ABSTRACT

Immunity is the capacity of the body to resist the pathogenic agents. It represents the capacity of an individual to defend their health against physical, mental & environmental challenges. In Ayurveda, the concept of immunity is very wide. Immunity or vyadhikshamatwa means not only the defense from the disease, but Ayurveda considers the equilibrium state of dosha, saptadhatu, agni, mana. There are many factors involved in body’s resistance power to a disease. These factors are mentioned in Ayurvedic classical texts. By strengthening these factors, we can enhance the disease resistance power of a body as well as can maintain the equilibrium state of doshadibhavas. Oja, shukra, bala, shleshma are the important contributing factors for building vyadhikshamatwa. Oja is responsible for good health, better immunity, longevity, intelligence. Ayurveda explains many ways to boost up healthy state of body and mind to increase the resistance power of body to any disease. One of those ways is the rasayana therapy. It is best for health promoting and rejuvenating. This article is a review on the things explained in Ayurveda about vyadhikshamatwa.

Keywords: immunity, vyadhikshamatwa, oja, shukra, bala, shleshma.

INTRODUCTION

Immunity is defined as the capacity of body to resist the pathogenic agents. It is the ability of the body to resist the entry of different types of foreign bodies like bacteria, virus, toxic substances etc. Immunity is of two types

1. Innate / non-specific 2. Aquired / specific

1. Innate immunity is inborn capacity of the body to resist the pathogens. By chance, if the organism enter the body, innate immunity eliminates them before the development of any disease. It is also called as natural immunity.

2. Aquired immunity is the resistance developed in the body against any specific foreign body like bacteria, viruses, toxins, vaccines or transplants tissues.

According to Ayurveda, the main purpose is the prevention of health in healthy individual and eradication of disease from unhealthy body.\(^1\)

Charaka Acharya tells about characteristics of a healthy person. 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 metabolic activities.\(^2\)
Chakrapani mentioned the definition of vyadhikshamatwa for first time. Vyadhikshamatwa i.e resistance power of the body to disease is of two types: One which reduces the bala of vyadhi and the other one prevents the manifestation of disease.

The persons who are more prone to any disease are mentioned by charaka Acharya.

1. over obese individual
2. over emaciated person
3. Whose muscles & blood are diminished markedly.
4. Debilitated person.
5. One who consumes unwholesome food.
6. One who consumes less amount of food.
7. Whose mental faculties are weak.

Individuals having opposite type of physical constitution are capable of resisting diseases.

Aims & Objectives:
To study the concept of immunity from an Ayurvedic view.

Materials & Methods:
It is a review article. The article is based on various references of vyadhikshamatwa from Ayurvedic texts & references regarding immunity were collected.

Contributing Factors for Vyadhikshamatwa:
According to Ayurveda, the word vyadhikshamatwa is not only applicable for prevention or for fight from disease, but also applies to equilibrium state of dosha, dhatus, agni mala and mental power.

The following are some factors on which the vyadhikshamatwa of body depends on.
1. Aahara
2. Agni
3. Dosha, dhatu, mala.
4. Desha and kala.
5. Bala
6. Balavridhikara Bhava

7. Oja
8. Shleshma

1. Aahara: Wholesome food is the only sole cause for the growth of living being. Wholesome food consumption makes the body healthy preventing it from the diseases.
2. Agni: Strength, health, longevity are dependent on the condition of agni.
3. Dosha, saptadhatu, mala: Dosha, dhatu and mala are the main factors for the foundation of the body. Virya is the best among promoters of strength.
4. Desha and kala: Vayu (air), jala (water), desha (land) and kala (season) are the four jana-padhvamsa factors. These can affect disease resistance power of body. Mass people get affected with diseases due to vitiated air, water, land and season and destroy the vyadhikshamatwa of people.
5. Ayurveda explains three types of bala.

- Sahajabala: It is an inherent characteristic property of an individual present since birth.
- Kalajabala: Dependent on season and age. Gaining of strength is observed in visarga kala and middle age is considered as of full strength.
- Yuktikritabala: Depends on healthy practices related to diet, activities. Bala is one of the important contributing factors for vyadhikshamatwa. If balakshaya occurs, death can also occur.
6. Balavrdhikara Bhava: i.e the factors promoting strength
1. Birth of a person in a country where people are naturally healthy and strong.
2. Time factor which is conducive for dhatu and helps promotion of strength. There is more strength in dhatu during visarga kala.
3. Excellency among qualities of bija and kshetra. (Sperm & ovum, uterus)
4. Excellence of diet.
5. Excellence of physique.
7. All mental faculties are superior.
8. Natural mechanism.
9. Young age.
10. Exercise and such other physical activities.

