

CONCEPT OF ALLERGIC DISORDERS IN AYURVEDA - A REVIEW ARTICLE

Himadri Arya^{1*}, Swati Bhandari² and Sanjay Kumar Singh³

^{1,2}Second Year MD Scholar Dept. of Rog Nidan Evum Vikriti Vigyan, Rishikul Campus,
UAU, Haridwar.

³Professor, Dept. of Rog Nidan Evum Vikriti Vigyan Dept. of Rog Nidan Evum Vikriti
Vigyan, Rishikul Campus, UAU, Haridwar.

Article Received on
10 August 2021,

Revised on 30 August 2021,
Accepted on 20 Sept 2021

DOI: 10.20959/wjpr202112-21847

*Corresponding Author

Dr. Himadri Arya

Second Year MD Scholar
Dept. of Rog Nidan Evum
Vikriti Vigyan, Rishikul
Campus, UAU, Haridwar.

ABSTRACT

Tridoshas are the body humours or forces responsible for health and disease in accordance with their state of equilibrium and imbalance. Among various groups of disorders, the occurrence of allergic disorders has increased over the years. This may be due to faulty lifestyle i.e use of canned food, fast food, adulterated food, alcoholism, smoking, use of synthetic clothes or environmental pollutants etc. These results in imbalance of *tridosha* and hypofunction of *agni* which produces *ama*. *Ama* is the root cause of allergic disorders because our body recognizes *ama* as a foreign substance (allergen). As a result, *vata* or *pitta* or *kapha* type of allergies may occur in the body. Allergy

itself is not a disease but it gets manifested as a symptom in various types of disease. It is defined as a hypersensitive rapid immunogenic response against a particular antigen i.e., dust, pollen, food, drugs, microbes & various chemicals and endogenous self-antigens. So, proper healthy lifestyle helps in maintaining the balance between the *tridosha* thereby preventing allergic disorders.

KEYWORDS: *Tridoshas*, *Ama*, *Dosha*, Allergy, Hypersensitivity.

INTRODUCTION

Life style plays an important role in the maintenance of health. Nowadays, millions of people are indulged in unhealthy lifestyle. Intake of unhealthy diet, canned foods, incompatible and unwholesome foods, smoking, alcohol consuming, drug abuse, stress, eating and sleeping at irregular intervals etc are key factors of faulty lifestyle. These unhealthy practises lead to

poor immune status which have resulted in production of various diseases; allergic disorders are one among of them. Allergy itself is not a disease but it gets manifested as a symptom in various types of disease. It is defined as a hypersensitive rapid immunologic reaction against a particular antigen. The reactions can be elicited by exogenous environmental antigens include dust, pollen, food, drugs, microbes & various chemicals and endogenous self-antigens. Hypersensitivity usually results from an imbalance between the effector mechanism of immune responses and the control mechanism that serve to limit such responses.^[1] The immune response imbalance causes tissue injury and produce disease. These diseases include asthma; rhinitis; anaphylaxis; drug, food and insect allergy; eczema; urticaria and angioedema etc.

The prevalence of allergic diseases worldwide is rising dramatically in both developed and developing countries. A steady increase in the prevalence of allergic diseases globally has occurred with about 30-40% of the world populations now being affected by one or more allergic conditions. According to World Health Organization (WHO) statistics, hundreds of millions of subjects in the world suffer from rhinitis and it is estimated that 300 million have asthma, markedly affecting the quality of life of these individuals and their families, and negatively impacting the socio-economic welfare of society.^[2] The burden of allergic diseases in India has been on an uprising trend in terms of prevalence as well as severity. Approximately 20% to 30% of total population in India suffers from at least one allergic disease. Because the prevalence of allergy has increased to such an extent, allergy must be regarded as a major healthcare problem.

