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THE CONCEPT OF VYADHIKSHAMATVA (IMMUNITY) IN AYURVEDA

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ABSTRACT

The covid-19 pandemic crisis has turned the world's attention to immune system, the body's defense force against disease. Ayurvedais an oldest science of life and health care in the world; it is interesting to know that in this ancient ayurvedictexts there are in detail explanations and descriptions about immunity. In Ayurvedathe immunity is explained under the term Vyadhikshamatva. Ayurvedasystem of medicine not only deals with treating the disease but also aims for prevention and plays a larger emphasis on building strength of mind and body to cope with various infections. In Ayurveda, the superior vital essence of all bodily tissues is called 'Ojas'. Acharyaspromoted the use of rasayana (Rejuvenation) to enhance

ojasand vyadhikshamatva(immunity). Rasayanasare health promoting and rejuvenating agents which by their empirical effects produce resistance against disease both physically and mentally. Ojasis responsible for good health, better immunity, longevity, intelligence and thought process. For this purpose, use of different types of ojaspromoting herbs have been described in Ayurvedawhich can be immensely helpful in the management of immunodeficiency disorders. Similar to innate and acquired immunity, vyadhikshamatva concept is considered equivalent to immunity (balaor strength) classified as natural (sahaj), chronological (kalaj) and acquired (yuktikrita). The current article critically reviews the available literature to evaluate ancient concepts of vyadhikshamatva and immunity in the

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recent era.

KEYWORDS: vyadhikshamatva, bala, immunity, Ayurveda.

INTRODUCTION

The most important thing in relation to health and disease is immunity of the body. Immunity is defined as the capacity of the body to resist pathogenic agents. It is the ability of body to resist the entry of different types of foreign bodies like bacteria, virus, toxic substances etc. Immunity is of two types 1. Innate immunity 2. Acquired immunity. Innate immunity is the inborn capacity of the body to resist pathogens. Acquired immunity is the resistance developed in the body against any specific pathogens after an antigenic stimulus. So this type of immunity is also known as specific immunity.^[1]

Our immune system is essential for our survival. Without an immune system our bodies would be open to attack from infections. It is our immune system that provides us protection against pathogens. Vyadhikshamatvais described in Ayurvedaand this concept is considered equivalent to immunity. In Ayurvedainnate immunity may be correlated to sahajabalaand acquired immunity may be correlated to kalajaand yuktikritabala. Keen observation substantiates that human being has two different varieties of strengths. 1. The strength required for the growth of the body and to perform routine activities is called energy (Shakti) 2. The Strength required to protect the body against several disease is called resistance (Kshamatva). [2] InAyurveda, Ojas has been described as vital defense mechanism of the body. Ojasis an essence of all dhatusandvyadhikshamatvadepends on it. Some food substances are wholesome and suitable for the body as the body can transform those substances into its own (congruent) by virtue of jatisatmya, called hitasubstances(satmya). Substances which are always suitable and accustomed (to man) by birth like water, ghee, milk, porridge (boiled rice) etc are called hitasubstances while others which are always unsuitable and causes putrefaction and may be fatal such as fire, caustic alkali, poison etc. Also some others by combinations become similar to poison, are called Ahitasubstances (Asatmya). [3] The following three are the reasons for the ill effects being present in ahita substances 1. Natural inheritance feature 2. Physical or chemical combinations 3.

Refinement (samskara). Some other examples of dravyas1. Incompatible combination and incongruent exposures (viruddhaaharavihara) 2. Vajrais told by Kashyapa whichmeans incongruent substance which produces antigens due to improper digestion eg; insect,

creatures, etc. 3. Certain drugs (medicine). 4. Microorganisms. 5.

