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## Critical analysis of Ayurvedokta Vyadhikshamatva concept

### w.s.r. to modern immunity

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**Abstract:** The far most objective of *Ayurveda* is to prevent the disease. For prevention of diseases, *Ayurveda* had advocated the adherence to concepts like *dina charya* (Daily code of conduct), *ritu charya* (seasonal code of conduct), *sadvritta* (noble code of conduct), *Na vega dharan* (non suppression of natural urges) etc. Whereas these measures are useful in preventing the lifestyle related diseases but for preventing the *Aupsargik rogas* (communicable diseases), *Janapada dhwansa rogas* (epidemic diseases), *Krumij Roga* (Infectious diseases), *Asatmyaj roga* (allergic disorders), the concept of *Vyadhikshamatva* (Immunity) is propagated by the *Ayurvedic science*. But this important concept is not properly explored in *Ayurvedic science* after independence and remained neglected for long time only to come in limelight and in syllabus after the awareness and propagation of immunization schedule by government of India. The present study aims to re-explore the *Ayurvedokta* concept of *Vyadhikshamatva* critically with reference to concept of immunity described in modern medical science. *Vyadhikshamatva* in *Ayurveda* is defined as the biological defensive power of the body to fight against the ongoing afflicted diseases (*vyadhibala virodhitwam*) and to prevent the future development of disease (*vyadhi utpad pratibandhakatwam*). [C.Su. 28/7]. In modern science, immunity is defined as the ability of the body to recognize the harmful antigen and eliminate it through body defense system and by forming specific antibodies against the antigens. Practice of immunization was known to Indians from long times and they were using it with regard to small pox infection as stated by *Acharya Gananath Sen*. It was also known to ancient *Circassians* (border area of Russia). Later in the year 1796, the Englishman Edward Jenner further researched on it and made it popular. The result of the present study shows that the *Ayurvedokta* concept of *Vyadhikshamatva* is nothing but the immunity concept mentioned in modern science. Review of literature showed that the concept of *Vyadhikshamatva* is very well described in *Ayurveda* almost as on modern line. In both sciences, the concept of immunity and hypersensitivity is described together.

## INTRODUCTION

The far most objective of *Ayurveda* is to prevent the disease. For prevention of diseases, Ayurveda had advocated the adherence to concepts like *dina charya* (Daily code of conduct) , *ritu charya* (seasonal code of conduct), *sadvritta* (noble code of conduct) , *Na vega dharan* (non suppression of natural urges) etc. Whereas these measures are useful in preventing the lifestyle related diseases but for preventing the *Aupsargik rogas* (communicable diseases), *Janapada dhwansa rogas* (epidemic diseases), *Krumij Roga* (Infectious diseases), *Asatmyaj roga* (allergic disorders), the concept of *Vyadhikshamtva* (Immunity) is propagated by the Ayurvedic science. But this important concept is not properly explored in *Ayurvedic* science after independence and remain neglected for long time only to come in limelight and in syllabus after the awareness and propagation of immunization schedule by government of India. There is lot of confusion about the types of *Vyadhikshamatva* in *Ayurvedic* science owing to the ambiguity and lack of proper understanding of this concept. The present study aims to re-explore the *Ayurvedokta* concept of *Vyadhikshamatva* critically with reference to concept of immunity described in modern medical science. *Vyadhikshamatva* in *Ayurveda* is

defined as the biological defensive power of the body to fight against the ongoing afflicted diseases (*vyadhibala virodhitvam*) and to prevent the future development of disease (*vyadhi utpad pratibandhakatvam*). [C.Su. 28/7]. In modern science, immunity is defined as the ability of the body to recognize the harmful antigen and eliminate it through body defense system and by forming specific antibodies against the antigens.

## MATERIAL & METHOD

The literary method of research was adopted for the present study. Critical study of *Ayurvedic* as well as modern literature pertaining to the subject is carried out to come to the logical result and conclusions.