7. Oja:
The essence of all seven dhatus is called as oja. Oja is among the ten pranayatana, means among the ten things in which prana lies. Oja is the best pranayatana. Charakaacharya says, during embryogenesis the oja appeared foremost in the human body. It is the seat for strength, hence also called as bala.

There are two types of Oja.
1. Para Oja -Ashtabindupramana
If the Para Oja decreases, then person will die. If apara Oja decreases or gets vitiated, manifest three kinds of abnormalities:
- Ojokshaya
- Ojovyapada
- Ojovisransa.

8. Shleshma: Shleshma performing its normal functions is said to be bala or oja. If it gets vitiated then the shleshma is said to be mala or papma. Shleshma in normal state provides compactness, stability, heaviness, immunity, resistance to the body.

Deteriorating factors for vyadhikshamatwa:
1. Vegdharana: Holding or suppression of natural urges is the root cause for any disease and is responsible for deteriorating vyadhikshamatwa.
2. Mental factors: Vishaada or sadness is best factor among increasing diseases in the body.

If chinta (stress), shoka (sorrow) etc. mental factors are there in mind while taking food, then the food taken in proper time and proper amount also cannot be digested. Hence, leading to agnidushti and further invites to many diseases.

3. Vydhikarshita: Ayurveda explains ashtau-mahagada i.e. eight fatal diseases said to be great because of their incurable nature. These diseases cause bala and man-sakshaya, giving rise to opportunistic infections. Diseases like prameha, rajayakshma having ojodushti leads to deterioration of vyadhikshamatwa.

4. Vardhakya: Naturally, the bala is less in old age because of dhatukshaya. This balakshaya suppress immunity.
5. Aadanakala: Naturally, bala is less in aa-danakala as there is predominance of sun in this kala.

6. Free radical:
Free radicals are derived either from normal essential metabolic processes in the human body or from external sources such as exposure to X-rays, ozone, cigarette smoking, air pollutants & industrial chemicals. Research also suggests that free radical damage to cells leads to the pathological changes associated with aging. Free radicals have a significant influence on aging, that free radical damage can be controlled with adequate antioxidant defense, and optimal intake of antioxidant nutrient may contribute to enhanced quality of life. According to Ayurveda, Pitta dosha is responsible for transformation and for aging process. Rasyan are believed to play important role as an antioxidant therapy. The drug amalaki (Emblica officinalis) is best for preventing aging process.

Bhavaprakasha mentioned properties of amalaki as it balances tridosha, pacifies Pitta dosha by its madhura and sheeta properties. Amalaki fruit is rich source of vitamin C.
Enhancement And maintaining of Vyadhikshamatwa:
The following are some factors mentioned in Ayurvedic classical texts that can build up health, maintain equilibrium of dosha, du-dhya, agni, mental stability.
1. Following garbhini paricharya during pregnancy.
2. Vyayama
3. Satmyaaahara
4. Rasayana
5. Vajikarana Yogas
6. Drugs
7. Trayopastambha
8. Swasthavritta palana

1. For healthy foetus, following garbhinisanumasika paricharya is beneficial.
2. Vyayama: Regular exercise creates lightness in the body, increase the ability to do work, enhance the digestive power, gives stability to body and increases the mental stability. 16

3. Aahara: Wholesome food is the only sole cause for the growth of living being. Regular consumption of food having all six tastes promotes strength. Food consumption according to aaharavidhi also gives strength to body. Lohitashali, mudga, saindhava, jivantishaka, Aeneyamrugamansa, gavyasarpi, mrudwika are excellent food items among their food class. 17 Shashtikashali, mudga, saindhavalavana, ghrita, jangalamansa, madhu are the food items that to be consumed daily. 18

4. Rasayana: The word rasayana is made up of two words: Rasa & Ayana. Rasa means the saptadhatus viz. rasa, rakta, mansa, meda, asthi, majja and shukra. Ayana means path or channel. So, rasayanas are those that bring about proper uptake, growth and improvement of essential saptadhatus. Use of rasayanas results in dirghamaayu, smriti, medha, aarogya, tarunavaya, prabha, varna, voice, strength etc. (Charak Chikitsasthana 1/1/7-8)

Various drugs, diet & regimens which promote longevity by delaying aging and preventing diseases.

According to Charaka Acharya, Rasayana is classified into: 19
1. kutipraveshika
2. vatatapika
3. Achara rasayana:
To follow a particular code of conduct in routine life, which keeps oneself to attain good mental and spiritual health.

