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Review Article

IMMUNITY – AYURVEDIC PERSPECTIVES AND PRACTICES

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ABSTRACT

Most discussable and most common topic today is *Vyadhikshamatva* (Immunity) due to past SAR COV-2 situation. Major curse on our earth is pandemic situation has become a major headache for every government and every agency. To face this situation and to avoid future we have to work on our *Vyadhikshamatva* (Immunity). According to Ayurveda, the power of body which decreases the harmful effects of the disease and stops the origin of the disease is known as *Vyadhikshamatva* (Immunity).

Vyadhikshamatva is a broad concept comprising the whole modern understanding of immunology and giving attention to the prevention and progression of diseases in human body.

Ayurveda is the science of life and its main aim is to maintain healthy status of healthy living being, i.e., prevention of disease and treatment of disease. To fulfil these purposes, Ayurveda has mentioned various fundamental principle in reference of *Sharira Rachana*, *Sharira Kriya*, *Chikitsa*, etc. 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*, *Prakriti*, *Desha*, *Kala* and concept of *Ojas* is one among them. According to the concept of *Ojas* or *Vyadhikshamatva* or *Bala* (immunity), the body's resistance is of tremendous importance in the daily life of living beings not only for disease prevention but also for rapid recovery after disease. In

Ayurveda prevention is an equally important aspect of disease management as cure and thus, strengthening the immune system, is a natural way to help the body fight against the disease-causing pathogens. In Ayurveda Acharyas promoted the use of *Rasayana* (Rejuvenation) to enhance *Ojas* and *Vyadhikshamatva* (immunity). *Rasayanas* are useful for Promoting Health and rejuvenating agents which by their empirical effects produce resistance against disease both physically and mentally.

KEYWORDS: *Vyadhikshamatva, Bala, Ojas, Immunity, Rasayana*

INTRODUCTION:

“*Swasthasya Swasthya Rakshanama Aturasya Vikara Prashamanam Cha*”, Main aim of Ayurvedic Science is to maintain the health of healthy individuals and cure the diseased one. Due to advancement of science and research, life span of human being has been increased but simultaneously threat of pandemic situation or communicable diseases is increasing day by day. To make command on this pandemic diseases we have to increase our own immune system. 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.

Vyadhikshamatva Functional role of-

- *Prana anuvarthana* – provide resistance and Preserves life
- *Harsha* –having a mind free of depression and anxiety and provide quality of life.
- *Arogyaanuvarthana* – Improves health.
- *Dosha nigraha* – Balances dosha and balance life
- *Vyadibalavighatha* – Inhibits the effects of diseases.
- *Vrana ropana* – Heals wound and recovery from diseases

CONTENTS

- To study the concept of *Vyadhikshamatva*.
- To study the *Bala* in detailed.
- To study the concept of *Ojas* and its function in detail.
- To study role of *Rasayan*.
- To study role of *Satva*

CONCEPT OF VYADHIKSHAMATVA The concept of *Vyadhiksamatva* (immunity) is huge importance in the daily wellness of human beings; for prevention and also recovery from diseases. *Acharya Chakrapaani* has described *Vyadhikshamatva* (Resistance to disease manifestation) in two ways ^[1]

1. *Vyadhibalavirodhitvam*- Capacity of the body to fight against disease.

2. *Vyadyutpadapratibandhakatvam* - Capacity to restrain or withstand the strength (Severity) or Virulence of diseases.

According to *Acharya* Sushruta in the context of a person with good immunity against diseases says, 'He who consumes food which is moderate in both properties viz. unctuousness and dryness, the essence of that consumed food gets formed in him, circulating throughout the body,

nourishes all the dhatus (tissues) properly, being in their normal, the dhatus, make for medium sized body; he will be capable of performing all activities, of enduring hunger, thirst, cold, heat, breeze, rain and sunlight and will be strong.^[2] Both of them together have called Immunity against disease and resistance against death and decay. Ayurveda emphasizes the promotion of health through the strengthening of host defences, against day-to-day physiological extremes as well as opportunistic maladies. Thus, *Vyadhikshamatva* implies a resistance against the loss of the integrity, proportion or amount, and interrelationship amongst the individual's *Doshas* (bioenergies) and *Dhatus* (tissues).