## OBSERVATIONS

### Definition of *Vyadhikshamatva*:

व्याधिक्षमत्वं व्याधिबलविरोधित्वं व्याधि उत्पादप्रतिबन्धक (शरीरबलं) इति । चक्रपाणि— च. सू.28/7

**Vyadhikshamatva** refers to the biological defensive power of the body to fight against the ongoing afflicted diseases (*vyadhibala virodhitvam*) and to prevent the future development of disease (*vyadhi utpad pratibandhakatvam*). [C.Su. 28/7]

In modern context *Vyadhikshamatva* is referred as **Immunity** which is defined as the balanced state of the organisms having adequate biological defense to

fight infections and diseases or other biological invasion while having adequate tolerance to avoid allergy and autoimmune diseases. In modern science, allergy and immunity are now described together. Modern science considers infection as some kind of allergy and its features as allergic response.

In Ayurvedic science, also, Viruddha Vikar (allergic disorders) and Vyadhikshamatva (immunity) are also discussed together. In Ayurveda, antigen is referred as *Dehadhatu-pratyanik dravya*. Anything that produce sharir viruddha allergic manifestation in the body can be called as *Dehadhatu-pratyanik dravya or Asatmya dravya*.

### How Vyadhikshamatva Develops

देहधातुप्रत्यनीकभूतानि द्रव्याणी देहधातुभिः विरोधम्  
आपद्यन्ते; परस्परगुणविरुद्धानि कानिचित्, कानिचित्  
संयोगात्, संस्कारदपराणि,  
देशकालमात्रादिभिश्चापराणि, तथा  
स्वभावादपराणि।। च.सू. 26 / 81

**चकपाणि** — व्याधिप्रतिद्वन्द्वैः व्याधिप्रत्यनिकैः  
हेतुप्रतिद्वन्द्वैः हेतुप्रत्यनिकैः प्रतिद्वन्द्व शब्द  
विपरातार्थकारिण। च.सू. 7 / 44

The *Dehadhatu-pratyanik dravyas* (antigens) gets resistance from the *Dehadhatu*s (antibodies from cells) due to factors like antagonistic properties of each other (*paraspar gunavirodhat*), sensitive contact (*sanyogat*), unsuitability to geographical distribution (*desh*

*virodhat*), abnormal dose (*matra virodhat*) or as a natural defensive reaction against antigen (*svabhawat*).

The *asatmya dravyas* (incompatible substance) constitute the antigens to the body as its contact leads to the allergic manifestation in the body. This *asatmya dravyas* may be food or microbes.

So antibodies are developed in the body as a result of entry of antigens. These antibodies fight against the entry and reentry of antigens as the immunity develops. This is beneficial in case of microbial antigen so that infectious disease is prevented but if the antigen is food then allergic reaction may occur.

The reaction is severe at second time as the antibody titer is high during second and subsequent entries of antigens.

### Variations in Vyadhikshamatva (Immunity)

न च सर्वाणि शरीराणि व्याधिक्षमत्वे समर्थानि  
भवन्ति। शरीराणि च अतिस्थूलानि अतिकृशानि  
अनिविष्टमांसशोणित्वास्थीनि दुर्बलानि असात्म्य  
आहार उपचितानि अल्पाहाराणि अल्पसत्त्वानि च  
भवन्ति व्याधि असहानि, विपरीतानि पुनः  
व्याधिसहानि। च.सू. 28 / 7

**चकपाणि—** व्याधि अक्षम शरीराणि — निविष्टानि इति  
विषमाणि किंवा श्लथानि मांसादिनि, उपचितानि  
सर्वर्धितानि विपरीतानि इति अनतिस्थूलत्वादियुक्तानि,  
व्याधिसहानि इति व्याधि उत्पादप्रतिबन्धकानि । तेन  
यथा उक्त अपथ्यबलवैपरित्यं दोषबलवैपरित्यं च न  
सद्यो व्याधिकारकं भवेत् इति ।