In *Ayurveda* it is the result of a particular substance (the allergen) which aggravates a specific dosha i. e. *Vata*, *Pitta* and *Kapha*. The body balance is basically based on the balance of *tridoshas*. So, if the body balance is maintained no allergic reactions are possible. As per *Ayurveda*, root cause of allergy is production of *ama* or toxin in the body due to low digestive fire or due to *asatmya* or *virudha ahara* which can vitiate *rakta* or *pitta* or it can vitiate *kapha* producing different kind of symptoms such as itching, skin rashes etc. *Acharya charaka* has mentioned some allergic disorders (*Anurjatajanya vikara*) such as *Udarda* under *Kaphanatanatmaja vikara*^[3] and *Kotha* under *Raktapradoshaja vikara*.^[4] Symptoms of allergic skin reaction is mentioned as *Kotha* in *Brihata Trayi*. Later on, it is developed as separate disease under the title *Sheetapitta-Udarda-Kotha* by *Madhavakara*.^[5] In our *Samhita*, these three disorders are described as almost similar but are having few different characteristics and different causative factors.

Causes of allergy

- **Production of *ama***:- It is formed Due to diminished digestive fire (*Agnimandya*) as a result the first *dhatu*, namely *Rasa*, does not form properly. So, it remains in the *Amashaya* for a long time and undergoes fermentation. This state results in formation of *Ama*. When *Ama* further metabolizes in the alimentary canal, it produces toxic substances, which are known as *amavisha*. Intestine can absorb this *amavisha* into the blood or lymph and mix with *doshas*, *dhatu*s and *malas* in the body, which leads to various diseases. Production of *ama* can vitiate *rakta* or *pitta* or it can vitiate *kapha* producing different kind of symptoms such as itching, skin rashes etc.
- ***Asatmyata* (Intolerance)**:- The word '*Satmya*' means suitability to those things which are favourable for oneself. *Satmya* and *upashaya* have the same meaning. Thus, *satmya* is integral part of preservation of health and treatment. A substance which is not conducive to the body is regarded as '*Asatmya*' or unwholesome and which becomes responsible to provoke all the *doshas*. This Intolerance can be towards any food, weather or medicine or any habits (*Asatmya ahara-vihara*). If an individual consumes a diet that he is not accustomed to, then it leads to incompatibility and cause diseases; e.g., Peanut allergy. It is the most common type of food induced anaphylaxis. The reason for this is that here the body identifies peanut protein as harmful to the body.
- ***Viruddha ahara* (Incompatible food)^[6]**:- The diet, which disturbed the balance among the body elements is called unbalanced diet. Unwholesome diet is called *virudhahara* in *Ayurveda*. The word '*virudha*' denotes opposition. *Virudhahara* is explained by *acharya charaka*. He clearly says, that certain diet and its combinations, which interrupts the metabolism of tissue, which inhibits the process of formation of tissue and which have the opposite property to the tissue are called as *Virudhahara* or incompatible diet for example taking diet with hot and a cold potency simultaneously would generate toxicity, which further cause skin allergies. The combination of any two or more factors when used, may creates harmful effects on the health. Wrong food combinations (*Virudhahara*) having antagonistic properties like fish with milk, fruit juice with milk, clarified butter with honey or ice cream after night meals etc. which leads to allergic reactions.

- **Alpa-vyadhikshamatva (Low-immunity):-** Acharya Chakrapani has commented in *charak samhita* that *Vyadhikshmatvam nam vyadhi bala virodhitvam vyadhyutpada prathibhandakatvam*.^[7] *Vyadhi-balavirodhitvam* is the capacity to resist the strength (severity) of the diseases. *Vyadhi-utpadakapratibandhakatva* is the resisting power of the body competent enough to prevent the occurrence and re-occurrence of the disease. The purpose of the immune system is to defend itself and attack the microorganisms or substance that invade in the body and cause diseases. Weak immunity plays a role in the manifestation of allergy.
- **According to Madhavkar “khrek: rlaLi”kkZ’^[8]**:- This vitiates *kapha* and *vata* and increase them. Subsequently, along with *pitta*, the *kapha* and *vata* begin to travel externally in the skin and internally through the blood and other tissues.