CONTRIBUTING FACTORS FOR VYADHIKSHAMATVA Various factors which contribute towards *Vyadhikshamatva* are normal *Doshas*, equilibrium state of *Dhatus* (bodily tissues), normal *Agni*^[3] (digestive fire), patency of *Srotas*^[4] (micro channels) etc. Person who is possessing excellence of all *Dhatus* including mental faculties i.e. *Sarvasara* are endowed with great strength, happiness and resistance to diseases.^[5] It follows then that the Ayurvedic concept of immunity is intricately interwoven with the concepts of nutrition, *Agni* (digestive fire), and tissue formation. In the ancient texts *Vyaadhikshamatva* which appears as a *Bala*, generally translated as "strength" and both terms are used as synonyms.

Vyadhikshamatva in different individuals- Some people with appropriate daily and seasonal habits develop disease and some peoples dose not developed in same condition like in Today's condition Corona affects easily to small age group and old age group due to variation in immunity power than young adult, though indulging in improper diet and behaviour hardly develop any disease. *Acharya* Charaka described two types of *Sharira* (individuals) - *Vyadhisaha* and *Avyadhisaha* which are similar and can be easily correlated to *Vyadhi Kshamatva* and *Akshamatva*. *Manobala* is also important Along with *Sharir Bala*; Person has poor *Vhadhikshamatva* if he /she has good *Sharirabala* but poor *Manobala* then generally they have and this is explained by *Acharya* Charaka by term *Alpa sattvaani*.

REVIEW OF LITERATURE

The materials were collected from the Ayurvedic classics, and research journals, articles etc.

MATERIALS AND METHODS

In Ayurveda *Vyadhikshamatva* related as: *Sleshma*, *Bala* and *Ojas*.

I. Sleshma: In normal state *Sleshma* is called *Bala* and *Oja*. *Sleshma* in abnormal state called "Mala" (waste) and "Papma" (diseases)^[6](Function of normal *Kapha* (*Kapha* is one of the *Tridosha* (three humors- *Vata*, *Pitta* and *Kapha*-which are said to be responsible for maintenance of homeostasis or equilibrium in the body), which performs the functions like strength, support, protection, growth and resistance) like that of *Ojas*. *Kapha* in normal state provides compactness, stability, heaviness, virility, immunity, resistance, courage and greedlessness.^[7]

II. Bala:

Acharya Sushruta mentioned *Bala* as "*Tatr Balen Sthiropacitamamsata Sarvachestasvapratigaatah Svaravarnaprashado Bahyanamabhyantraranam Cha Karananamatmakaryapratipattirbhavati*" means *Bala* imparts firm integrity to the muscles, improves the complexion and voice, helps the person to perform his natural functions (including the external and inner function) normally^[8] Three types of *Bala* (*Vyadhiksamatva* or immunity) in Ayurveda are: 1. *Sahaja* 2. *Kalaja* 3. *Yuktikrita*^[9]

a. Sahaja Bala (innate):- The constitutional strength present since birth. It depends on the healthiness of *Shukra* (sperms) and *Artava* (ovum). Genetics as per Ayurvedic concept, if two parents' genetic makeup is healthy, similar health status is acquired by the children. On the other hand if the genetic makeup of parents is susceptible to certain diseases, those diseases may be carried over into the next generation.^[10] This concept indicates genetic abnormalities which occur due to abnormal changes at genes or chromosomal levels.

b. Kalaja Bala (according to time, season, and age):- About the time of day, season, age etc. (according to *ritu* and age) factors for enhancing immunity. In the early morning Strength is assumed to be greater, spring, and *yuvaawastha* (young age) than in evening, summers and old age. ^[11]

c. Yuktikrita Bala (acquired):- Ayurveda focuses for acquiring *bala* or enhancing immunity by:

- Proper, nutritional, suitable *Ahara* (nutritious diet),
- Performing exercise (*Chesta*) with proper method &
- Using different beneficial Yoga, Pranayama, Meditation (e.g. *Rasayanachikitsa*)^[12]

III. Ojas:

1. According to Charaka, during embryogenesis the *Oja* appeared foremost in the human body.^[13]

2. The essence of *Saptadhatus* (*Saptadhatu* means the seven bodily tissues as from *Rasa* to *Shukra Dhatu* e.g. *Rasa* (plasma and lymph), *Rakta* (blood cells), *Mansa* (connective and muscular tissue), *Meda* (body fats e.g. adipose tissue), *Asthi* (bones), *Majja* (bone marrow) and *Shukra* (reproductive systems). is called *Oja* and it is the seat for strength, hence called *Bala*.^[14]

3. In Ayurveda, *Ojas* has 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 this intact, life also continues.^[15]

4. In conditions like and *Shosha* (malnutrition), *Madhumeha* (diabetes mellitus) where depleting of *Ojas* (infection fighting power) is a constant feature, people are known to be susceptible to various recurrent infections. Types:

- *Para Ojas*: This is *Ashtabindu* in quantity, if decreases then person will die.
- *Apara Ojas*: which is *Ardhanjali Ojas*, if decreases or vitiated manifest abnormalities. It is “*Somatmaka*” (mild and cool) and “*Snigdha*” (essence) in nature. Though predominately white in colour, has got some yellowish & whitish tinge. Ten great blood vessels connected to heart carry the *Rasatmaka Ojas*”, on which the whole life process itself is dependent.^[16]

Factors responsible for enhancement of strength

According to Carak acharya there are 12 factors responsible for increasing *Bala*(strength) of the body known as *Bala Vriddhikara Bhava*^[17]

1. Birth in a country where people are naturally strong like *Sindhpranta*.
2. Birth at a time when people naturally gain strength i.e. *Hemanta* and *Shishiraritu*(winter)
3. Favourable deposition of time (pleasant and moderate climate)
4. Excellence in the qualities of seed i.e. sperm and ovum, and *Asaya* i.e. uterus of the parents.
5. Excellence of the ingested food.
6. Excellence of the physique.
7. Excellence of the *Satmya* (healthiness of various factors responsible for maintenance of the body).
8. Excellence of the mind.
9. Favourable deposition of the nature.
10. Young age of both the parents i.e. they should not be over aged.
11. Habitual performance of exercise.
12. Cheerful disposition and immense love for each other. The individuals possessing most of these factors are naturally immune i.e. *Vyadhikshama* for diseases.

FOOD ARTICLES WHICH INCREASE OJAS AND BALA

1. The food which is light (*Laghu*) cold in potency unctuous and beneficial to body^[18]
2. *Jivniya* drugs and milk and its product^[19]
3. Food articles having *Madhura Rasa* and amla promotes *Ojas* and strength^[20]
4. *Katu* and *Tikta* take away the strength.

5. Milk the cow milk has got the ten properties like that of *ojas* thus it is best among vitalizers.^[21] *Takra* and *Navnita* are said to increase the strength.
6. *Ghrita* is mentioned as strength and *Ojas* promoter^[22]
7. *Mamsarasa* is meat soup it is nourishing and cordial it is as nectar for those suffering from phthisis, emaciation during convalescence. Eggs of swans, *Chakora*, hens, peacocks and sparrows if consumed immediately promote strength^[23]
8. Among cereals Barley *Yava* is *Balya*, wheat is vitalizer, bulk-promoting, stabilizer and heavy.^[24]
9. All pulses in general are strength promoter especially *Masa*^[25] and *Tila*. Fruits that are sweet in taste are *Balya* and nourishing especially Grapes, Dates, Coconut, *Phalgu*, ripened *Amra*, *Vataram*, *Abhisuka* and *Aksota*.

ROLE OF RASAYANA

Classification of Rasayanas: ^[26]

A) According to Acharya Charaka:

1. *Kutipravesika* (indoor regimen): Patient has to stay in a very specialized manner in the specifically made *Kuti*, As per the needs of *Rasayana*.
2. *Vatatapikarasayana* (outdoor regimen): Person can use it while doing his/her normal duties and staying at his or her own home.^[27]
3. *Achara Rasayana* (mode of conduct) - *Acharya* Charaka described in detail in *Rasayana* chapter^[28]. Aim is to follow a particular code of conduct in routine life, which keeps oneself to attain good mental and spiritual health. By following *Achara Rasayana*, person can be keep away from anxiety, stress, and thereby from all diseases that are generated due to undue stress, anxiety, fear, anger, depression etc.

B) According to Sushruta^[29]

1. *Sarvopaghatasamaniya* (*Rasayan* formulation which counteract various diseases process)
2. *Medhaayuskamiya* (*Rasyana* which increase intellect and longevity)
3. *Svabhavavaydhipratishedhaniya* (means delaying onset of *Svabhavika* disease)
4. *Nivrittasantapiya* therapy to improve immunity Promotion of health in Ayurveda is achieved by :

Rasayana drugs as Immunity boosting herbs	
<i>Guduchi</i>	<i>Tinospora cordifolia</i>
<i>Yastimadhu</i>	<i>Glycyrrhiza glabra</i>
<i>Jyothismati</i>	<i>Celastrus paniculatus</i>
<i>Shatavari</i>	<i>Asparagus racemosus</i>

<i>Amalaki</i>	<i>Indian gooseberry</i>
<i>Brahmi</i>	<i>Bacopa monnieri</i>
<i>Ashwagandha</i>	<i>Withania somnifera</i>
Immunity herbs with Rasayana	
<i>Pippali</i>	<i>Piper longum</i>
<i>Haritaki</i>	<i>Terminalia chebula</i>
<i>Chyavanprasha</i> - Provide immunity and in today's scenario it is the best <i>Rasayana</i>	

