wjpmr, 2022,8(8), 149-152

SJIF Impact Factor: 5.922

WORLD JOURNAL OF PHARMACEUTICAL AND MEDICAL RESEARCH

www.wjpmr.com

Review Article

ISSN 2455-3301

WJPMR

# A CRITICAL REVIEW ON VYADHIKSAMATVA IN AYURVEDA W.S.R TO IMMUNITY

**Vd Sachin Agiwal*, Vd Vandana Dhole, Vd Devanand Jambhalikar, Vd Sneha Tiwari and Vd Suryakant Dwivedi**

[1]H.O.D Sawastha Vritta Shri Gurudev Ayurved College Mozari.
[2]H.O.D Roga Nidan and Vikriti Vijayan Shri. K.R.Pandav Ayurvedic College.
[3]H.O.D Sharir Rachana Shri Gurudev Ayurved College Mozari.
[4]Assistant Professor, Dept. of Kayachikitsa Shri. K.R. Pandav Ayurvedic College.
[5]Assistant Professor, Dept. of Stri prasuti Tantra Om Ayurved College and Hospital Betul.

***Corresponding Author: Vd Sachin Agiwal**

H.O.D Sawastha Vritta Shri Gurudev Ayurved College Mozari.

**Article Received on 03/06/2022** **Article Revised on 24/06/2022** **Article Accepted on 14/07/2022**

## ABSTRACT

The healthy and joyful long life is the main priority of Ayurveda. Ayurveda explained the concepts related to health and diseases in details, also the knowledge of etiology, symptomology, therapeutics, numerous methods to sustain healthy status and causes behind falling sick. The main purpose and objectives of Ayurveda is the preservation of health in healthy individual and eradication of diseases which are curable. The concept of Vyadhiksamatva (immunity) is of tremendous importance in the daily wellness of human beings; for prevention and recovery from diseases. 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. This power of the body, which prevents the development of diseases or resists a developed disease, is called Immunity. Vyadhikshamatva in Ayurveda is not merely immunity against a specific infectious agent or disease such as typhoid, measles or rubella for which modern resistance against the loss of the integrity, proportion, and interrelationship amongst the i medicine provides "immunizations". Rather, Vyadhikshamatva implies.

**KEYWORDS:** Immune System, Vyadhikshamatva(Immunity), Immunodeficiency, Antibodies, Epigenetic, Antigen, Kapha.

## INTRODUCTION

Vyadhikshamatva (Immunity) was described by Acharya Charaka1 thousands of years ago. Now-a-days, the same is known as immunity in the modern science. If the power of the body to counter the disease is less, various diseases occurs and if the same is great, disease will not occur or they were be of mild nature. In atmosphere there are numerous microorganisms which enter in our body through air respiratory tract. Our blood has the cappacity to damage these micro-organisms and the body remains free of the diseases produced due to toxins of these microorganisms. This very natural power of the body is known as Vyadhikshamatva (Immunity). The principal of Ayurveda is to protect the health of the persons before the occurrence of the disease for the fulfillment of this principle and to destroy various toxins prevent in the atmosphere Ayurveda directs for Dhoopana karma.

For example, Guggulu (Commiphora wightii), Jatamansi(Nardostachys jatamansi), Dhoopana is for destroying micro-organisms and thus protecting the health.[3] Modern system also accepts that Dhoompana karma should be performed. It not only increases immunity but destroys micro-organisms as well. There are many more karmas in Ayurveda to increase the immunity. For example Honey and Ghee is given for licking to new born.

## ABOUT THE IMMUNE SYSTEM

The immune system is the body's defense against infectious organisms and other invaders. Through a series of steps called the immune response, the immune system attacks organisms and substances that invade body systems and cause disease. The immune system is made up of a network of cells, tissues, and organs that work together to protect the body. The cells involved are white blood cells, or leukocytes, which come in two basic types that combine to seek out and destroy disease causing organisms or substances. Leukocytes are produced or stored in many locations in the body, including the thymus, spleen, and bone marrow. For this reason, they're called the lymphoid organs. There are also clumps of lymphoid tissue throughout the body,

