitutional), kalaja (temporal) and yuktikrita (acquired). A. Sahaja bala-It is an inherent characteristic property of an individual present since birth. It is because of equilibrium state of dosas; B. Kalaja bala-It is dependent on season and age. Loss of strength is observed in adanakala, gaining of strength is observed in visarga kala and middle age is considered as full of strength and C.Yuktikrita-Acquired strength is dependent on healthy practices related to diet, activities etc. Performing exercises with proper methods by giving rest in between different exercises. Other says that other considered yoga as rasayana therapy. Vajikarana yogas help to acquire

strength by fulfilling necessary deficiencies in deficient dhatus. Proper utilization of sense organs with their objects, normal actions and normal seasons are beneficial in the maintenance of good health. Compactness indicates healthy state of the body. Vata brings about compactness in all tissue elements of the body and promotes union of the body. Ghee is conducive to rasadhatu, shukradhatu and ojas. Ojas is the essence of all dhatus and body strength depends on ojas. Oil does not aggravate kapha but enhances body strength. Majja enhances strength and it also adds to the physical strength especially to asthidhatu. Superior quality ojas situated in hridaya and its quantity is eight drops. Other type of ojas is ordinary one and which is dwelling in vessels attached to the heart and its quantity is half anjali. Equilibrium state of kapha promotes strength, that's why normal kapha is called ojas. Functions of normal kapha are like that of ojas. Normal blood promotes strength. Wholesome food is the only sole cause for the growth of living being.

Meat of cock is strength promoter; amalaki causing rejuvenation; habitual use of ghee and milk causes rejuvenation; regular consumption of food having all tastes promotes strength; desert land is healthy land; Sweet taste, sour taste enhances strength. Strength, health, longevity and vital breath are dependent on the condition of agni. When the proper quantity of food and drinks supplied to a person which is commensurate with the power of digestion in the form fuel, which sustains the agni otherwise leads to abnormal functions. One who consumes wholesome food along with self control lives longer with proper health for one thousand and thirty six nights (100 years) and these persons are blessed by noble man.

Non violence is the best among the promoters of longevity of living beings; virya (semen) is the best among promoters of strength; knowledge is the best among promoters of nourishment; self control is the best for the promotion of delightfulness; knowledge of reality is the best among promoters of happiness; celibacy is the best among those leading to salvation.

The main purpose and objectives of Ayurveda is the preservation of health in healthy individual and eradication of diseases, which are curable. Person who is having balanced proportion of muscles, compactness, excellent sensory faculties never suffer from diseases. These people can easily withstand hunger, thirst, heat of the sun, cold and physical exercises. Agni performs normal digestion and metabolism activities. Sama prakriti individual possesses equilibrium state of dosas, dhatus and it is considered as best prakriti. Person who is possessing excellence of all dhatus including mental faculties i.e. sarva sara are endowed with great strength, happiness and resistance to diseases.

The following persons are free from diseasesconsumption of wholesome diet; observation of wholesome behavior; unattached to sensual pleasures; One who donates regularly; impartial in judgement; who is always says truth; endowed with forbearing (forgiveness) nature and one who devoted to learned people.

The following persons does not fall victim of diseasesperson possessing excellent intellect; acts and speech are leading to ultimate bliss; independent thinking or excellent faculties; clarity in understanding; full of knowledge; observation of spiritual activities and continuous yogic practices.

For the maintenance of equilibrium state of dhatus the following adaptations are essential-proper use of actions and consumption of food contrary to the properties of place, time and the self; avoid over utilization, non utilization and improper utilization of time, intellect and sense objects; non suppression of impelled urges and do not indulge in activities which are beyond one's own capacity.

Dhatus grows constantly by the use of the food substances and drinks having similar qualities or dominated by such qualities. Complete uniform growth of the body takes place by following factors. Young age is the period in which complete development of body dhatus observed. Certain unseen factors favors the growth of the body naturally is called svabhava samsiddhi. Food substances possessing excellent properties and qualities for the over promotion of dhatus are considered ideal food to gain vital immune power. Avighata means absence of factors which favors deterioration of dhatus. For example, excessive indulgence in sexual acts and affliction to mental faculties brings abnormality in dosas.

The following factors which favour the promotion of strength- birth of a person in a country where people are naturally strong(For example 'sindha' region people are strong by nature); time factor which is conducive for dhatus and helps for promotion of strength. For example if person born during hemanta and shishira ritu which favors the promotion of strength; excellence among qualities of bija (sperm) and kshetra (ovum and uterus) of parents; excellence of diet; excellence of physique; excellence of suitability; all mental faculties are superior; natural mechanism; young age and exercise and such other physical activities. Habitual performance of exercise promotes strength. Always in cheerful mood is also helpful to gain strength. Normal span of life in kaliyuga is 100 years.

The following factors helps to live longer upto hundred years- excellent constitute i.e. sama prakriti--prakriti sampat means person possessing equilibrium state of all dosas and it is called sama prakriti and these individuals live longer; guna sampat i.e. excellent compactness of body, excellent essence, compactness etc., natural excellent inherent qualities transformed from parents; atma sampat-righteous acts along with observation of penance, indulging in right conducts helps for longevity. Celibacy, sleeping in a place which is devoid of breeze, hot water bath, sleeping during night, physical exercises is best adjustable to all as a wholesome substance. Ojas is the essence of rasadhi dhatus and it is also called bala. Strength gives stability and maintains compactness of muscles, energy to perform all kinds of activities without any hindrances, clarity in voice and complexion, both karmendriya and jnanendriya performs their normal functions. Protection of health of healthy individual is very important. Equilibrium state of dosa, agni, dhatu, mala and their activities are normal along with proper co-ordination between soul, sense organs and mind in called svastha. Whose joints, vessels and ligaments are properly developed with steady sense faculties and all body organs

are excellent from feet to head and are better than its preceding is said to survive for longer period. Person that is free from disorders even from fetal life and gradually developing day by day with common and scientific knowledge lives longer. Collected rain water in a clean vessel mitigates all three dosas, promotes strength, rejuvenative and best for intelligence. Only the living being can enjoy desired fruit of his action. Therefore, one desirous of long life should avoid rash behavior. Avoiding all the things one has to protect his body first by using appropriate preventive measures. Shukra is the ultimate excellent outcome of food hence it should be preserved because its diminution leads to development of many diseases or even death. Person who is having control over his senses should take wholesome food in proper quantity and in proper time. Otherwise irregular dieting is the root cause for the manifestation of diseases.