Acharya Sushruta divided rasayana into: 20
1. sarvopaghatashamaniya: (rasayana formulation which counteracts various disease processes)
2. Medhaayushkamiya: (rasayana which increases intellect and longevity)
3. Swabhavavyadhipratishedhniya: (Delaying onset of swabhavika diseases.)

Taking rasayana is helpful to increase the immunity of the person to keep him away from opportunistic diseases.

5. Vajikarana Yogas:
Vajikaranayogas not only give strength to shukradhatu but helps to acquire strength by fulfilling necessary deficiencies in all deficient dhatus.

6. Drugs:
Regular consumption of milk and ghrita is having rasayana property. 21

There are many rasayana drugs explained in classical texts that prevents aging process, strengthens the saptadhatus, prevent the body from various diseases.

Some of the rasayanadravyas are: Amalaki
Haritaki  
Guduchi  
Shatavari  
Guggulu  
Yashtimaghу.
Charakaacharya mentioned Vaya Sthapanagana for boosting vyadhikshamatwa and for prevention of aging. These are the drugs mentioned in vayasthapana: Amrita, abhaya, dhatri, jivanti, shatavari, mandukparni, punarnava, yukta, shweta, sthira.

6. Trayopastambha: Aahara, Nidra, Bramhacharya are the three building blocks of human body. As we have seen, aahara plays major role in forming vyadhikshamatwa. Pathyakara aahara leads to healthy and balanced state of mind and body. Nidra is said to be bhutadhati. Proper sleep is necessary for normal functioning of body. Sukha- dukha, pushti - karshyа, bala – abala are the factors depends upon sound sleep. Bramhacharya palana is necessary for creating healthy shukradhatu. Shukra is the ultimate excellent outcome of food. So, one has to preserve it because its diminution leads to development of many diseases or even death. Bala depends upon shukradhatu. The disease rajakshma occurs due to excess of shukradhatukshaya.

7. Swasthavritta Palana: Following dinacharya, ritucharya, Aaharavidhi, Acharavidhi helps the body and mind to prevent from diseases and increases the strength of body. Adopting shodhana according to rit in swastha purusha. Abhyanga is also important for boosting vyadhikshamatwa and for preventing aging process.

DISCUSSION

The concept of vyadhikshamatwa can be correlated with the immunity concept of modern science. Immunity is the defense mechanism of the body. It is the body system which prevents the body from various pathogenic agents. Innate and Acquired immunity are the types of immunity. Innate immunity is the inborn capacity of body to resist the pathogens. Innate immunity represents the first line of defense against any type of pathogens. Gastrointestinal tract having enzymes and the acid in the stomach as the mechanism of innate immunity. Lysozyme present in the saliva destroys bacteria. Skin protects the body from various organisms by its innate immunity mechanism. Lysozyme secreted by the skin destroys the bacteria. Acidity in urine and vaginal fluid destroy the bacteria. Innate immunity can be correlated with ‘Sahaja bala’. Sahaja bala is the inherent characteristic property of an individual present since birth. Acquired immunity is the resistance developed in the body against any specific foreign body. It is not present since birth. Acquired immunity obtained either from the development of antibodies in response to exposure to an antigen, as from vaccination, or an attack of an infectious disease, or from the transmission of antibodies. It can be correlated with the Kalaja and yuktikrita bala. These are obtained by healthy practices related to diet, physical activities etc. Modern science use vaccination and other supplements like vitamins for boosting up immunity. Ayurveda having wide approach towards Vyadhikshamatwa, the Ayurvedic science tells us many things as discussed above, for prevention from disease as well as to boost up resistance power of body to defend any disease. Excellent vyadhikshamatwa increases resistance power of the
body. Hence, the disease can not attack the body or if attacked the power of the disease will be less. i.e the disease will be of alpa-bala.

Often the patients tell us about their immuni-

ty that they get frequently attacked by infec-
tions or any diseases. In such patients having frequent attacks of organisms, a physician should think about daily regimen of the pa-
tient by history taking.

By following proper regimen as described in Ayurvedic classical texts, we surely can boost up the vyadhihikshamatwa.

CONCLUSION

With the help of Ayurveda, one can enhance the vyadhihikshamatwa. And can maintain the equilibrium state of dosha, saptadhatus, ma-
la, agni and mana. For attaining good vyad-

hikshamatwa, one should use various regi-
mens and follow conducts as described in Ayurveda.

