

Viruddha Ahara as a cause of Autoimmune diseases

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Abstract

Viruddha Ahara is said to be cause of –“*Ninditavyadhis*” by Acharya Charaka. Also he has given detailed description about its 18 types and the diseases developed by intake of *Viruddha Ahara*. Autoimmune diseases arise from an overactive immune response of the body against substances and tissues normally present in the body. In other words, the body actually attacks its own cells. The immune system mistakes some part of the body as a pathogen and attacks it. The cause of autoimmune diseases is still not fully understood. Various theories are postulated for the pathogenesis of autoimmune disease like processed foods are loaded with chemicals, hormones, steroids, trans-fats and sugars, which promote the creation of free radicals in the body, which in turn damage the cells it can be correlated as *Viruddha Ahara*. There are number of autoimmune diseases and the list of these diseases is still progressive. There are some autoimmune diseases which are enlisted in our Ayurvedic texts as *Viruddha Aharajanya* like- Hemolytic anemia (*Pandu*), Crohn’s disease(*Grahani*), Psoriasis (*Kushtòha*), *Visphotka*, *Visarpa* (*Pemphigus vulgaris*), Rheumatoid arthritis(*Amavata*) etc. Therefore, it can be said that *Viruddha Ahara* is root cause of autoimmune disorders.

Key words: *Viruddha Ahara*, Autoimmune diseases, *Vyadhi*, *Samprapti*

INTRODUCTION

Food plays a decisive role in development, sustenance, reproduction and termination of life. Through the centuries, Food has been recognized as an important factor for human beings, in the healthy and diseased state. The practice of *Aharavidhi* (dietetics) is an ancient, empirical and elegant art and by its proper implementation one can remain free from

diseases. Charaka has mentioned “All drugs and diets which dislodge the various *Doshas* but do not expel them out of the body are to be regarded as unwholesome [1].” Further he said “Articles of diet that are inimical to the body-elements tend to disagree with the system (body).” *Viruddha Ahara* is one potential causative factor for several diseases. Consumption of *Viruddha Ahara* gives rise to various disturbances of mild to violent nature and disease of acute to chronic nature including the eight *Maharogas*, genetic disturbances and even sometimes causes death of the person. This fact clearly indicates how far reaching effects can be produced by *Viruddha Ahara*. Autoimmune disorders occur when the body produces an inappropriate immune response against its own tissues. Sometimes the immune system will cease to

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recognize one or more of the body's normal constituents as "self" and will produce auto antibodies – antibodies that attack its own cells, tissues or organs. This causes inflammation and damage and leads to autoimmune disorders. The cause of autoimmune diseases is unknown, but it appears that there is an inherited predisposition in many cases. In a few types of autoimmune disease (such as rheumatic fever), infection with bacteria or virus triggers an immune response and the antibodies or T-cells attack normal cells because some part of their structure resembles a part of the infecting microorganism [2]. There are more than eighty illnesses caused by autoimmunity. It has been estimated that autoimmune diseases are among the ten leading causes of death among women in all age groups up to 65 years [3].

AIMS AND OBJECTIVES

1. To re-evaluate the concept of *Viruddha Ahara* and *Viruddha Aharajanya vyadhis*.
2. To evaluate the role of *Viruddha Ahara* in the pathogenesis of autoimmune diseases as well as described in Ayurvedic texts.

MATERIALS AND METHODS

This article is based on a review of the Ayurvedic texts. Materials related to *Viruddha Ahara*, disorders due to *Viruddha Ahara* and other relevant topics have been assessed from main Ayurvedic texts and available commentaries on these. We have also referred to the modern texts, journals, research works and searched various websites on the relevant topics.