न सर्वाणि वपूषि च व्याधिक्षमत्वे शक्तानि। अ.सं.सू. 9 / 89

इंदु – बहु अपि दोषः कुपितो व्याधिक्षमे देहे न लक्ष्यते विकारं , पीडाकरण अशक्तत्वात् ।

There are individual variations in *Vadhikshamatva*. Not all individuals have good immunity. The individuals having obese, thin, uneven, weak body and those who could not get proper nutrition on account of incompatible diet and inadequate diet and those who have low mental toughness are prone to diseases and cannot offer resistance to the diseases due to low immunity. These types of bodies have been referred as '*Vyadhi A-ksham Shararni*' (bodies which cannot resist the diseases) by Acharya Chakrapani i.e. **not having** *Vyadhikshamatva* (immunity). In these individuals , even the minor diseases become severe. In contrast to this, the individuals having proportionate and properly nourished body with good mental endurance, are called as '*Vyadhi Ksham Sharirani*' (bodies which can resist the diseases) and **have good** *vyadhikshamatva* (immunity) to prevent and fight against the diseases. In these individuals, even the major diseases become minor due to good defensive power. [C.Su. 28 / 7]

### The Sharir Bala Enhancing Factors :

बलवृद्धिकराः तु इमे भावा भवन्ति । तद्यथा—बलवत्पुरुषे देशे जन्म बलवत्पुरुषे काले च, सुखश्च कालयोगः, बीजक्षेत्रगुणसंपत् च, आहारसंपत् च, शरीरसंपत् च, सात्म्यसंपत् च, सत्त्वसंपत् च, स्वभावसंसिद्धिः च, यौवनं च, कर्म च, संघर्षः च इति ।। च.शा. 6 / 13

**चक्रपाणि** – सैन्धवाः बलवन्तः पुरुषः । बीज शुक्र आर्तव रूपस्य क्षेत्र गर्भशयरूपस्य । कालयोग इति वृद्धिकारक यौवनादि कालयोगः, यौवनादौ सप्तदशसंवत्सरात् । हेमन्ते शिशिरे वा काले जायमानस्य स कालो बलं जनयति । स्वभावसंसिद्धिः बलजनक कर्मसंसिद्धिः, व्यायामादि कर्म अभ्यासात् बलं भवति ।

#### 1. *Balwat Purushe Deshe Janma* -

The birth in the country of strengthen peoples is natural strength provider. Such as in *Sindhu desha*. The peoples of the *Sindh* (now in Pakistan) and Punjab area considered as strengthen peoples on the basis of their height weight and healthy status.

2. *Balwat Kale Janma* – The birth in healthy seasons like winter (*Hemant* or *Shishir ritu*) is natural strength offering. As pr Ayurveda the Hemant and Shishir are considered to be the healthiest among all the ritus. In these ritus due to the outside cold, internal appetite is strong and digests the food early. Hence, peoples tend to eat more in this season.

3. **Sukhakar Kalyoga** – The happy period of life is a natural strength offering. During happy time the positive mood and approach towards life boosts the immunity and fills the person with energy and enthusiasm.
4. **Bija Guna Sampat** – The genetically healthy ovum and sperm give birth to healthy and strengthly offspring. This is also a natural strength enhancer. The defects in genes leads to diseases like diabetes, asthma, piles, epilepsy etc
5. **Kshetra Guna Sampat** – The healthy state of uterus with respect to nutrition during intrauterine life is a natural strength enhancer.
6. **Aahar Sampat** – The balanced nutritious diet is a natural strength enhancer by virtue of fulfillment of all dietary needs of proteins, fats, carbohydrates, minerals, vitamins etc.
7. **Sharir Sampat** – The well built of the body is a natural strength enhancer.
8. **Satmya Sampat** – The adaptability of the body to all the foods is a natural strength enhancer. The compatibility to all the six tastes (*shad rasa*) leads to balanced diet by virtue of which all the

necessary nutrition is provided to the body and body becomes strong.