These are being explored for their effect on immune system. Available evidence shows these drugs modulate immune functions by improving antibody formation, macrophage activation and CMI suppressing effects. They can act as immunosuppressant, immune stimulant and immune adjuvant. These drugs promote nutrition by direct enrichment of nutritional qualities and improving *Agni* (digestion and metabolism)

ROLE OF SATVA (PSYCHE) in immunity *Manasik Vyadhikshamatva* or *Bala* can be understood in the sense of making an individual strong mentally to cope up with mental stress variably and can tolerate the disease and treatment. *Ojas* maintains the smooth functioning of sensory organs or cognitive thus making to audition, perceive vision etc at their optimum level. As far as mind or psyche is concerned it endows an individual with the feeling of strength and lightness. *Ahara* also important for to improve *Stvikta* and immunity, also good *Ahara* developed positivity ultimately *Satva*. *Ahara Sambandhita Sadvritta* (food habits) - Kashyapa *Acharya* said Food as *Mahabheshajam*. *Ahara* improves vitality, strength, complexion and *Ojas* (immunity). Use *Ahar Vidhi* (method of meal) as per mentioned by *Acharya Charaka* in *Vimansthan Adhyaya Rasaviman* like *Snigdha*, *Matrvat*, Consumed after digestion of previous food, *Virya Avirudha Ahara*, taken at *Ista Desha*, with *Ista Sarvopkarana*, not taken speedily, slowly, taken without talking with others, without laughing, taken with full concentration of mind etc.

DISCUSSION

The body's resistance is importance in the health of living beings, for prevention and rapid recovery from diseases. This force computed, as regards everyday wellness termed as *Vyadhikshamatva*. Principles of *Vyadhikshamatva* in Ayurveda are free from diseases and lead healthy and prosperous life.

The *Vyadhikkshamatva*, *Ojas* and *Bala* are not entirely different from each other. All of these directly or indirectly indicate towards body resistance. In view of prevention and recovery from disease, body resistance plays a significant role.

The vital essence of all the dhatus from *Rasa* to *Sukra* is *Ojas* and it is responsible for the maintenance of tissue elements. *Acharya Ckrapani* mentions *Ojas* being a factor for resistance, is also the source of energy to all body elements including mind. Only one of the numerous functions of *Ojas* is *Vyadhikkshamatva*. As the function of *Aparaojas* and *Vyadhikkshamatva* in turn depends upon *Sahaja*, *Kalaja* and *Yuktikritabala*.

Suitable diet and appropriate regimen according to the season is the way to achieve strength, vitality, energy and longevity. The acquired strength can be gained by appropriate diet and behavioural regimen.

SUMMARY

The main purpose and objectives of Ayurveda is the preservation of health in healthy individual and eradication of diseases which are curable. In the present scenario of Covid-19 pandemic most horrible situation, to survive in this pandemic we have to work on our *Vyadhikshamatva*(immunity) world accepted the ayurvedic fundamental like “*Swasthasya Swasthya Rakshanam; Aturasya Vikarprashamana Cha*”. In Ayurveda science different varieties of food, medicine, and procedures are mentioned to maintain healthy life and long-life span by improving *Vyadhikshamatva*. The external factors used to improve *Vyadhikshamatva* are the good quality of food (*Ahara*), adaptability of food and environment (*Vihara*) etc. and internal factors like *Bala*, *Ojas* etc. also by taking Rasayana we improve our *Vyadhikshamatva*. In above explain concept of *Vyadhikshamatva*, *Ojas*, *Bala*, *Satva* and *Rasayana*.

CONCLUSION

Vyadhikshamatva ultimately depends on the status of *Ojas*, *Sahaja*, *Kalaja* and *Yuktikritabala*, diet etc Ayurvedic *Rasayan* treatment corrects the *Agni* and thereby produce best *Dhatu* as *Dhatwagnis* are also at their best ability; for attaining good *Vyadhikshamatva*, we should use various regimens and follow conducts as described in Ayurvedic texts for maintenance of health such as -Eat Good and Nutritious food, Follow right eating habits, Adopt *Dincharya Ritucharya*, Timely *Shodhana*, *Rasayana* Therapies, Follow *Sadvritta* and *Achara Rasayana*. Time to integrate Ayurveda lifestyle in our modern lifestyle. Good Immunity will be outcome even in such horrible pandemic situation like SAR COV-2.

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