Conceptual Study

Concept of *Viruddha Ahara* and *Viruddha Aharajanya Vyadhis*

Different types of food when interact is known as *Viruddha Ahara*. Charaka has quoted that "*Viruddha Veerya Ashanam Nindita vyadhi*

Karanam [4]" which indicates that *Viruddha Ahara* is root cause of wretched diseases. There are 18 types of *Viruddha Ahara* described by Acharya Charaka. Among them some of these types can be correlated with causes of autoimmune diseases like-

- *Desha Viruddha*- Environmental toxins responsible for autoimmune disease. Charaka has described various diseases that occur due to intake of the water of other river of which is not suitable for that environment which may produce environmental toxins [5].

- *Agni Viruddha*- Free radical production is due to *Agni Viruddha* in our body. Some examples of *Agni Viruddha* diseases like *Grahaniroga Nidana* [6], *Sannipatodara Nidana* [7] etc.

- *Matra Viruddha – Atimatra Ahara* may be taken as *Matra Viruddha* and it leads to formation of *Ama* such as *Amavata* (Rheumatoid arthritis).

- *Satmya Viruddha*-Intake of food items not suitable to a person's body constitution for a long time may be called as *Satmya Viruddha* which may lead to various diseases like *Kushtha Nidana* [1].

- *Paka Viruddha*- If food substances / diet is prepared is undercooked or over cooked or burnt, then it is called or *Paka Viruddha* [9]. In recent era processed food also one of the causative factors of Autoimmune disease.

- *Samskara Viruddha*- Use of preservatives in various food products packed in tinned bottles or longer time can result in formation of toxins leading to autoimmune diseases.

- *Veerya Viruddha*- Use of sweet food items/ milk products which are of *Sheeta Veerya* with *Ushna Veerya* products like samosa, dhosa, Punjabi Sabjis with Lassi etc can be lead to autoimmune diseases. Acharya Charaka has also stated "The severity of *Veerya Viruddha* by the phrase- "*Viruddha Veerya Ashanam Nindita Vyadhi Karanam* [10]"

- *Samyoga Viruddha*- It is seen practically in research work of Psoriasis that intake of milk+ khichadi (*Lavana Rasa*), milk+ onion/ garlic, fish+ milk etc as causative factor found in maximum patients which are clear

examples of *Samyoga Viruddha* [11]. Also it is stated by Charaka that taking of milk and fish together can lead to *Kushtha Roga* [12]. Among all types of *Viruddha* which are mentioned by several Acharyas, *Samyoga* or *Veerya Viruddha* is the most important or more dangerous than others.

- *Krama Viruddha*- *Krama* relates to general rules and regulations of eating described in the texts. As for example in *Kushtha Roga*, *Sheeta Ushna Krama Viruddha* intake is causative factor. Likewise, not following rules for eating leads to improper digestion resulting in formation of toxins in our body.

- *Sampada Viruddha*- Intake of such food items which are not having edible qualities like overripe, unripe, putrefied fruits, food items etc. It is seen practically that fruits and vegetables available in market are mostly synthetically made ripe which soon loses its qualities leading to formation of *Ama*.

- *Vidhi Viruddha*- If rules and regulations for diet regimen are not followed it can lead to diseases like *Kushtha*. *Ajirna* is already stated in *Kushtha Nidana* by Acharya Charaka [13] which is also seen practically in patients of Psoriasis during research [14]. Unwashed fruits or vegetables contaminated with pesticides can also cause autoimmune diseases.

Mode of Action of Viruddha Ahara described in classics

Viruddha Ahara acts in the body by various ways which is described by Acharyas. Some explanations given here are as follows- All drugs and diets which dislodge the various *Doshas* but do not expel them out of the body are to be regarded as unwholesome [15].

Sushruta has also quoted that whatever food aggravates *Dosha* but does not expel it or vitiates *Rasa* etc. *Dhatu*s gives rise to disorders [16]. Dalhana has pointed out that not only incompatible food is cause of disorder but also the other unwholesome items are stated by - *Yat* etc. *Yat kinchit* (whatever) covers the entire group of unwholesome not only *Dosha* vitiating but also *Dhatu* vitiating causes disorders, this is stated by *Rasadishu* etc. The quality of vitiating *Dhatu*s is not comprehended by that of vitiating *Doshas* as the substances possess specific powers such as vitiate *Doshas* while others vitiate *Dhatu*s [17].