9. **Satwa Sampat** – The healthy mental framework is a natural strength enhancer. It offers strength to fight against the diseases. The persons having *pravar satva* does not care about minor ailments.
10. **Swabhav San-Siddhi** – It refers to the person's engagement in strength increasing measures.
11. **Yawanam** – The young age is natural strength provider. The young age is considered to be strengthiest among all ages and is a natural strength enhancer period of the life.
12. **Karma** – The *karmaj bala* here refers to the strength obtained through exercise. The exercise tones the muscles and arouses the appetite and boosts the immunity.
13. **Sanharsha** – It is the orgasm obtained after sexual intercourse. This releases the happy andorphins in the body which gives pleasing sensation and happy and contended mood.

#### Person who have good immunity

सात्म्यतो अल्पतया वाऽपि दीप्ताग्नेः तरुणस्य च ।

स्निग्धव्यायामबलिनां विरुद्धं वितथं भवेत् ।। च.  
सू. 26/105

Following persons enjoy good immunity  
as per Ayurveda.

1. Those who is subjected to antigen in low dose [सात्म्यतो अल्पतया]
2. Person having strong appetite [दीप्ताग्नेः]
3. Young individual [तरुणस्य]
4. Those who take unctuous substance in diet [स्निग्ध]
5. Those who do regular exercise [व्यायाम]
6. Strong built person [बलिनां]

### How Immunity Could Be developed In The Body

एषां खल्वपरेषां च वैरोधिकनिमित्तानां व्याधीनाम्  
इमे भावाः प्रतिकारा भवन्ति । तद्यथा— विधैः च  
द्रव्यैः पूर्वमभिसंस्कारः शरीरस्य इति ।। च.सू.  
26/104

**चक्रपाणि** — अभिसंस्कार इति सतत उपयोगेन  
शरीरभावनम् ।

**हेमाद्रि** (अ.ह.सू. 7/47) — सह आत्मना भूतं सात्म्यम्  
आत्मनः सहायभूतम् अनुकूलं सुखावहं अति अर्थः । तत्  
च द्विविधं कृत्रिमं अकृत्रिमं । तत्र यत् अभ्यासेन  
क्रियते तत् कृत्रिमं । अकृत्रिमं तु निः—उपाधिकं  
स—उपाधिकं । तत्र दोषादि निरपेक्षं निःउपाधिकं,  
दोषादि विपरीतगुणत्वं उपाधिः । दोषादि सापेक्षं  
सउपाधिकं, दोषादि तुल्यगुणत्वं उपाधिः ।

As per methodology, body should be  
preconditioned for fighting against the  
*asatmya* (allergic) things like food or  
microbes by slow sensitization of body

with low dose of allergens or antigens at  
regular intervals. [विधैः च द्रव्यैः  
पूर्वमभिसंस्कारः शरीरस्य]

This could be acquired actively  
(*Akrutrim*) or passively (*Krutrim*).

1] **Sakriya (Active)** - Adaptive immunity  
could be naturally acquired through direct  
contact with disease agent. It could be  
again *Akrutrim* (Natural) or *Krutrim*  
(Artificial).

2] **Nishkriya (Passive)** - It can be  
passively acquired through transfer of  
readymade antibodies. It could be again  
*Akrutrim* (Natural) or *Krutrim*  
(Artificial).

### Types of Vyadhikshamatva

As *Vyadhikshamatva* is nothing but the  
*vyadhivirodi* and *vyadhi utpad*  
*pratibandhak sharir bala*, it can be  
classified on the basis of types of *sharir*  
*bala*.