Psychological aversion. 6. The viruddhadravyase.g. equal quantities of honey and ghee. All these causes are responsible for disease production. Hence Vagbhataadvised that all drugs in the practice of medicine should be used logically. Not only ahitadiets and medicines provoke the hostile reactions but the viruddhadeeds (vihar) also manifest such mishap e.g. sudden cold water bath after heat exhaustion is virudhha. Charaka defined Ayush(life) as combination of the body, sense organs, mind and soul. In other word, Ayurvedahas given much priority to live a 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, and reasons behind falling sick and various measures to maintain health.

MATERIALS AND METHODS

To review the Vyadhikshamatvaand immunity described in various AyurvedicSamhitas, textbooks, journals, articles and websites for better understanding.

LITERARY REVIEW

Concept of Vyadhikshamatva

In Sanskrit, the word 'Vyadhikshamatva'is made up of two words; Vyadhi(disease) and Kshamatva(suppress or overcome). According to Ayurveda, Vyadhiis condition which comes into existence as a consequence of non-equilibrium between Doshas (physiological factors i.e vata, pittaandkapha), Dhatus(tissues systems) and Malas (excretory products of body). These factors, in their normal status are responsible in maintaining the physical and psychological health. The other word, Kshamatvais derived from, or composed to suppress anger, to keep quite or to resist. Therefore Vyadhikshamatwameans the factor which limits the pathogenesis the strength of disease. ChakrapaniDatta, while commenting CharakaSamhita, gave his opinion on the term Vyadhikshamatvaand explained the term in two divisions, viz (I) Vyadhi-balavirodhitvam: It is the capacity to restrain or withstand the strength (severity) of the disease i.e. strength to resist the progress of disease. (II) Vyadhiutpadakpratibandhakatva- The resisting power of the body competent enough to prevent the occurrence and re-occurrence of the disease. These sub-types form the resistance which is now a day known as Immunity. [4] There are nine factors mentioned in Ayurvedawhich promotes body towards incapability to resist the disease manifestation i.e. factors responsible for decreasing immunity.^[5]

- 1) Ati-Sthoola(Excessively obese persons)
- 2) Ati-Krisha(Excessively emaciated person)
- 3) Anivishta-Mamsa(Individual having improper musculature)
- 4) Anivishta-Asthi(persons having defective bone tissues)
- 5) Anivista-Shonita(persons with defective blood)
- 6) Durbala(A weak person)
- 7) Asatmya-Aaharopachita(Those nourished with unwholesome food)
- 8) Alpa-Aaharopachita(Those taking diet in small quantity)
- 9) Alpa-Satva(Individuals with feeble mind)

When etiological factors come in contact with the body they try to produce disease. At the same time the body tries to resist the disease power of body, which prevents the development of disease or resist a disease which has occurred is called immunity (Vyadhikshamatva). Various factors which contribute towards immunity are balanced doshas, equilibrium of dhatus, normal agni, patency of srotasetc^[6] along with qualities of blood, tissues, intercellular fluids, lymph.^[7] Immunity in Ayurveda can be understood by three terms that are Shleshma, Balaand Oja.

Shleshma

Shleshmain normal state is balaand oja,shleshmain abnormal state is malaand papma.^[8] Function of normal kaphawhich performs the factions like strength, protection, growth, resistance like that of oja.^[9] Kaphabeing one of the three doshasin our body are said to be responsible for maintenance of homeostasis or equilibrium in the body. Much more than just immunity it includes even physical and mental strength. All mechanisms that help in reducing the vulnerability of an individual to all possible assaults.

Bala

AcharyaSushrutstatesbalaas that which imparts integrity to the muscles, improves the voice and complexion and helps the person to perform his natural functions.^[10] Three types of bala(vyadhikshamatva) in Ayurvedaare 1.Sahaj,2.Kalaj, 3. Yuktikrita.^[11]

Sahajbala(innate) is the constitutional strength present since birth. It depends on the health of shukraand artava. According to Ayurvedaconcept of genetics, if both the parent's genetic makeup is healthy, then children too become healthy. This concept indicates congenital abnormalities which occur due to abnormal changes at genes or chromosomal level.

