



RESEARCH ARTICLE

EFFECT OF RASAYANA IN AUTOIMMUNE DISEASES: A REVIEW

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ABSTRACT

Objective: In an autoimmune disease, there is a wrong action of our defense mechanism against the body's own tissue. Autoimmunity is group of illnesses that include almost every organ system. *RASAYANA* is a unique branch of *Ayurveda*. *Rasayanachikitsa* is also known as rejuvenation therapy. It promotes the inner healing power of an individual and helps him in over taking the pain and disease while promoting the immunity (*SVASTHASYA ORJASKARAM*). **Method:** References regarding *Rasayana* and Autoimmune disease were collected from various textbooks, published research papers, previous work done. **Result:** *Rasayana* is the method of management by which the excellent form of *Rasa* is maintained in the body. The purpose of *Rasayana* is to obtain strength, immunity, *Ojus*, and removal of toxins. One of the results of *Rasayana* is increasing *Ojus*, which is the factor responsible for *Vyadhikshamtav* (Immunity). *Rasayana* drugs probably reduce stress levels by affecting anti-oxidant levels. So these *Rasayana* drugs act as potent antioxidants and immunomodulators. Like *Guduchi*, *Ashwagandha*, *Amalaki* etc., have proven effects in autoimmune diseases. **Conclusion:** It can be concluded that *Rasayana* builds natural resistance against infection, increases immunity and have an immunomodulator effect, which prevents any kind of autoimmune disorders.

INTRODUCTION

In an autoimmune disease, there is a wrong action of our defense mechanism against the body's own tissue. Autoimmune diseases occur when the body is working hard to defend against potentially hazardous substances our bodies, like allergens, toxins, infections or food, but does not see the difference between the invaders and our own body cells. Because certain body cells for harmful antibodies are sent on offⁱ. Autoimmunity is group of illnesses that include almost every organ system. Modern medicinal approach for autoimmune disorders rests primarily upon the use of NSAIDs and corticosteroids. Long usage of NSAIDs damages the liver cells, irritates the gut wall and corticosteroids depress immune functions. It has been crystal clear that the autoimmune diseases are nothing but abnormally activated immune response. The immune response or immunity mentioned in allied science is very well described in *Ayurveda* as *Vyadhikshamatwa*ⁱⁱ. *Ayurveda* has a unique branch of treatment known as *Rasayana*. *Rasayan Chikitsa* is also known as rejuvenation therapy. It promotes the inner healing power of an individual and helps in over taking the pain and disease while promoting the immunity. "*Rasayana*" means the method of obtaining good quality of *Rasa*. The word *Rasa* represents the seven *Dhatu*s because they all are nourished by *Rasa* yield of *Aahararasa* (digestive product of food)ⁱⁱⁱ.

The quality of the *Rasa* in the body directly governs the state of health of an individual. So the meaning of gaining optimum standard of *Rasa* is to be *Rasayana*. *Rasayanais* the method of management by which the excellent form of *Rasa* is maintained in the body^{iv}. The purpose of *Rasayana* is to obtain strength immunity, *Ojus*, vitality, will power and determination and it also strengthen the senses. One of the results of *Rasayana* is *Ojus*, which is the factor responsible for *Vyadhikshamtav*, (Immunity).

AUTOIMMUNE DISEASES: An autoimmune disease means the immune system start producing auto - antibodies to an antigen, which is usually produced in our body due to some injury to tissues of the body^v. The connective tissues such as muscles, skin and joints are prone to wear and tear. Some persons have a tendency for these connective tissues to undergo degenerative changed that are initiated by inflammatory and immunological mechanisms. Thyroiditis, Grave's disease, Rheumatoid arthritis, Ankylosing spondylosis, Muscular dystrophy, Psoriasis, Neuropathy, IBD, Hemolytic anemia, Multiple sclerosis are some of autoimmune diseases found in society^{vi}. It has been crystal clear that these diseases are nothing but abnormally activated immune response. The cause of autoimmune diseases is generally unknown.

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The early symptoms of various autoimmune diseases are very similar, such as^{vii}:

-) Fatigue
-) Achy muscles
-) Swelling and redness
-) Low-grade fever
-) Trouble concentrating
-) Numbness and tingling in the hands and feet
-) Hair loss
-) Skin rashes

AYURVEDIC MANAGEMENT OF AUTOIMMUNE DISEASE^{viii}:

Toxin removal: According to *Ayurveda*, toxins or *Ama* in the body interfere with the proper functioning of the immune system, which often leads to autoimmune diseases. Generally, *Shunthi*, *Haritki*, *Pipli*, *Maricha*, *Hingu* are used to detoxify the body. Increase in *Ojus* production: *Ojus* is the constituent which helps in the nourishment of the immune system. Due to dysfunctional immune system causing the impairment of metabolism, production of *Ojus* decreased to almost nil. Hence *Ayurveda* increases *Ojus* production. *Guduchi*, *Haridra*, *Amalki*, *Manjistha* etc., are used to increase *Ojus* production. Immune system correction: When the immune system is corrected, then the above treatment procedure will effect perfectly. Usually *Ghrita*, *Haritki*, *Amalki*, *Bahera*, *Ela* etc., are used to calm the immune system and rejuvenate it. For normal functioning, these drugs helps to correct the immune system.