त्रिविधं बलमिति— सहजं, कालजं, युक्तिकृतं च ।  
सहजं यत् शरीरसत्त्वयोः प्राकृतं, कालकृतम्  
ऋतुविभागजं वयःकृतं च, युक्तिकृतं पुनः तत्  
आहार चेष्टायोगजम् ।। च.सू. 11/36

**चक्रपाणि** — प्राकृतं जन्मादिप्रवृत्तं दृश्यन्ते केचित्  
स्वभावात् एव बलिनो दुर्बलाः च । सत्त्वं मनः  
मनसो बलं वा यत् उत्साह उच्यते । युक्तिः आहार  
चेष्टायोः सम्यक् शरारेण योजना । आहारस्य मांस  
सर्पिः आदे योजना चेष्टाया उचित विश्राम व्यायाम  
आदे योगः अन्ये रसायन अपि ग्राहयन्ति । च.सू.  
11/36



हेमाद्रि (अ.ह.सू. 7/47) – तत् च द्विविधं कृत्रिमं अकृत्रिमं । तत्र यत् अभ्यासेन क्रियते तत् कृत्रिमं । अकृत्रिमं तु निः-उपाधिकं स-उपाधिकं ।

As sharir bala is of 3 types, the Vyadhikshamatva bala is also of 3 types :

1. Sahaj Vyadhikshamatva
2. Kalaj Vyadhikshamatva
3. Yuktikrit Vyadhikshamatva

### 1.Sahaj Vyadhikshamatva Bala (Innate – Natural immunity) :

सहज यत् शरीरसत्त्वयोः प्राकृतं । च.सू. 11/36

बलवृद्धिकराः तु इमे भावाः भवन्ति ... बीजक्षेत्रगुणसंपत् च । च.शा. 6/13

बीज शुक्र आर्तव रूपस्य क्षेत्र गर्भशयरूपस्य । चक्रपाणि – च.शा. 6/13

It refers to the natural (innate) immune power present in the body by virtue of genetic make up of an individual. If the ovum of the mother and sperm of the father are genetically healthy then their child will also be healthy. This is naturally present *Vyadhikshamatva bala* (immunity). It also includes the mental toughness acquired from parents. Some are born tough mentally and are less affected from diseases. Sahaj Vyadhikshamatva (Innate Natural Immunity) could vary as per species, races and individuals.

**A] Species related Sahaj Vyadhikshamatva (Innate Natural Immunity) -** Certain antigens are

pathogenic to humans but not to some species. For e.g. Dogs and horses are resistant to Tuberculosis. Hens are immune against tetanus and rats against diphtheria.

**B] Race related Sahaj Vyadhikshamatva (Innate Natural Immunity) -** Certain races are immune to certain diseases. Jews have immunity against tuberculosis whereas Nepalese are susceptible to it.

**C] Individual related Sahaj Vyadhikshamatva (Innate Natural Immunity) -** It depends upon the individual's health, diet, exercise, age, adaptability, mental toughness etc.

### Sahaj Akrutrim Vyadhikshamatva Bala (Innate – Passive immunity) :

In Ayurveda, the instillation of *matru stanya* (mother's milk) is used for treating eye infections. Also mother's milk help in fighting abdominal infections in new born. These readymade antibodies present in mother's milk is an example of passive natural immunity. The maternal readymade antibodies are also passed to the foetus through blood.

### 2.Kalaj Vyadhikshamatva Bala (Natural Seasonal & Age related Immunity) :

कालकृतम् ऋतुविभागजं वयःकृतं च । च. सू. 11/36

बलवृद्धिकराः तु इमे भावाः भवन्ति ... सुखः च कालयोगः यौवनं च । च.शा. 6/13

कालयोग इति वृद्धिकारक यौवनादि  
कालयोगः, यौवनादौ सप्तदशसंवत्सरात् ।

चक्र— च.शा. 6/12

हेमन्ते शिशिरे वा काले जायमानस्य स  
कालो बलं जनयति । चक्रपाणि— च.शा.  
6/13

It refers to the natural (innate) immune power present in the body by virtue of age and seasons. The immunity is strong in young age and weak in old age. Also as per Ayurveda, the natural immunity gets boosted in season like winter (*Hemant* and *Shishir ritu*). For this reason it is also called as healthy season and peoples are less affected with diseases in this season.