Kalajbalais according to time, ritu(season) and age etc which are the factors responsible for enhancing immunity (strength). It is assumed to be greater in the early morning, spring and yuvaawasthathan in evening, summers and old age.^[13]

Yuktikritabala(acquired) – Ayurvedafocuses on the following plans for acquiring bala or enhancing immunity.

- Proper and suitable ahara(nutritious diet)
- Performing exercise (cheshta) properly
- Using various beneficialyoga^[14](e.g. rasayanachikitsa)

Balavardhakabhava(factors which increase strength/immunity) as described by Acharya Charaka— birth in a place where people are naturally healthy or strong, birth in a family history without any immunodeficient disorders, birth at a time when people naturally gain strength (Visargakala), favourable time, excellence among qualities of bija(spermand ovum) and kshetra(uterus), excellence of diet (aharsampat), excellence of physique (sharirsampat), excellence of suitability (satmayasampat), all mental faculties are optimal (satvasampat), natural mechanism (swabhavsanssidha), young age, exercise and other physical activities.^[15]

Ojas

- 1. According to Charaka, (during embryogenesis) the ojaappeared foremost in the human body. [16]
- 2. The essence of saptadhatus(saptdhatumeans the seven bodily tissues from rasato shukradhatu) e.g. rasa(plasma and lymph), rakta(blood cells), mamsa(connective and muscular tissue), meda(body fats e.g. adipose tissue), asthi(bones), majja(bone marrow) and shukra (reproductive systems). is called Ojaand it is the seat for strength, hence called bala.^[17]
- 3. In Ayurveda Ojashas been considered vital in the defence mechanism of the body. It resides in the heart (hridaya), but also circulates (vyapata) all over body and maintains healthy status of the person. If this is lost, life also is lost and if it is intact, life also continues.^[18]
- 4. In conditions like madhumeha(diabetes mellitus) and shosha(malnutrition), where depleting of Ojas(infection fighting power) is a constant feature, people are known to be susceptible tovarious recurrent infections.

Types

1. Paraojas: This is ashtabinduin quantity, if decreases then person will die.

2. Aparaojas: which is ardhanjaliojas, if decreases or vitiated manifestsabnormalities. It is snigdhaand somatmaka(mild and cool) in nature. Though predominantly white in color, has got some yellowish and whitish tinge. Ten great blood vessels connected to heart carry the Rasatmaka Ojas, upon which the whole life process itself is dependent.^[19]

Substances, which have opposite qualities to those of bodily tissues (or dehadhatupratyanikbhutani), (when gain entry into the body) encounter the opposition by the dehadhatu(bodily tissues).^[20] It points that immune system of person attacks any antigen, which has gained entry into the body.

Hitaand AhitaAhara^[21]

Some food substances are wholesome and suitable for the body as the body can inheritably transfer those substances into its own by virtue of Jatisatmya. These are called as Satmyaor Hitasubstances. Water, ghee milk and rice are few examples of general wholesome food as these are completely suitable for every human. On the other contrary some substance do not suit to the body and cause some adverse reaction.

These are known as Ahitaor Asatmyasubstances. Fire-burns, alkalis-cauterize, toxin- kills are some of the examples of Ahitasubstance. There are three reasons seen for the ill-effects being present in Ahitasubstance i.e. natural inherent feature, physical or chemical combination and refinement. Hita, Ahitasubstance and VyadhikshamatvaHita aharais responsible to develop healthy Dhatusand final product of Dhatusi.e. Ojas. So increase in Ojasor Balaultimately increase Vyadhikshamatva. On the other hand, Ahita substance if taken continuously it leads to improper nourishment of Dhatuswhich result in decreasing Ojasand Vyadhikshamatva.