primarily as lymph nodes, that house the leukocytes. The leukocytes circulate through the body between the organs and nodes via lymphatic vessels and blood vessels. In this way, the immune system works in a coordinated manner to monitor the body for germs or substances that might cause problems. The two basic types of leukocytes are:[1] phagocytes, cells that chew up invading organisms to remember and recognize previous invaders and help the body destroy them A number of different cells are considered phagocytes. The most common type is the neutrophil, which primarily fights bacteria. If doctors are worried about a bacterial infection, they might order a blood test to see if a patient has an increased number of neutrophils triggered by the infection. Other types of phagocytes have their own jobs to make sure that the body responds appropriately to a specific type of invader. The two kinds of lymphocytes are B lymphocytes and T lymphocytes. Lymphocytes start out in the bone marrow and either stays there and mature into B cells, or they leave for the thymus gland, where they mature into T cells. B lymphocytes and T lymphocytes have separate functions: B lymphocytes are like the body's military intelligence system, seeking out their targets and sending defenses to lock onto them. T cells are like the soldiers, destroying the invaders that the intelligence system has identified

**FACTORS AFFECTING VYADHIKSHAMATVA**

There are around nine types of factors accountable for reducing the immunity. -Ashtaninditiya Purush.

अ॰तद॰घश्र्च अ॰तह्रस्वश्च अ॰तलोमाच अलोम च, अ॰तकृष्ण्श्च, अ॰तगौरवश्च, अ॰तस्थूलश्च, अ॰तक ृशश्च

Following are the main factors affecting vyadhikshamtva as described by Acharya Charak: Desha, Kala, Samyoga, Virya, Pramana, Oja, Bala, Jatakarma, Lehana karma, Suvarna karma, Dhoopana karma, Niyamita vyayama.

**IMMUNITY**

Humans have three types of immunity — innate, adaptive, and passive:

**INNATE IMMUNITY**

Everyone is born with innate (or natural) immunity, a type of general protection. Many of the germs that affect other species don't harm us. For example, the viruses that cause leukemia in cats or distemper in dogs don't affect humans. Innate immunity works both ways because some viruses that make humans ill — such as the virus that causes HIV/AIDS — don't make cats or dogs sick. Innate immunity also includes the external barriers of the body, like the skin and mucous membranes (like those that line throat, nose and gastrointestinal tract), which are the first line of defense in preventing diseases from entering the body. If this outer defensive wall is broken (as through a cut), the skin attempts to heal the break quickly and special immune cells on the skin attack invading germs.

**ADAPTIVE IMMUNITY**

The second kind of protection is adaptive (or active) immunity, which develops throughout our lives. Adaptive immunity involves the lymphocytes and develops as people are exposed to diseases or immunized against diseases through vaccination.

**PASSIVE IMMUNITY**

Passive immunity is "borrowed" from another source and it lasts for a short time. For example, antibodies in a mother's breast milk provide a baby with temporary immunity to diseases the mother has been exposed to. This can help protect the baby against infection during the early years of childhood. Everyone's immune system is different. Some people never seem to get infections, whereas others seem to be sick all the time. As people get older, they usually become immune to more germs as the immune system comes into contact with more and more of them. That's why adults and teens tend to get fewer colds than kids — their bodies have learned to recognize and immediately attack many of the viruses that cause colds.

**PROBLEMS OF THE IMMUNE SYSTEM**

Disorders of the immune system fall into four main categories:

1. Immunodeficiency disorders (primary or acquired)
2. Autoimmune disorders (in which the body's own immune system attacks its own tissue as foreign matter).
3. Allergic disorders (in which the immune system overreacts in response to an antigen)
4. Cancers of the immune system

**IMMUNODEFICIENCY DISORDERS**

Immunodeficiency occurs when a part of the immune system is not present or is not working properly. Sometimes a person is born with an immunodeficiency (known as primary immunodeficiency), although symptoms of the disorder might not appear until later in life. Immunodeficiency also can be acquired through infection or produced by drugs (these are sometimes called secondary immunodeficiency).

Immunodeficiency can affect B lymphocytes, T lymphocytes, or phagocytes. Examples of primary immunodeficiency that can affect kids and teens are:

- **IgA deficiency** is the most common immunodeficiency disorder. IgA is an immunoglobulin that is found primarily in the saliva and other body fluids that help guard the entrances to the body. IgA deficiency is a disorder in which the body doesn't produce enough of the antibody IgA. People with IgA deficiency tend to have allergies or get more colds and other respiratory infections, but the condition is usually not severe.
- **Severe combined immunodeficiency (SCID)** is also known as the "bubble boy disease" after a Texas boy with SCID who lived in a germ-free plastic bubble. SCID is a serious immune system disorder that occurs because of a lack of both B and T

lymphocytes, which makes it almost impossible to fight infections.