### 3. *Yuktikrit Vyadhikshamatva Bala* (Acquired Immunity) :

युक्तिकृतं पुनः तत् आहार चेष्टा योगजम् ।  
च.सू. 11/36

**चक्रपाणि** —युक्तिः आहार चेष्टायोः सम्यक् शरारेण  
योजना । आहारस्य मांस सर्पिः आदे योजना  
चेष्टाया उचित विश्राम व्यायाम आदे योगः अन्ये  
रसायन अपि ग्राहयन्ति ।

शरीर चेष्टा स्थैर्याथा बलवर्धिनी देहव्यायामसंख्याता  
। च. सू. 7/31

युक्तिजं पुनः विहार आहार जनितं तथा  
उर्जस्करयोगजम् । अ.ह.शा. 3/78

**अरुणदत्त** — उर्जस्कराः तु इमे भावा भवन्ति ।  
तद्यथा—बलवत्पुरुषे देशे जन्म बलवत्पुरुषे काले च,  
सुखश्च कालयोगः, बीजक्षेत्रगुणसंपत् च,  
आहारसंपत् च, शरीरसंपत् च, सात्म्यसंपत् च,  
सत्त्वसंपत् च ।

It refers to the acquired immune power generated in the body by virtue of good

proteinous nutrition (*mansa ahar*), exercise and body building measures (*Vyayam yogajam*). The physical strength can also be enhanced by increasing adaptability, mental toughness, choosing healthy marriage partners and by staying happy.

This can also be generated in the body by inoculating the various toxic antigens in the body in low dose forming antibodies against them in the body to fight against the future disease. The Ayurvedokta example of '*Vishkanya*' is one such example of *Yuktikrit Vyadhikshama Bala*. आजन्म विषसंयोगात् कन्या विषमयी कृता । अ.सं.सू. 8/87

*The Yuktikrut Vyadhikshamatva* (Acquired Immunity) could be of two types :

A] *Sakriya* (Active)

B] *Nishkriya* (Passive)

The Active and Passive immunity again could be of two types :

i] *Akrutrim/Sahaj* (Natural)

ii] *Krutrim* (Artificial)

A]

i] *Yuktikrut Sakriya Sahaj Vyadhikshamatva* (Acquired Active Natural immunity)

It is developed by the disease itself. (*pratyaksha Roga akraman Labdha*)



**ii] Yuktikrut Sakriya Krutrim Vyadhikshamatva (Acquired Active Artificial immunity)**

It is developed by inoculation of low dose of microbial toxin or inoculating attenuated live or killed microbes.

B]

**i] Yuktikrut Nishkriya Sahaj Vyadhikshamatva (Acquired Passive Natural immunity)**

It is developed by transferring readymade antibodies such as from mother to child.

**ii] Yuktikrut Nishkriya Krutrim Vyadhikshamatva (Acquired Passive artificial immunity)**

It is developed by transferring the readymade antibodies prepared in animals to humans.

**Yuktikrit Nishriya Krutrim Vyadhikshamatva Bala In Ayurveda (Acquired Passive Artificial Immunity)**

Ancient acharyas have referred infectious invisible microbes as 'Grahas' or 'Bhutas' or 'Rakshas' or 'Rakshogana'. As per Ayurveda, there are infectious diseases which spread from one person to another. Such diseases have been referred as 'Sangarj Roga' in Ayurvedic literature. Infectious fevers, conjunctivitis, tuberculosis, leprosy, measles, mumps, small pox are its examples. The

'Masurika' or 'Shitala' (small pox) is one such disease which occur due to infectious *graha* (microbe).

मसूर्यव हि शीतला ज्वर एव यथा भूताधिष्ठितो विषमज्वरः । यो.र.