Indu, commentator of Ashtang Samgraha has mentioned here that these types of *dravyas* (*Viruddha Ahara*) are localized in *Dhatu*s inspite of its antagonist nature to *Dhatu*s [18].

Agni is responsible for health as well as disease. Acharyas have stated that *Agni* is root cause for several diseases. *Viruddha Ahara*

Table 1

<i>Abhojana</i> (Abstinence from food)	<i>Matra</i> and <i>Vidhi Viruddha</i>
<i>Ajirna Atibhojana</i> (Over eating in indigestion)	<i>Vidhi, Agni, Kala</i> and <i>Matra Viruddha</i>
<i>Vishamasana</i> (Irregular eating)	<i>Agni, Kala, Vidhi Viruddha</i>
<i>Asatmya</i> (Unhologatory diet)	<i>Satmya Viruddha</i>
<i>Atiruksha Sheet</i> a (Too much Dry and Cold)	<i>Vidhi Viruddha</i>
<i>Samudista Bhojana</i>	<i>Paka, Sanskara Viruddha</i>

causes the vitiation of *Agni* as Charaka has mentioned as follows [19]

Abhojana (Abstinence from food)
Matra and *Vidhi Viruddha*

Ajirna Atibhojana (Over eating in indigestion)
Vidhi, Agni, Kala and *Matra Viruddha*

Vishamasana (Irregular eating)
Agni, Kala, Vidhi Viruddha

Asatmya (Unhologatory diet)
Satmya Viruddha

Atiruksha Sheeta (Too much Dry and Cold)
Vidhi Viruddha

Samdusta Bhojana
Paka, Samskara Viruddha

This vitiated *Jatharagni* does not digest even the lightest of food substances, resulting in undigested harmful toxic waste product which acts like a poison, which is called *Amavisha* in Ayurveda [20].

Tridosha vitiation by Viruddha Ahara

Vagbhatta has stated that Indulgence in mixture of factors causing an increase of individual *Dosha* gives room for the increase of all the Three *Doshas* [1].

Srotasa vitiation by Viruddha Ahara

Food and regimens that promote the morbidity of the *Doshas* and go contrary to the well being of *Dhatu*s vitiate the channels (*Srotasa*) [1].

Autoimmune diseases

The essential feature of an autoimmune disease is that tissue injury is caused by the immunologic reaction of the organism with its own tissues. Autoimmunity, on the other hand, refers merely to the presence of antibodies or T lymphocytes that react with self-antigens and does not necessarily imply that the development of self-reactivity has pathogenic consequences [23].

Specific Autoimmune Disorders [24]

According to the American Autoimmune Related Diseases Association (AADRA), there are approximately 80 - 100 conditions that are autoimmune related. The following is a list of 50 of the more common autoimmune disorders.

Etiological Factors of Autoimmune diseases and its relation with *Viruddha Ahara*

The exact etiology of autoimmune diseases is unknown. The proposed causes are as follows-

Family or Personal History of Autoimmune Disease

If there is a family member with an autoimmune disease an increased risk of developing an autoimmune condition is found in other members. It does not have to be the same disease if one relative may have autoimmune thyroid disease, another multiple sclerosis, and another inflammatory bowel disease. It is stated that *Viruddha Ahara* can vitiate all *Dhatu*s and by *Shukradhatudushti* there is increased risk of *Kulaj* (hereditary) disease e.g. *Kushtha* (one among which is Psoriasis in which family history is also seen positive in many patients.¹

Bacterial and Viral Infections and Illnesses

Viruses, bacteria and mycoplasma are implicated in autoimmune diseases. Often a bout of illness with a virus such as the Epstein-Barr virus triggers the onset of an autoimmune disease. *Viruddha Ahara* causes *Dhatu*vigunata which is responsible for *Balakshaya* leading to decreased immunity which may result in autoimmune disorders.