Relation between Agni(food assimilation power of body) and Vyadhikshamatva^[22]

AcharyaCharakain the context of functions of Agninarrated that. Dehagnior Jatharagni(digestive power of stomach) is responsible for life, color (luster of the skin), strength, health, enthusiasm, plumpness, complexion, Ojas(energy), Tejas(gleam of the body), other varieties of Agniand Prana(vitality). Extinction of this Jatharagnileads to death. Its proper maintenance helps a person to live a long life and its impairment gives rise to diseases. Therefore Jatharagniis considered to be the root or the most important sustaining factor of living beings. In this way immunity is influenced by the power of Agni, digestive fire and our ability to digest, assimilate and absorb nutrients in human bodies. In a healthy, strong and immune body, invadersget neutralized or destroyed and expelled out of body. If Agni is impaired by an imbalance within by the Tridoshathen metabolism will get affected, immune response and natural resistance will also be lowered.

Rasayana(Rejuvenation therapy) and Vyadhikshamatva^[23]

Rasayanameans the way for attaining excellence in all body tissues through some special measures and medicines. Rasayanatherapy is one of eight major specialties of Ayurveda. The concepts of immunity and immunomodulation are extensively explored and used in Ayurveda, particularly in the form of Rasayanatherapy. According to Ayurveda, Rasayanahelps in strengthening Oja, Balaand thus increases Vyadhikshamatva. Benefits of Rasayanatherapy Long life (good), memory, great intelligence, perfect health, youthfulness, bright complexion and color, bold voice and magnanimity, increased strength, of the body and sense organs, perfection in speech, sexual power and brilliance are all obtained a from proper Rasayanatherapy.

Classification of Rasayanaaccording to method of use are - 1) Kutipraveshika rasayana(indoor regimen) and 2) Vatatapikarasayana(outdoor Regimen)

DISCUSSION

Vyadhikshamatvameans resistance to diseases or immunity against diseases is of two typesi.e. the one which attenuate the manifested disease and other variety prevents the manifestation of diseases. Sleshmain normal state considered as Balaand Ojaand function of normal Kaphalike that of Ojas. Agni(food assimilation power of body) is important for proper digestion of diet. Proper nourishment of Dhatuswill depend on wholesome and unwholesome food. Doshasare vitiated due to continuous taking unwholesome food ultimately affecting production of excellent essence of Dhatus i.e. Ojas. Final and excellent essence of Dhatusbeginning with Rasato Shukrais Ojas and that Ojasis said to be Bala. The concept of Vyadhikshamatvais related with Kapha, Bala, Agniand Ojas. AyurvedicRasayanatherapy in light of the concepts of modern immunology, particularly the immunomodulation will be quite rewarding. Many research works on the Rasayanadrugs are effective in improving immunity and prevent the disease as antibacterial and antifungal.

CONCLUSION

Vyadhikshamatvais described in Ayurvedaand this concept is considered equivalent to immunity. Our immune system is essential for our survival. Without an immune system our bodies would be open to attack from infections. It is our immune system that provides us

protection against pathogens. In Ayurveda, Ojashas been described as vital defense mechanism of the body. Ojasis final dhatuand vyadhikshamatvadepends on it. Vyadhikshamtvacan also be enhanced through balanced diet, proper daily regimen and rasayanatherapy.