कूरग्रहेक्षणात् ....जनयति शरीरे दुष्टरक्तेन संगता ।

मसूराकृति पिडकाः तासो पूर्व ज्वर त्वचि वैवर्ण्य नेत्ररागः च । मा. नि. 54/2-4

The Yuktikrit Vyadhikshamatva against the infectious diseases could also be developed by practice of inoculating live attenuated microbes. Or inoculating it in Cow and then injecting readymade antibodies generated by cow into the patient. This is quoted by Acharya Gananath Sen as follows :

बृहन्मसूरित्वक् चर्मण्य उत्कीर्णा विधिपूर्वकम् । कतिचित् पिडकाःकृत्वा प्रतिषेधाय कल्पते ।

बृहन्मसूरिका गोषु संक्रान्ता गोमसूरिका । तत् रसः प्रच्छिते चर्मण्यर्पितः प्रतिषेधकः ।।

कृतमसूरिका भारतीयवैद्यैः आविष्कृता प्राग् वर्षशतात् अपि सुप्रचलिता इदानीं विलुप्तप्राया ।

ग.से.— सि.नि. 4/144-46

The skin of small pox lesion should be scrapped carefully and then it should be brought into the contact of highly perfused mucosal layer to induce immunity in the body. This referred as 'Krit Masurika'.

This is an example of acquired active immunity.

Or alternatively the scrap from the small pox lesion should be injected into the cow's skin and then the antibody produced in the cow's body (serum) should be taken out from the blister of injected site and then it should be transferred in the patient.

This is an example of acquired passive immunity.

*Acharya Gananath Sen* states that this practice of immunization was known to the ancient *Ayurvedic Vaidyas* from long time but was not in use from some 100 years. The ancient history also shows that this technique was initially known to Indian and *Ciracssians* (Border area of Russia). Later in the year 1796, Englishman Edward Jenner further research on it and made it popular so much so that he is referred as father of modern immunology.

## DISCUSSION

There is a one word reference of *Vyadhikshmatva* in *Charak Sutrasthana* 26/81 and *Ashtang Sangraha sutrasthana* 9/89. *Acharya Chakrapani* had defined the *Vyadhikshmatva* in proper way covering both preventive and curative aspect of immunity. In the said definition, the antigen is referred as *Pratyanik Dravya* and antibody is referred as *Dehadhatu*. But slight

missing of word “*Sharir Bala*” in the definition of *Vyadhikshamatva* by him lead to the discrepancy about the types of *Vyadhikshmatva*. The addition of word ‘*Dehadhatu rup Sharir Bala*’ (antibody) in the said definition clears the confusion as it is the one which is offering the resistance to the antigen (*Pratyanik Dravya*). On the basis of *Sharir bala*, the *Vyadhikshmatva* can easily be classified into *Sahaj* (Innate) and *Krutrim* (Artificial). These words are also suggested by *Acharya Hemadri* in his commentary on *Ashtang Hrudaya* of *acharya Vagbhta*. *Acharya Indukara*, had mentioned that immune bodies does not fall prey to diseases despite the abundance of morbid doshas on account of good *Vyadhikshmatva*. The *Sharir bala* enhancing factors mentioned in *C.Sha.* 6/13 plays important role in building the immunity. The Immunity could be developed artificially with the factors mentioned in *C.Su.* 7/31, *C.Su.* 11/36 and *A.H. Sha.* 3/78. Acquired passive artificial immunity is mentioned in *Ayurveda* by *Acharya Gananath Sen* with reference to small pox infection.

## RESULT

The result of the present study shows that the *Ayurvedokta* concept of *Vyadhikshamatva* is nothing but the immunity concept mentioned in modern science. Review of literature showed that

the concept of *Vyadhikshamtva* is very well described in *Ayurveda* almost as on modern line. In both sciences, the concept of immunity and hypersensitivity is described together.