Toxic Chemical Exposure

Toxins such as pesticides, solvents, industrial chemicals, even household cleaners and hair dyes are being implicated in autoimmune diseases. These toxins are everywhere, and they greatly increase the risk

- Addison's Disease
- Alopecia
- Ankylosing Spondylitis
- Antiphospholipid Syndrome (APS)
- Autoimmune Hepatitis
- Behcet's Disease
- Bullous Pemphigoid
- Castleman's Disease
- Celiac Disease
- Chronic Fatigue Syndrome
- Chronic Inflammatory Demyelinating Neuropathy (CIDP)
- Churg Strauss Syndrome
- Crohn's Disease
- Endometriosis
- Fibromyalgia
- Giant Cell Arteritis
- Glomerulonephritis (Autoimmune Kidney Disease)
- Graves' Disease
- Guillain-Barre Syndrome
- Hashimoto's Thyroiditis
- Idiopathic Pulmonary Fibrosis
- IgA Nephropathy
- Interstitial Cystitis
- Kawasaki Disease
- Lupus
- Meniere's Disease
- Mixed Connective Tissue Disease (MCTD)
- Multiple Sclerosis
- Myasthenia Gravis
- Narcolepsy
- Pemphigus
- Pernicious Anemia
- Polyarteritis Nodosa
- Polymyositis
- Primary Biliary Cirrhosis
- Psoriasis
- Raynaud's Phenomenon Disease
- Reiter's Syndrome
- Rheumatoid Arthritis
- Sarcoidosis
- Scleroderma or CREST Syndrome
- Silicone Immune Toxicity Syndrome
- Sjogren's Syndrome
- Stiff-Man Syndrome
- Type 1 Diabetes
- Ulcerative Colitis
- Vascular Dementia
- Vasculitis
- Vitiligo

of all diseases in general. The examples of *Sampada Viruddha* deals with all such food items which are deranged in quality.

Nutritional Deficiencies

Poor diet is an important factor in autoimmunity because poor nutrition compromises the immune system. Processed food is loaded with chemicals, hormones, steroids, trans-fats and sugars, which promote the creation of free radicals in the body. It can be understood by two types of *Viruddha* i.e *Paka Viruddha* and *Samskara Viruddha* which can lead to various autoimmune diseases.

Review study of various Authors:-

- According to Stephen B. Edelson, autoimmune diseases are caused primarily by a combination of genetics and environmental toxins. Hereditary predisposes a person to developing an autoimmune disorder, and environmental toxins trigger the conditions into being. So for instance some people who are genetically predisposed to autoimmune disorders do not develop autoimmune conditions and not everyone who is exposed to environmental toxins develops these conditions either. But the combination of heredity and environmental toxins as well as a stressful life event may be all that is needed². Researchers believe that if a person have a certain gene or combination of genes, he may be at higher risk for autoimmune disease but that he won't get the disease until something triggers his immune system [3]. This theory shows the concept of *Shukra dushti* by *Viruddha Ahara* leading to *Adibala pravritta Vyadhi* and such susceptible person if further take *Viruddha Ahara* can easily manifest autoimmune diseases.

- According to Thomas Nissen, We all have hereditary tendencies towards certain diseases. If a person is exposed to environmental toxins over long periods of time, this creates an enormous amount of free radicals in the body. These free radicals then alter the body's pH (which must be kept constant). An altered pH allows viruses, bacteria, candida and other pathogens to

thrive; this then sets the stage for more free radicals. The free radicals damage the cells, making it impossible for the cells to communicate with each other. Autoimmunity results when the immune system attacks the damaged cells.⁴This theory can be clearly understood by the formation of *Ama* due to intake of *Viruddha Ahara* which in turn is converted to *Amavisha* which can be compared with formation of free radicals.

DISCUSSION

Viruddha Ahara is the root cause of most of the diseases and here we have showed the pathogenesis created by *Viruddha Ahara* as under.