Allergy and Tridosha

The body balance is basically based on the balance of *tridosha* i.e., *vata*, *pitta* and *kapha*. As per *Ayurveda*, that allergies originate from an imbalance of the *dosha* or bio- energetic principles that govern the function of our body and mind. So, if the body balance is maintained no allergic reactions are possible. Allergies according to dosha: *vata*-type, *pitta*-type and *kapha*-type.^[9]

- **Vata-Type allergy:** *Vata* aggravating factors i.e., dry, bitter, spicy and astringent food, raw food, cold food, cold- dry and windy weather, excessive exercise or overactivity causes this type of allergy. This kind of allergic reaction may start suddenly with wheezing and *vata* related asthma, dizziness, giddiness and headaches.
- **Pitta-Type allergy:** It is caused by *pitta* aggravating factors like hot, spicy, sour and salty foods, fermented food and hot weather. It is usually occurred when an allergen comes in contact with the skin and then subsequently enter into the bloodstream. *Pitta* types allergies are therefore often skin-based reactions such as hives, rashes, itching, eczema and allergic dermatitis.
- **Kapha-Type allergy:** *Kapha* aggravating factors like sweet, sour, salty food; dairy foods i.e., milk, yogurt, cheese etc; fruits like cucumber, water melon and cold, rainy or cloudy season may lead to allergic reactions. *Kapha* type allergies are most likely to be exacerbated during the spring season because of the onslaught of pollen- based allergens.

The symptoms are irritation of the mucus membrane, hay fever, cold, congestion, cough, bronchial congestion, asthma or sleeping disorders.

Allergy and Hypersensitivity

An allergy is an immune system response to a foreign substance that's not typically harmful to the body. Allergic disease is common and increasing cause of illness, affecting between 15% and 20% of the population at the same time. Hypersensitivity is a rapid immunologic reaction occurring in a previously sensitized individual that is triggered by the binding of an antigen to IgE antibody on the surface of mast cells. These reactions are often called allergy, and the antigens that elicit them are allergen. IgE coated mast cells are said to be sensitized because they are activated by subsequent encounters with antigen. When a Mast cell armed with IgE antibodies previously produced in response to an antigen is exposed to the same antigen, the cell is activated, leading to the release of an arsenal of powerful mediators that are responsible for immediate hypersensitivity reactions.^[10]

Mediators of hypersensitivity^[11]

Mediators contained within mast cells granules are the first to be released and can be divided into three categories:

- Vasoactive amines i.e., Histamine which causes intense smooth muscle contraction, increase vascular permeability and stimulates mucus secretion by nasal, bronchial and gastric glands.
- Enzymes include neutral protease (chymase, tryptase) and several acid hydrolases contained in the granule matrix. The enzymes cause tissue damage and lead to the generation of kinins and activated components of complement.
- Proteoglycans include heparin and chondroitin sulphate. They serve to package and store the amines in the granules.

Common types of allergens

- **Animal products:** These include pet dander, dust mite waste, and cockroaches.
- **Drugs:** Penicillin and sulfa drugs are common triggers.
- **Foods:** Wheat, nuts, milk, shellfish, and egg allergies are common.
- **Insect stings:** These include bees, wasps, and mosquitoes.
- **Mould:** Airborne spores from mould can trigger a reaction.

- **Plants:** Pollens from grass, weeds, and trees, as well as resin from plants such as poison ivy and poison oak, are very common plant allergens.
- **Other allergens:** Latex, often found in latex gloves and condoms, and metals like nickel are also common allergens.