REFERENCES

- 1. Kaviraj Ambikadutta shastri, Sushrut Samhita (Ayurveda Tantra Sandipika Hindi commentary), Part-I, Varanasi, Chaukhamba Sanskrit sansthan, 2005.
- 2. Brahmanand Tripathi, Ashtang Hridayam (Nirmala Hindi Commentary), New Delhi, Chaukhamba Sanskrit Pratishthan, 2009.
- 3. Brahmanand Tripathi, Sarangadhar Samhita (Hindi), Varanasi, Chaukhamba Surbharti Pratishthan, 2006.
- 4. Sharma MK. Concept of vyadhikshamatva (immunity) and its relationship with Bala (Vital strength), Global J Res. Med. Plants & Indigen. Med, 2013; 2(5): 386-391.
- 5. Kashinath shastri, Gorakha Natha Chaturvedi, Charaka Samhita (Vidyotini Hindi commentary), Varanasi, Chaukhamba Bharti Academy, Part-I (Reprint year: 2005) and Part-II (Reprint year: 2006), Sutrasthana 28/6(7), page no 571.
- 6. Dr. Bulusu Sitaram, Bhavaprakasha, Chaukhamba orientalia, Varanasi, Purvakhanda, chapter, 2015; 101(6): 1-2.
- 7. Ajay Kumar Sharma, Kayachikitsa, Chaukhamba orientalia, Delhi, 2011; 295.
- 8. Charaka Samhita, Chaukhambna orientalia, English translation, Varanasi, Sutrasthana, 2008; 297(2): 17-117.
- 9. Charaka Samhita, Chaukhambna orientalia, English translation, Varanasi, Sutrasthana, 2008; 2: 18-51.
- 10. Sushrut Samhita, Sutrasthana, 15-25.
- 11. Charaka Samhita, Sutrasthana, 11-36.
- 12. Kashinath Pandey and Gorakhnath Chaturvedi, Chaukhamba Bharti Academy, Varanasi, Charaka Samhita, Sutrasthana, 2009; 95: 6-5.
- 13. Kashinath Pandey and Gorakhnath Chaturvedi, Chaukhamba Bharti Academy, Varanasi, Charaka Samhita, Sharirsthana, 2009; 3-17.
- 14. Kashinath shastri, Gorakha Natha Chaturvedi, Charaka Samhita (Vidyotini Hindi commentary), Varanasi, Chaukhamba Bharti Academy, Part-I (Reprint year: 2005) and Part-II (Reprint year: 2006), Sutrasthana 11/36, page no 228.
- 15. Kashinath shastri, Gorakha Natha Chaturvedi, Charaka Samhita (Vidyotini Hindi

- commentary), Varanasi, Chaukhamba Bharti Academy, Part-I (Reprint year: 2005) and Part-II (Reprint year: 2006), Sharirsthana 6/13, page no 900.
- 16. Kashinath shastri, Gorakha Natha Chaturvedi, Charaka Samhita (Vidyotini Hindi commentary), Varanasi, Chaukhamba Bharti Academy, Part-I (Reprint year: 2005) and Part-II (Reprint year: 2006), Sutrasthana 17/75, page no 351.
- 17. Kaviraj Ambikadutta shastri, Sushrut Samhita (Ayurveda Tattva Sandipika Hindi commentary), Part-I, Varanasi, Chaukhamba Sanskrit sansthan, 2005; Sutrasthana 15/24, page no 60.
- 18. Brahmanand Tripathi, Ashtang Hridayam (Nirmala Hindi Commentary), New Delhi, Chaukhamba Sanskrit Pratishthan, 2009; Sutrasthana 11/37-38, page no 167.
- 19. Brahmanand Tripathi, Ashtang Hridayam (Nirmala Hindi Commentary), New Delhi, Chaukhamba Sanskrit Pratishthan, 2009; Sharirsthana 3/18, page no 370.
- 20. Kashinath shastri, Gorakha Natha Chaturvedi, Charaka Samhita (Vidyotini Hindi commentary), Varanasi, Chaukhamba Bharti Academy, Part-I (Reprint year: 2005) and Part-II (Reprint year: 2006), Sutrasthana 26/81, page no 517.
- 21. Dr. Priyanka Inaniyan, Immunity and its important through Ayurveda, World Journal of Pharmaceutical Research, 2021; 10(6): 234.
- 22. Dr. Priyanka Inaniyan, Immunity and its important through Ayurveda, World Journal of Pharmaceutical Research, 2021; 10(6): 235.
- 23. Dr. Priyanka Inaniyan, Immunity and its important through Ayurveda, World Journal of Pharmaceutical Research, 2021; 10(6): 236.