Website: www.ijhsr.org ISSN: 2249-9571

Review Article

Concept of Yuktikruta Bala W.S.R. to Acquired Immunity Viz Passive Immunity

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ABSTRACT

To maintain the healthy status of human being is very important; especially in today's era. Globally as well as nationally the immunity of humans is getting compromised by every passing day because of sedentary, busy and unorganised life style including eating habits. Immunity is one's internal capacity to resist any physical anomaly or disease. In *Ayurveda*, Immunity can be well correlated with *vyadhikshamatwa* which is due to *ojas* and *bala*. *Trividha Bala* has been quoted in *ayurvedic* literature as *sahaja*, *kalaja* and *yuktikruta bala*. Innate immunity may be correlated to *sahaja bala* described in Ayurveda. *Kalaja* and *yuktikruta bala* may be correlated to acquired immunity. *Yuktikruta bala* can be acquired by making effective changes in the diet and physical activities in one's daily routine and similarly the acquired immunity is the resistance developed against any bacteria, virus etc it may be either through active or through passive means. *Bala* is characteristic feature of healthy physical and mental state of body. Immunity and *bala* are interrelated terms.

Key words: Sahaja bala, kalaja bala, yuktikrita bala, innate immunity, acquired immunity.

INTRODUCTION

Immunity is defined as the one's capacity to resist pathogenic agents or various diseases. It is the ability of body to resist the entry of different types of foreign bodies like bacteria, virus, toxic substances, etc. In Ayurvedic reference, it is the tendency of the body to keep *dosha*, *dhatu* and *mala* in equilibrium.

There are two types of Immunity mentioned in the texts:

- a. Innate immunity.
- b. Acquired immunity.

1) Innate immunity -

Innate immunity is also termed as Non-specific immunity and it is the capacity of the body to resist pathogens by birth. Somehow, if the organism enters the body, it eliminates them before they start developing any disease. It is also known as natural or non-specific immunity because it

represents the first line of defence against any type of pathogens. Innate immunity is provided by antibodies.

It Ayurveda, innate immunity can be correlated with *sahaja bala* quoted among *trividha bala* as-

सहजं यच्छरीरसत्त्वयोः प्राकृत । (च.सू-११/३६) which says *sahaja bala* is the one which is present in

mind and body since birth.

2) Acquired immunity -

Acquired immunity is also termed as Specific immunity and it is the resistance developed in the body against any specific foreign body like bacteria, viruses, toxins, vaccines and grafted or transplanted tissues. It is the most powerful defence mechanism that protects the body. Acquired immuity is provided by B-Lymphocytes.

In Ayurveda, acquired immunity can be well correlated to *yuktikruta bala* quoted among *trividha bala* as-

युक्तिकृतं पुनस्तद्यदाहारचेष्टायोगजम् । (च.सू-११/३६)

which says that *yuktikruta bala* is the one which can be gained by the combination of diet and other daily regimen i.e *dincarya* and *ritucarya*.

Acarya cakrapani commented upon the above verse and said-

युक्तिः आहारचेष्टयोः सम्यक् शरीरेण योजना। आहारस्य मांससर्पिरादेः, चेष्टाया उचितविश्रामव्यायामादेर्योग आहारचेष्टायोगः; अन्ये तु योगशब्देन रसायनप्रयोगं ग्राहयन्ति॥

which says that, in human body *bala* can be gained by proper combination of consumption of wholesome food like meat, ghee etc and other regimen like proper rest, exercise etc and also through the use of various *rasayanas*.

It is of two types-

- a. Active Immunity (Sakriya bala)
- b. Passive Immunity (*Nishkriya bala*)

Passive immunity can be further subdivided into 2 types –

- 1) Natural Passive (Akrutrim / Sahaja)
- 2) Artificial Passive (Krutrim)

Ayurveda has described *trividha* bala as sahaja, kalaja and yuktikruta bala. Yuktikruta bala can be well correlated with acquired immunity viz passive immunity as in both, the inner strength to resist diseases has been developed by external means i.e by eating healthy and making effective changes in lifestyle.