Anti-allergic ayurvedic HERBS

Reoccurrence of allergic disorders are more frequent even after the treatment thus ayurvedic herbs should be used to treat the root cause of allergy. Many such herbs are mentioned in our classics for example: -

- ***Nimba (Azadirachta indica)*^[12]**:- *Nimba*, commonly known as *Neem* is most widely used herb for the treatment of skin allergic conditions. The plant contains Nimbin, Nimbinin, Nimbidin, Nimbosterol, Margosin, Azadirachtine possess karma like anti-allergic, antimicrobial, antioxidant, anti-inflammatory.
- ***Haridra (Curcuma longa)*^[13]**:- *Haridra* commonly known as turmeric. It contains a high amount of alkaloid, curcumin, curcumone, termerol, essential oil resin and turpenoids. It is used as an antioxidant and possesses various beneficial properties such as anti-allergic, anti-inflammatory, antiseptic, blood cleansing etc. It can be used to pacify *kapha* and *pitta* dosha.
- ***Guduchi (Tinospora cordifolia)*^[14]**:- *Guduchi* commonly known as *giloy*. It is antibiotic, anti-inflammatory, anti-cancer or an immune modulator drug. It contains berberine, tinosporin, choline, ethanol, giloin etc. It is useful to remove *ama* (toxins) and other microbes from the body and rejuvenates body. The herb is effective for various skin disorder like itching, burning sensation, chills and excessive sweating.
- ***Khadir (Acacia catechu)*^[15]**:- *Khadira*, commonly known as *Kattha*, black catechu or cutch tree. It contains Catechin, Tannic acid, Tannins and Quercitin. It is chiefly used for treating skin and respiratory problems of allergic origin. It has anti-inflammatory, anti-microbial and anti-oxidant traits. Furthermore, it is known to pacify *kapha* and *pitta* dosha due to its *tikta kashaya* properties. *Khadir* preparation like '*Khadirarishta*' is very useful in detoxifying the body off the accumulated toxins (*Ama*) which accumulate in the body as a result of faulty lifestyle and dietary habits.

- ***Shirisa* (*Albizia lebbbeck*)^[16]**:- It is an important anti-posioning herb in *Ayurveda*. It is *Kashaya*, *tikta* and *madhura* in taste. Main consituents found in *shirisa* are saponin and tannin which suppress the histamine induced allergic reaction like bronchospasm, pulmonary eosinophilia; skin diseases or food allergy. It has anti-allergic,
- ***Udard-prashman mahakashaya*^[17]**:- *Udarda Prashamana Mahakshaya* is a multi-herb decoction explained in *charak samhita* which contains ten important herbs in equal quantity. They are – *Tinduk* (*Diospyros peregrina*), *Priyala* (*Buchanania lanzan*), *Badar* (*Zizyphus jujuba*), *Khadir* (*Acacia catechu*), *Kadar* (*Acacia suma*), *Saptaparna* (*Alstonia scholaris*), *Ashwakarna* (*Dipterocarpus turbinatus*), *Arjuna* (*Terminalia arjuna*), *Asana* (*Pterocarpus marsupium*), *Arimeda* (*Acacia leucophloea*) in equal quantity. It is indicated in *Udarda*, *Sheetapitta*, *Kotha* with *Tridoshaghana* action mainly *Kapha-pittahara* along with *Rakta Prasadana*, *Kushthaghana*, *Shothahara* actions etc.

DISCUSSION

As allergic disorders are the result of faulty lifestyle. These unhealthy lifestyle practises lead to weakened immune status which is responsible for manifestations of various allergic disorders. The root cause of allergy is production of *ama* due to low digestive fire or due to *asatmya* or *virudha ahara* which vitiates *Vata*, *Pitta*, *Kapha* and *Rakta* produces different kind of symptoms such as itching, skin rashes etc. Allergy is the result of a particular substance (the allergen) which aggravates a specific dosha i.e., *Vata*, *Pitta* and *Kapha*. This results in imbalance of the *tridoshas* causing different allergic reactions. For example, In *Vata*-type of allergy, the allergic reaction may start with dizziness, giddiness and headaches. In *Pitta*-type of allergy, the reactions are often skin-based such as hives, rashes, itching, eczema and allergic dermatitis. In *Kapha*-type of allergy, the reactions aggravate mostly in spring season resulting in cold, cough, congestion or hay fever. In *Ayurvedic* classics, various herbs are described for the management of allergic disorders such as *Nimba*, *Haridra*, *Khadira*, *Guduchi*, *Shirisha* etc. These drugs work as immunomodulators, Anti-histaminic and mast cell stabilizers. So, by virtue of these property these herbs help to prevent the reoccurrence of allergic reactions.