- **Di-George syndrome (thymic dysplasia),** a birth defect in which kids are born without a thymus gland, is an example of a primary T-lymphocyte disease. The thymus gland is where T lymphocytes normally mature.
- **Chediak-higashi syndrome and chronic granulomatous disease** both involve the inability of the neutrophils to function normally as phagocytes. Acquired (or secondary) immunodeficiency usually develops after someone has a disease, although they can also be the result of malnutrition, burns, or other medical problems. Certain medicines also can cause problems with the functioning of the immune system. Acquired (secondary) immunodeficiency includes.
- **HIV (human immunodeficiency virus) infection/AIDS (acquired immunodeficiency syndrome)** is a disease that slowly and steadily destroys the immune system. It is caused by HIV, a virus that wipes out certain types of lymphocytes called T-helper cells. Without T-helper cells, the immune system is unable to defend the body against normally harmless organisms, which can cause lifethreatening infections in people who have AIDS. Newborns can get HIV infection from their mothers while in the uterus, during the birth process, or during breastfeeding. People can get HIV infection by having unprotected sexual intercourse with an infected person or from sharing contaminated needles for drugs, steroids, or tattoos.

## AUTOIMMUNE DISORDERS

- In autoimmune disorders, the immune system mistakenly attacks the body's healthy organs and tissues as though they were foreign invaders. Autoimmune diseases include:
- Lupus, a chronic disease marked by muscle and joint pain and inflammation (the abnormal immune response also may involve attacks on the kidneys and other organs)
- Juvenile rheumatoid arthritis, a disease in which the body's immune system acts as though certain body parts (such as the joints of the knee, hand, and foot) are foreign tissue and attacks them.
- Scleroderma, a chronic autoimmune disease that can lead to inflammation and damage of the skin, joints, and internal organs
- Ankylosing spondylitis, a disease that involves inflammation of the spine and joints, causing stiffness and pain
- Juvenile dermatomyositis, a disorder marked by inflammation and damage of the skin and muscles.

## ALLERGIC DISORDERS

Allergic disorders occur when the immune system overreacts to exposure to antigens in the environment. The substances that provoke such attacks are called allergens. The immune response can cause symptoms such as swelling, watery eyes, and sneezing, and even a life-threatening reaction called anaphylaxis. Medications called antihistamines can relieve most symptoms. Allergic disorders include:

**Asthma**, a respiratory disorder that can cause breathing problems, frequently involves an allergic response by the lungs. If the lungs are oversensitive to certain allergens (like pollen, molds, animal dander, or dust mites), it can trigger breathing tubes of the lungs become noarrowswollen, leading to reduced airflow and making it hard for a person to breathe.

**Eczema** is an itchy rash also known as atopic dermatitis. Although atopic dermatitis is not necessarily caused by an allergic reaction, it more often occurs in kids and teens who have allergies, hay fever, or asthma or who have a family history of these conditions.

**Allergies** of several types can occur in kids and teens. Environmental allergies (to dust mites, for example), seasonal allergies (such as hay fever), drug allergies (reactions to specific medications or drugs), food allergies (such as to nuts), and allergies to toxins (bee stings, for example) are the common conditions people usually refer to as allergies.