Aim-

To study the various factors to find out the correlation between *Yuktikruta bala* and acquired immunity or passive immunity.

MATERIAL AND METHOD

A detailed study has been done from *Charaka Samhita* and its various commentaries along with other modern

literature and digital media containing information about immunity.

LITERATURE REVIEW

In Ayurveda three types of *bala* have been described *as Sahaja*, *Kalaja* and *Yuktikruta*.

1. Sahaja Bala (natural strength): -

It is natural strength of body which is present in an individual since birth from mother's *artava* and father's *shukra*. *Sahaja bala* also depends on *mansika* and *sharirika bala* of mother & father at the time of conception and *mansanumasik garbhini paricharya* (monthly regimens in pregnancy) of mother during her period of pregnancy.

2. Kalaja Bala (periodic strength): -

Strength of mind and body also depends upon season and age which varies accordingly and it is hence called *kalaja bala*.

3. Yuktikrut Bala (acquired strength): -

Strength of mind and body which depends upon proper diet, physical activities, *aushadha*, *rasayana* (rejuvenating drugs) and *vajikarana* (aphrodisiacs) is *yuktikruta bala*. It can be achieved by the proper and regular usage of above factors.

In Jwara chikitsa, it is mentioned that,

बलाधिष्ठानमारोग्यं यदर्थोऽयं क्रियाक्रमः॥१४२॥

which means healthy status of the individual depends upon *bala*.

In the same chapter it is also mentioned that,

बलंह्यलंवनग्रहायदोषाणां बलंकृच्च तत्। (च.चि-३/१६६)

Means *bala* is responsible for elimination of disease if they anyhow caused. So, it is clear that the concept of *bala* is directly related in maintaining the healthy status of body and the management of disease.

In Charaka Samhita, Rogabhishagjitiya adhyaya of Vimanasthana; sara pariksha have been specially described for measuring the *bala* of an+ individual.

In Charaka Samhita, Shariravicaya sharira of Sharirsthana; various factors that promotes the strength of one's body have been quoted as 'Bala vriddhikara bhava' बलवृद्धिकरास्त्विमे भावा भवन्ति। तद्यथा-बलवत्पुरुषे देशे जन्म बलवत्पुरुषे काले च, सुखश्च कालयोगः, बीजक्षेत्रगुणसम्पच्च, आहारसम्पच्च, शरीरसम्पच्च, सात्म्यसम्पच्च, सत्त्वसम्पच्च, स्वभावसंसिद्धिश्च, यौवनं च, कर्म च, संहर्षश्चेति॥ (च.शा-६/१३)

Balavriddhikara bhava mentioned are-

- o *Balavana desha* birth in the place with naturally strong environment. For example. *Desha* like Punjab, Sindha where people have naturally strong constitution since birth.
- o **Balawana Kala** (time)- that time when all plants & environmental factors are strong and healthy i.e. *Viasrga kala* and birth during this helps to improve strength.
- o *Sukhascha Kaalayoga* favourable conditions which leads to good strength.
- Beeja kshetra sampata maternal and paternal endowment at the time of conception.
- o *Ahara sevana* Intake of healthy and nutritious food.
- o *Shareer Sampaccha* having good bodily constitution.
- o Satmya Sampaccha being habitual to everything related to diet, medicine & environment etc.
- o *Satva Sampaccha* having excellent mind and intellect.
- o **Swabhav Sampaccha-** excellence of natural endowment.
- o *Yauvan* youthfulness with maximum strength.
- Karma- karma are the deeds of an individual regarding health (panchakarma), diet, talk and behaviour in society.
- o **Samharsha-** having sexual excitement and enthusiasm.

Hence, *sharir bala* enhancing factors mentioned above plays an important role in building the immunity and among all these *balavriddhikara bhava; yuktikruta bala* can be enhanced by *sukhascha kalayoga, beeja kshetra guna sampat, ahara sampata, sharira sampat, satmya sampata, karma and samharsha*. Rest other factors improves *sahaja* and *kalaja bala*.