DISCUSSION

Immunity is a biological term that describes a state of having sufficient biological defenses to avoid infection, disease, or other unwanted biological invasion. Immunity involves both specific and non-specific components. The non-specific components act either as barriers or as eliminators of wide range of pathogens irrespective of antigenic specificity. Other components of the immune system adapt themselves to each new disease encountered and are able to generate pathogen-specific immunity (Anonyms, 2011). This may be correlated to vyadhiksamatwaresistance to diseases or immunity against diseases is of two kinds i.e. the one which attenuate the manifested disease and other variety prevents the manifestation of diseases.

Innate immunity, or nonspecific, immunity is the natural resistance with which a person is born. It provides resistance through several physical, chemical, and cellular approaches. Microbes first encounter the epithelial layers, physical barriers that line our skin and mucous membranes. Subsequent general defenses include secreted chemical signals (cytokines), antimicrobial substances, fever, and phagocytic activity associated with the inflammatory response. The phagocytes express cell surface receptors that can bind and respond to common molecular patterns expressed on the surface of invading microbes. Through these approaches, innate immunity can prevent the colonization, entry, and spread of microbes (Anonyms, 2011). This can be correlated to sahaja bala-it is an inherent characteristic property of an individual present since birth. It is because of equilibrium state of dosas; . Certain unseen factors favors the growth of the body naturally is called svabhava samsiddhi; birth of a person in a country where people are naturally strong. For example 'sindha' region people are strong by nature; time factor which is conducive for dhatus and helps for promotion of strength. For example if person born during hemanta and shishira ritu which favors the promotion of strength; excellence among qualities of bija (sperm) and kshetra (ovum and uterus) of parents; natural mechanism etc.

Adaptive immunity is often sub-divided into two major types depending on how the immunity was introduced. Naturally acquired immunity occurs through contact with a disease causing agent, when the contact was not deliberate, whereas artificially acquired immunity develops only through deliberate actions such as vaccination. Both naturally and artificially acquired immunity can be further subdivided depending on whether immunity is induced in the host or passively transferred from a immune host. Passive immunity is acquired through transfer of antibodies or activated T-cells from an immune host, and is short lived -- usually lasting only a few months -- whereas active immunity is induced in the host itself by antigen, and lasts much longer, sometimes lifelong (Anonyms, 2011). This can be correlated to kalaja bala- It is dependent on season and age. Loss of strength is observed in adanakala, gaining of strength is observed in visarga kala and middle age is considered as full of strength and yuktikrita- acquired strength is dependent on healthy practices related to diet, activities etc. to develop this kind of immunity Ayurveda described many points which author described in detail in the article.

A further subdivision of adaptive immunity is characterized by the cells involved; humoral immunity is the aspect of immunity that is mediated by secreted antibodies, whereas the protection provided by cell mediated immunity involves T-lymphocytes alone. Humoral immunity is active when the organism generates its own antibodies and passive when antibodies are transferred between individuals. Similarly, cell mediated immunity is active when the organisms' own T-cells are stimulated and passive when T cells come from another organism (Anonyms, 2011). Such description is not available in ayurvedic texts. According to Ayurveda immunity depends on ojas, equilibrium state of kapha and udana vata. There are two terminologies used in Ayurveda to discuss about the concept of vyadhiksamatwa (immunity) namely Ojas and bala. Diseases of immune system arise due to disturbance in ojas, kapha, bala and udana vata.

Failures of host defense do occur, however, and fall into three broad categories: immunodeficiencies (Ojokshaya), autoimmunity (Ojovisramsa) and hypersensitivities (Ojovyapat).

CONCLUSION

Vyadhiksamatwa- resistance to diseases or immunity against diseases is of two kinds i.e. the one which attenuate the manifested disease and other variety prevents the manifestation of diseases. It may be correlated to concept of immunity. Sahaja bala may be correlated to innate immunity. Kalaja anad yuktikrita bala may 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. Over obese individual; over emaciated person; whose muscles and blood are diminished markedly; debilitated person; one who consumes unwholesome food; one who consumes less amount of food; whose mental faculties are weak; on the other hand, individuals having opposite type of physical constitution are capable of resisting diseases. 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. Innate immunity may be correlated to sahaja bala described in Ayurveda.. Present article through light on the concept of immunity vis-a vis vyadhiksamatwa. Author has collected many references regarding how to enhance immunity and keep body disease free by adopting ayurvedic principles. One who adopts Ayurveda principles in day today life will become free from diseases and can lead healthy and prosperous life.

REFERENCES

Anonyms. Immunity (medical) From Wikipedia, the free encyclopedia. [Cited on 12/7/2011] available online at http://en. Wikipedia.org/wiki/Immunity_(medical)

Byadgi P S. Vyadhiksamatwa. Parameswarappa's Ayurvediya Vikriti Vigyan & Roga Vigyan, 1st edition, Volume 1. Varanasi, Chaukhambha Sanskrit Sansthan, 2007; 292-305.