RASAYANA: *Ayurveda* is divided into eight branches and *Rasayana* (rejuvenation) is one of them. *Rasayana* is formed by the combination of two words “*Rasa* (*Rasa Dhatu*= nutrition)” and “*Ayana* (circulation and promotion)”^{ix}. So according to the literary meaning of *Rasa* and *Ayana*, it can be drawn that *Rasayana* is a regimen or substance with the help of which one can attain, metabolize and channelize the better quality of *rasa* and other *Dhatu*s up to smallest unit of the body. *Rasayana* is a specialized type of management influencing the fundamental aspect of body viz. *Dhatu*s, *Agni* and *Srotansi* and *Ojus* etc. *Rasayana Chikitsa* increases the *Ojus* and immune system. *Rasayana* deals with the science of nutrition, geriatrics and rejuvenation^x. Normally it is found that *Rasayana* enhances the natural killer cell activity^{xi}. *Rasayanas* are rejuvenators, nutritional supplements and have strong antioxidant activity with antagonistic actions on the oxidative stressors, that give rise to the formation of different free radicals. *Rasayana* activate mononuclear cells to produce cytokines. So *Rasayana* (particularly those *Rasayana* drugs having *Madhur Vipaka*) activate immune cells, leading to secretion of cytokines. *Rasayana* reduces load of hydroxide, peroxide and oxygen free radicals because they acts as free radical scavengers^{xii}. Free radical mediated haemolysis is also reduced by *Rasayana*. Immunity, strength and resistance of body depend upon the quality and quantity of *Ojus*; when *Ojus* depleted, it predisposes us to lowered immunity, low spirits and ill-health. All rejuvenation therapies are, therefore, targeted at improving *Ojas*^{xiii}. *Ojas* is the eighth *Dhatu*, or the essence of all the body tissues, the ultimate product of nutrition and digestion, and the prime energy reserve for the entire body. It provides the energy, vitality, that we get throughout life^{xiv}.

BENEFITS OF RASAYANA^{xv}

-) It enables the body to develop its own vital energy or the defensive mechanism against disease.

-) *Rasayanas* are believed to build a barrier against stress and infection.
-) It removes waste products or remove toxins in the body
-) It increases the strength and immunity of the body.
-) *Rasayana* drugs act as Antioxidants as well as Immunomodulator may also act as antiaging.

IMMUNOMODULATORY EFFECT OF RASAYANA:

An immunomodulator may be defined as a substance, biological and synthetic, which can stimulate, suppress and modulate any of the mechanisms of the immune system including both innate and adaptive arms of the immune response^{xvii}. *Rasayana* drugs also acts as immunomodulator. *Rasayanas* as immunomodulators activate the immune function without altering the other basic parameters of the body. The immunomodulator effects of *Rasayana* are^{xviii}:

-) *Rasayana* stimulate phagocytosis.
-) It increases phagocytic index.
-) It increases lysosomal secretions of macrophages.
-) It increases bone marrow cellularity.
-) It delays ageing process.
-) It improves healing and prevents diseases at early stage.

Certain *Rasayana* drugs act as Immunomodulator. Strengthening of immunity is done in various ways – by promoting body’s defense Mechanisms like increasing the WBC count, improving immune function. Bodily defense mechanism is promoted. Certain *Rasayana* drugs also increase the number of immune cells known as T cells & B cells which help in fighting against the infections.

Some *Rasayana* herbs are^{xix}:

-) ***Guduchi:*** *Guduchi* is known to be a rich source of trace elements (zinc and copper) which act as antioxidant^{xx} and protects cells from the damaging effects of oxygen radicals generated during immune activation. It enhances cellular and humoral immunity.
-) ***Aswagandha:*** It has significant modulation of immune reactivity. It also stimulates macrophages. It has immunosuppressive effect on B and T lymphocytes. It is found that *Aswagandha* increases Hb concentration, RBC count, and platelet count.
-) ***Amalki:*** *Amalaki* is well known for its antioxidant^{xxi} and detoxification properties. As an adaptogen, *Amalaki* improves immunity and boosts both cell mediated and humoral response.

CONCLUSION

In autoimmune diseases there is a defect of immune response. Autoimmune diseases may have cured by improving the immune system. *Rasayana* increases *Ojus* which is responsible for immunity and have an antioxidant activity which helps in removing free radicals. It can be concluded that *Rasayana* builds natural resistance against infections, helps in increasing immunity and also has an immunomodulator effect, which prevents autoimmune disorders.

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