### SUMMARY & CONCLUSION

The gist of the present research study can be summarized and concluded in following points:

1. The concept of *Vyadhikshmatva* is very well documented in *Ayurvedic* literature.
2. The antigen is referred as *Pratyanik Dravya*.
3. The antibody is referred as *Dehadhatu*.
4. Resistance is referred as *Virodha*.
5. *Vyadhikshmatva* can be broadly classified into following types as per *Ayurveda*  
A] *Sahaj* (Innate), B] *Kalaj* (Seasonal) and C] *Yuktij* (Artificially Acquired)
6. It can further be divided as  
A] *Sakriya* (Active)  
B] *Nishkriya* (Passive),  
C] *Akrutrim* (Natural),  
D] *Krutrim* (Artificial)
7. The Sharir bala enhancing factors mentioned in C. Sha. 6/13 plays important role in building the immunity.
8. The Immunity could be developed artificially with the factors

mentioned in C.Su. 7/31, C.Su. 11/36 and A.H. Sha. 3/78

9. Acquired passive artificial immunity is mentioned in *Ayurveda* by acharya Gananath Sen with reference to small pox infection.
10. The *Vyadhiksham* shariras have good immunity against the diseases.

### ABBREVIATIONS

1. C.Su. – Charak sutrasthana
2. C.Sha. – Charak Sharir Sthana
3. A.S.Su. – Ashtang Sangraha Sutrasthana

### References;;

1. '**Sushrut Samhita**' of acharya Sushruta edited and translated in hindi by Atridev, published by Motilal Banarasidas, 41, UA Bungalow Road, Jawahar nagar , Delhi-110007
2. '**Sushrut Samhita**' of acharya Sushruta with Nibandhsangrah Commentary of acharya Dalhana, edited by Vd. Yadavji Trikamji, published by Chaukhamba Surbharati, Gopal Mandir Lane, Varanasi -221001
3. **Charak Samhita** with 'Ayurved Dipika' commentary by acharya Chakrapani published by

- Chaukhamba Orientalia, Gopal Mandir lane, Varanasi-221001
4. **Charak Samhita** with hindi translation by Vd. Harichandra Kushwah, Published by Chaukhamba Orientalia, Gopal Mandir lane, Varanasi-221001
  5. **Ashtang Sangraha of Vagbhata with 'Shashilekha' commentary** by Indukara published by Chaukhamba Surbharati Publication, Gopal Mandir lane, Varanasi-221001
  6. **Ashtang Sangraha** of Vagbhata with hindi translation and commentary by Vd. Lalchand Shastri, Published by Shree Baiyanath Ayurved Bhavan, Great Nag Road, Nagpur - 440009
  7. **Ashtang Hrudaya of Vagbhata with 'Sarvang Sundari' commentary** by Arun Dutta and 'Ayurved Rasayan' commentary by Hemadri published by Chaukhamba Surbharati Publication, Gopal Mandir lane, Varanasi-221001
  8. **Ashtang Hrudaya** of Vagbhata with hindi translation by Kaviraj Atridev Gupta published by Chaukhamba Publication, Gopal Mandir lane, Varanasi-221001
  9. **Siddhant Nidan** by Gananath Sen published by Chaukhamba Surbharati Publication, Gopal Mandir lane, Varanasi-221001
  10. **Basic Pathology**, 6<sup>th</sup> edition, by Kumar, Cotran and Robbins, Published by Prism Books Pvt Ltd 53/2 Bull Temple Road, Basavanagudi, Bangalore – 560 019
  11. **Textbook of Pathology**, 4<sup>th</sup> edition by Harsh Mohan, Published by Jaypee Brothers Medical publishers Pvt Ltd, EMCA House, 23/23B, Ansari Road, Daryaganj, New Delhi – 110 002
  12. **Textbook of Microbiology**, 6<sup>th</sup> edition, by R Ananthnarayan and C. K. Jayram Paniker, Published by Orient Longman Pvt. Ltd., 3-6-752-Himayatnagar, Hyderabad – 500 029

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