REFERENCES

1. Agnivesha, Hindi commentary by pro. Ravidatta Tripathi, sutrasthana 30:26; Edited by Acharya Vidyadhar Shukla & Prof.Ravi Dutt Tripathi ;Charak Samhita vol.1 Chaukhamba Sanskrit pratishthana, Delhi. p.447

2. Agnivesha, Hindi commentary by pro. Ravidatta Tripathi, sutrasthana 21:18; Edited by Acharya Vidyadhar Shukla & Prof.Ravi Dutt Tripathi ;Charak Samhita vol.1 Chaukhamba Sanskrit pratishthana, Delhi. p.303

3. Ayurveda dipika commentary by Chakra-
pandutta, sutrasthana 28:7, edited by Vaidya Yadavji Trikamaji Acharya Chauk-
hamba Sanskrit pratishthana, Delhi. p.178

4. Agnivesha, Hindi commentary by pro. Ravidatta Tripathi, sutrasthana 28:7; Edited by Acharya Vidyadhar Shukla & Prof.Ravi Dutt Tripathi ;Charak Samhita vol.1 Chaukhamba Sanskrit pratishthana, Delhi. p.429

5. Agnivesha, Hindi commentary by pro. Ravidatta Tripathi, sutrasthana 25:31; Edited by Acharya Vidyadhar Shukla & Prof.Ravi Dutt Tripathi ;Charak Samhita vol.1 Chaukhamba Sanskrit pratishthana, Delhi. p.333

6. Agnivesha, Hindi commentary by pro. Ravidatta Tripathi, sutrasthana 27:342; Edited by Acharya Vidyadhar Shukla & Prof.Ravi Dutt Tripathi ;Charak Samhita vol.1 Chaukhamba Sanskrit pratishthana, Delhi. p.424

7. Agnivesha, Hindi commentary by pro. Ravidatta Tripathi, sutrasthana 30:15; Edited by Acharya Vidyadhar Shukla & Prof.Ravi Dutt Tripathi ;Charak Samhita vol.1 Chaukhamba Sanskrit pratishthana, Delhi. p.444

8. Agnivesha, Hindi commentary by pro. Ravidatta Tripathi, sutrasthana 11:36; Edited by Acharya Vidyadhar Shukla & Prof.Ravi Dutt Tripathi ;Charak Samhita vol.1 Chaukhamba Sanskrit pratishthana, Delhi. p.171


10. Agnivesha, Hindi commentary by pro. Ravidatta Tripathi, sutrasthana 29:3; Edited by Acharya Vidyadhar Shukla & Prof.Ravi Dutt Tripathi ;Charak Samhita vol.1 Chaukhamba Sanskrit pratishthana, Delhi. p.435

11. Sushruta Samhita Edited by Kaviraj Ambi-
kadutta Shastri, Sutrasthana;15:29-31;
12. Agnivesha, Hindi commentary by pro. RavidattaTripathi, sutrasthana 17:117; Edited by Acharya Vidyadhar Shukla & Prof. Ravi Dutt Tripathi; Charak Samhita vol.1 Chaukhamba Sanskrit pratishthantha, Delhi. p.272


15. Ncbi.nlm.nih.gov/pmc/articles/PMC324991
1. Article on free radical effect on human body.

16. Agnivesha, Hindi commentary by pro. RavidattaTripathi, sutrasthana 7:32; Edited by Acharya Vidyadhar Shukla & Prof. Ravi Dutt Tripathi; Charak Samhita vol.1 Chaukhamba Sanskrit pratishthantha, Delhi. p.126

17. Agnivesha, Hindi commentary by pro. RavidattaTripathi, sutrasthana 25:38; edited by Acharya Vidyadhar Shukla & Prof. Ravi Dutt Tripathi; Charak Samhita vol.1 Chaukhamba Sanskrit pratishthantha, Delhi. p.336

18. Agnivesha, Hindi commentary by pro. RavidattaTripathi, sutrasthana 5:12; Edited by Acharya Vidyadhar Shukla & Prof. Ravi Dutt Tripathi; Charak Samhita vol.1 Chaukhamba Sanskrit pratishthantha, Delhi. p.86


22. Agnivesha, Hindi commentary by pro. RavidattaTripathi, sutrasthana 4:78; Edited by Acharya Vidyadhar Shukla & Prof. Ravi Dutt Tripathi; Charak Samhita vol.1 Chaukhamba Sanskrit pratishthantha, Delhi. p.77

23. Agnivesha, Hindi commentary by pro. RavidattaTripathi, sutrasthana 11:35; Edited by Acharya Vidyadhar Shukla & Prof. Ravi Dutt Tripathi; Charak Samhita vol.1 Chaukhamba Sanskrit pratishthantha, Delhi. p.171


CORRESPONDING AUTHOR
Dr. Mayur S. Patil
Email: dr.patilmayurs@gmail.com

Source of Support: Nil
Conflict of Interest: None Declared