CONCLUSION

In modern science various remedies are available for management of allergic disorders but permanent cure is still not available. These drugs also have many adverse effects and habit

forming. On the other hand, *Ayurveda* has a lot of potential in the management and prevention of allergic disorders. So, by following proper healthy lifestyle and dietary habits and use of Ayurvedic herbs we can better manage and prevent allergic disorders.

REFERENCES

1. K Vinay, Abbas AK & Aster JC, Robbins & Cotran Pathologic Basis of Disease, Edition RELX India Pvt. Ltd; P, 2020; 6(10): 204.
2. <https://gaapp.org/allergy>
3. Charaka Samhita, Shastri K & Chaturvedi GN, Sutra Sthan, Chapter Reprint year Chaukhambha Bharati Academy, Varanasi, 2018; 404: 20 - 17.
4. Charaka Samhita, Shastri K & Chaturvedi GN, Sutra Sthan, Chapter Reprint year Chaukhambha Bharati Academy, Varanasi, 2018; 570: 28: 11-12.
5. Madhukosh Vaiyakhya, Upadhyaya Y, Vidyotini Hindi Commentary on Madhava Nidanam, Chapter; Edition Chaukhambha Prakashan, 2016; 200: 50 – 1.
6. Charaka Samhita, Shastri K & Chaturvedi GN, Sutra Sthan, Chapter Reprint year Chaukhambha Bharati Academy, Varanasi, 2018; 517: 26 - 81.
7. Charaka Samhita, Shastri K & Chaturvedi GN, Sutra Sthan, Chapter Reprint Chaukhambha Bharati Academy, Varanasi, 2018; 28 – 7.
8. Madhukosh Vaiyakhya, Upadhyaya Y, Vidyotini Hindi Commentary on Madhava Nidanam, Chapter Edition Chaukhambha Prakashan, 2016; 200: 50 – 1.
9. <https://www.banyanbotanicals.com/info/ayurvedic-living/living-ayurveda/health-guides/allergy-guide/>
10. K Vinay, Abbas AK & Aster JC, Robbins & Cotran Pathologic Basis of Disease, Chapter Edition RELX India Pvt. Ltd, 2020; 205: 6 – 10.
11. K Vinay, Abbas AK & Aster JC, Robbins & Cotran Pathologic Basis of Disease, Chapter Edition RELX India Pvt. Ltd, 2020; 206: 6 - 10.
12. Dravyaguna-vijnana, Volume-II, Sharma P.V., Chapter Reprint Chaukhambha Bharati Academy, Varanasi, 2009; 2: 149.
13. Dravyaguna-vijnana, Volume-II, Sharma P.V., Chapter Reprint, Chaukhambha Bharati Academy, Varanasi, 2009; 2: 162.
14. Dravyaguna-vijnana, Volume-II, Sharma P.V., Chapter Reprint, Chaukhambha Bharati Academy, Varanasi, 2009; 9: 761.
15. Dravyaguna-vijnana, Volume-II, Sharma P.V., Chapter Reprint Chaukhambha Bharati Academy, Varanasi, 2009; 2: 159.

16. Dravyaguna-vijnana, Volume-II, Sharma P.V., Chapter Reprint Chaukhambha Bharati Academy, Varanasi, 2009; 9: 773.
17. Charaka Samhita, Shastri K & Chaturvedi GN, Sutra Sthan, Chapter Reprint year Chaukhambha Bharati Academy, Varanasi, 2018; 4: 8 - 94.