According to modern point of view *Amavata* is very similar to Rheumatoid arthritis because Rheumatoid Arthritis is an autoimmune disease that causes chronic inflammation of the joints. Rheumatoid arthritis can also cause inflammation of the tissue around the joints, as well as other organs in the body. Because it can affect multiple other organs of the body, rheumatoid arthritis is referred to as a systemic illness and is sometimes called rheumatoid disease [1]. Rheumatoid arthritis have unknown etiology. So many hypotheses have been put forward to explain its etiology but still the research is going on. Now days theories of autoimmune mechanism, genetic susceptibility and free radical are most commonly incriminated role in etiopathology of the disease arthritis. In disease *Amavata*, the partially digested dietary substance accumulated at the level of intestine may lead to the Gastro-enteritis, part of *Ama* penetrates intestinal mucosa, circulates all over the body and perform the role of Antigen, consequently vitiating the *Dosha* to cause different disorders. *Amavata* is one of such disorders where Antigen antibody complex mediated tissue injury is basic pathogenesis. *Ama* can also be compared to unstable reactive free radicals, which are the main cause of many diseases and degenerative changes in the body and it may be produced due to *Viruddha Ahara*. *Ama* and free radicals can be co-related as follows.

Chart [29]

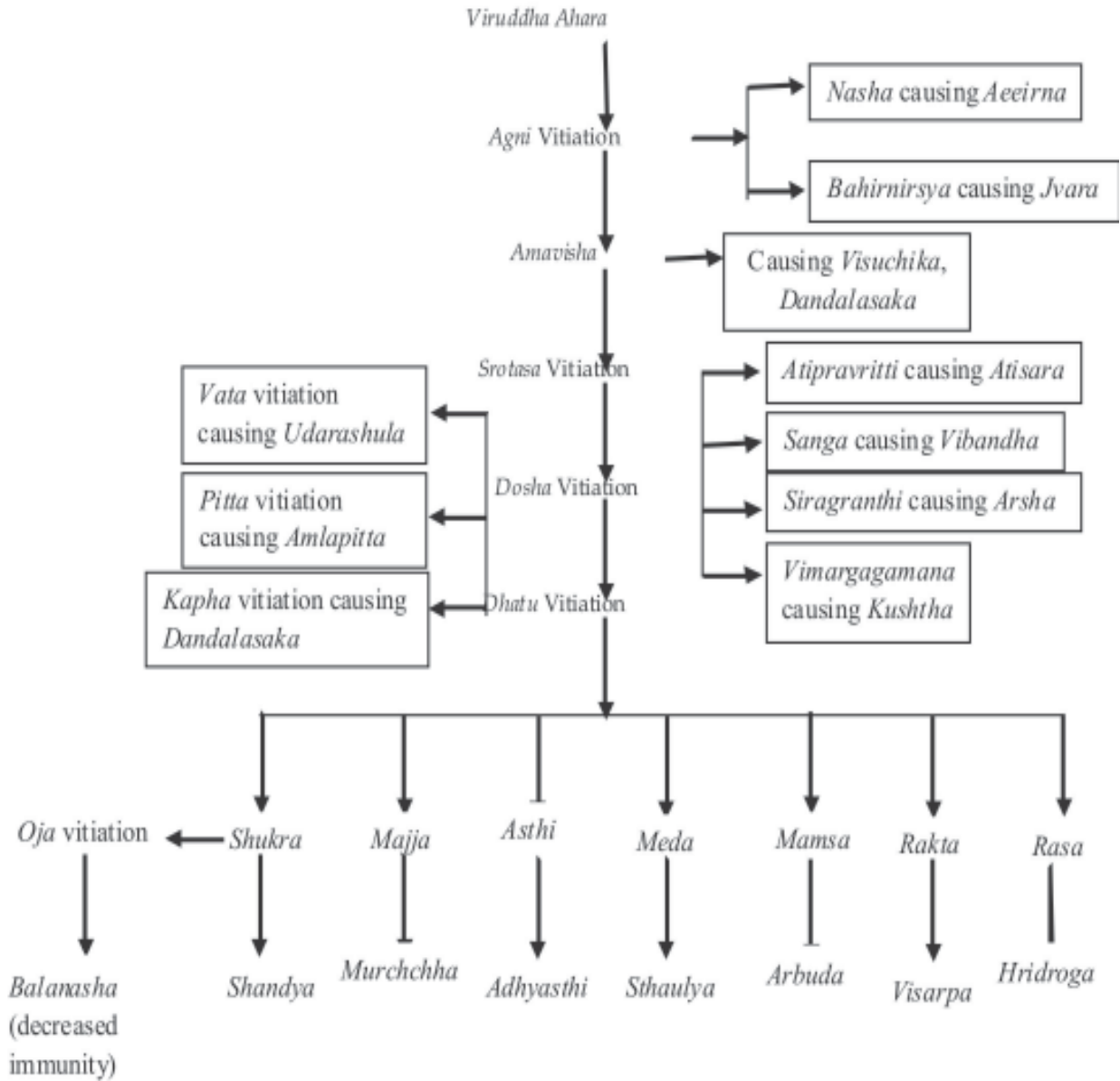


Table 2. Correlation between Ama & Free Radical

Production Causes		
Causes	Ama	Free Radicals
Exogenous	<i>Mithya-Aharavihara</i>	Pollutants, dangerous chemicals, certain food products.
Endogenous	Produced whenever <i>Mandagni</i> is there	Due to deficiency of certain enzymes like SOD.

Thus, we can understand that free radical formation is root cause of autoimmune diseases like Rheumatoid arthritis and it can be very well correlated with formation of *Ama* in disease *Amavata*.