## Comparison Between Ayurvedic and Modern Concept of Vyadhikshamatva (Immunity)

General Functions: When the Sleshma (Kapha) is in normal state, it is called ‘Bala’ as well as ‘Ojas’; but when it attains an abnormal state, it is then called ‘Mala’ (Waste) and ‘Papma’ (Disease).[4] From the above statement it is clear that ‘Bala’, ‘Ojas’ and ‘Kapha’ are identical entities, at least when ‘Kapha’ is in normal state. When ‘Kapha’ is in its normal state, it provides compactness, stability, virility, immunity and resistance.[5] Importance: The most essential fraction of all bodily tissues is called ‘Ojas’. Even though it resides in the heart, it circulates all over the body to maintain the normal healthy status of the body. It is ‘Snigdha’ (unctuous) and ‘Somatmaka’ (mild and cool) in nature. Though predominantly white in colour, it has got some yellowish and reddish tinge. If this is lost, life also is lost and if this remains intact, life continues.[6] ‘Ojas’ has been described to exist in different forms in the body. The fraction of ‘Ojas’, that circulates all over the body through the cardiovascular system moves along with ‘Rasa Dhatu’. This is called ‘Rastmaka Ojas’. Another form of ‘Ojas’, is present in all tissues and is called ‘Dhatutejorupi’. This indicates the im mune mechanisms present at tissue-level. A third form of ‘Ojas’ is ‘Śukra mala rupi’. This enters the foetus to provide protection to the foetus during intrauterine life. Another form of ‘Ojas’ is described as ‘Jivasonita rupi.

## CONCLUSION

When something dies, its immune system (along with everything else) shuts down. In a matter of hours, the body is invaded by all sorts of bacteria, microbes, parasites. None of these things are able to get in when

your immune system is working, but the moment your immune system stops the door while open .once u die it only takes a few weeks for these organisms to completely dismantle your body and carry it away, until all that's left is a skeleton. Obviously your immune system is doing something amazing to keep all of that dismantling from happening when you are alive. The immune system is complex, intricate and interesting and there are at least two good reasons for you to know more about it. First, it is just plain fascinating to understand where things like fevers, hives, inflammation, etc., come from when they happen inside your own body. You also hear a lot about the immune system in the news as new parts of it are understood and new drugs come on the market -- knowing about the immune system makes these news stories understandable. In this article, we will take a look at how your immune system works so that you can understand what it is doing for you each day, as well as what it is not.

The immune system, which is made up of special cells, proteins, tissues, and organs, defends people against germs and microorganisms every day. In most cases, the immune system does a great job of keeping people healthy and preventing infections. But sometimes problems with the immune system can lead to illness and infection. So we can conclude that the immunity described by the modern medicine is nothing but the Vyadhikshamatva(Immunity). of Ayurveda, which was described thousands of years ago. So we must remain cautions to protect the Vyadhikshamatva(Immunity) and for this should follow the proper diet and code conduct of Ayurveda.

## REFERENCES


1. Subhash D. Waghe* Sanjay P. Deshmukh Critical analysis of Ayurveda Vyadhikshamatva concept w.s.r. to modern immunity, April- June, 2019; 07$^{th}$: 2$^{nd}$.
2. Sharma PV, Charaka. Charaka Samhita, Part 1.. Sutrasthana, Chapter 1 Verse42 Varanasi Chaukhamba Surbharati Prakashan, 2011; 4(4): Tripathi B,
3. Pandit Kashinath Pandey Charak Samhita Sutra Sthana5, Chaukhamba Bharti Academy Varanasi India, (2013).
4. Pandit Kashinath Pandey Charak Samhita Sutra Sthana27/117, Chaukhamba Bharti Academy Varanasi India, (2013).
5. Pandit Kashinath Pandey Charak Samhita Sutra Sthana18/51, Chaukhamba Bharti Academy Varanasi India, (2013).
6. Kaviraj Atridev Gupt, Ashtanga Hradya Sutra Sthana11/37-38 Chaukhamba Sanskrit Sansthan Varanasi India, (2005).
7. Kaviraj Atridev Gupt, Ashtanga Hradya Sutra Sthana11/38-39 Chaukhamba Sanskrit Sansthan Varanasi India, (2005).
8. Pandit Kashinath Pandey Charak Samhita Sutra Sthana11/36, Chaukhamba Bharti Academy Varanasi India, (2013).
9. Pandit Kashinath Pandey Charak Samhita SHarir Sthana6/13, Chaukhamba Bharti Academy Varanasi India, (2013).
10. Pandit Kashinath Pandey Charak Samhita Sutra Sthana26/91, Chaukhamba Bharti Academy Varanasi India, (2013).
11. Pandit Kashinath Pandey Charak Samhita Nidana Sthana4/4, Chaukhamba Bharti Academy Varanasi India, (2013).
12. Pandit Kashinath Pandey Charak Samhita Sutra Sthana26/104, Chaukhamba Bharti Academy Varanasi India, (2013).