There are various methods mentioned in *ayurveda* that are considered to enhance the *bala* of an individual and as they are done by external means so it can be considered to promote the *yuktikruta bala* of an individual. They are-

- By following masanumasika garbhini paricarya, pumsavana karma for the outcome of a healthy foetus.
- ❖ By the use of *lehana karma*, *medya* rasayana to promote the health of infant.
- ❖ By following the daily regimen (dincarya) and seasonal regimen (ritucarya) to lead a long and healthy life.
- ❖ By using the *satmya ahara-vihara* and avoiding *asatmya ahara-vihara*.
- ❖ By having good sleep, performing different *vyayamas* and *yogas*.
- ❖ By adopting various *shodhana* therapies according to the season, the demand of one's bodily constitution and *doshas* aggravated.
- ❖ By following *sadvrutta* & *achara rasayana* for promoting mental and spiritual strength.
- ❖ By using *rasayanas* and *vajikarana* dravyas for a better life.

In vividhashitapiteeya adhyaya of sutrasthana of caraka samhita, it is mentioned that -

न च सर्वाणि शरीराणि व्याधिक्षमत्वे समर्थानि भवन्ति।

Which means not every individual have capacity to fight against diseases. It also means that *vyadhikshamatwa* varies with age, seasonal variations and the constitution of the body. Commenting on the above verse *Acarya cakrapani* has clarified that –

व्याधिक्षमत्वम्व्याधिबलविरोधित्वम्व्याध्युत्पाद्प्रति बन्ध्कत्वमितियावत्।

(चक्रपाणि टीका, च.सू-२८/७)

which means the concept of *vyadhikshamatwa* includes both the concept of maintaining the health and treatment of diseases which is also the objective of *ayurveda*. Concept of *vyadhikshamtwa* is related to *ojas* and *bala*.

तत्ररसादीनांशुक्राततानांितूनांयत्परंतेजस्तत्खल्वो जस्तदेवबलवमत्युच्यते॥ (सु.सू.१५/२४)

Ojas is said to be the essence of all the dhatus in body and is called bala. Two types of ojas have been quoted by Acarya cakrapani in his commentary on च.सू-१७/७३

- Para Ojas
- Apara Ojas

Amongst these two *ojas*; *apara ojas* is considered as the base of immunity and hereby responsible for the development of *vyadhikshamatwa* in human body. *Acarya dalhana* has mentioned the use of *rasayana* and *vajikarana dravyas* for treatment of *ojas kṣaya* while commenting on term 'kriya visheṣha' quoted by acarya susruta.

DISCUSSION

Immunity is a biological term that describes a state of having sufficient biological defence to avoid infection, disease, or other unwanted biological invasion. It can be both specific and non-specific. 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. 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 immunity acquired can be further subdivided depending on whether immunity induced in the host or passively transferred from a immune host. Yuktikruta bala and acquired immunity 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.

CONCLUSION

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 and 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 vyadhikshamatwa normal are 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 yuktikruta bala w.s.r to acquired immunity viz passive immunity. In avurveda samhitas, concept vyadhikshamatwa, ojas and bala are described in scientific manner and factors responsible for increasing bala described during treatment in cikitsasthana factors various responsible preventing particular disease in the form of ahara, vihara and drugs are also described. It is the need of time to compile them and

make protocol for increasing bala and vyadhikshamatwa for every disease i.e common for all as well as for particular disease. Concept of rasayana and vajakarana is just guideline for increasing bala and vyadhikshamatwa. One who adopts ayurveda principles in day today life will become free from diseases and can lead healthy and prosperous life.

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How to cite this article: Gangwar A, Yadav SS. Concept of *Yuktikruta Bala w.s.r.* to acquired immunity viz passive immunity. *Int J Health Sci Res.* 2021; 11(2): 125-129.