Psoriasis is an immune disorder, and a growing body of evidence indicates that abnormal T-cell activity is a critical component of disease pathogenesis it has been suggested that in predisposed individuals, certain epidermal triggering events induce activation of the basal cell layer of the epidermis stimulated by activated T lymphocytes in the blood vessels immediately beneath the epidermis. This results in increased turnover of epidermal cells which reach the top layer within 3-4 days instead of the normal 28 days. These are the silvery white thick scales, the typical feature of psoriasis. Likewise it is practically seen in research work of Psoriasis that maximum patients i.e. 36.93% were taking *Viruddha Ahara* in which specific *Viruddha Ahara* found were taking milk + khichdi, milk+ fish, tila (sesame) + guda (jaggery) etc¹. The main triggers of skin disease according to Ayurveda are, Using of opposite quality of foods at the same time, That is using Yogurt with Milk, or Fish with Milk, or Achar (Pickle) with Milk or Honey with Ghee (Butter) these are opposite foods and if taken together, they produce slow poisons in our body. It has been seen that people taking fish preparations and cheese preparations along with alcohol, this is a deadly combination and can easily lead to skin diseases, because fish and milk products like cheese are contraindicated. Using cold drinks and cold water when a person is in stress or after having hard physical work this is just like an injury to skin and it is a proven fact that injury to skin triggers psoriasis (koebners sign) [2].

CONCLUSION

The concept of *Ama* and *Agni* has an important role in disease manifestation .It has been described that majority of diseases are due to uncontrolled or wrong dietary controls, lack of exercise and environmental factors. Regarding treatment aspect 66% of diseases

could be managed only by changing diet and life style.³ In Ayurveda various causative factors are mentioned, which can produce poisons in intestine like opposite food and deeds which we already detailed in *Viruddha Ahara*. *Kushtha*, *Amavata*, *Visarpa* etc. originating due to intake of *Viruddha Ahara* and these all are very well considered as Auto immune diseases. Thus we can understand that *Viruddha Ahara* is the main cause of various types of autoimmune diseases like Pemphigus, Rheumatoid arthritis, Psoriasis, DM- I etc.

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