

**A PHYSIOLOGICAL STUDY OF VYANABALA VAISAMYA  
(HYPERTENSION) AS PER AYURVEDIC PRINCIPLES****Vishal Sharma\***

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**ABSTRACT**

The word Ayurveda derived from AYU and VEDA. AYU means Life VEDA means Science of Knowledge. In Ayurveda, the disease Vyanabala Vaisamyia seems to be a result of the Vaisamyia/ Vikriti of Vyana vata. Vata is responsible for the regulation of other Doshas (Pitta and Kapha). In the pathological state also it has double path of vitiation viz. Dhatu kshaya and the Avarana. Vyana is a type of Vata which moves all over the body. Its Nirukti indicates that it affects the whole body. Bala here is indicative of the normal guna (properties) and Karma (functions) of Vyana. Vaisamyia refers to Vikriti or disequilibrium of Dosha in which they are able to produce the disease. Therefore Vyanabala Vaisamyia may either be considered as increased and decreased function of Vyana. Here in the present study hyper function of Vyana Vata is considered under Vyanabala Vaisamyia

which produces increased force in the wall of the channel (blood vessels) to produce the disease Hypertension. In Hypertension, mainly Vata Prakopa occurs, particularly Vyana Vata as it is responsible for Rasa Rakta Samvahana. By virtue of its Ruska, Sheeta, and Khara Guna, Rasa Rakta Vahini Dhamanis are constricted; also its Ruska guna dries the Malarupa Kapha at the inner side of the Vessels making them more rigid. Vascular lumen may be reduced further leading to obstruction in it. So for normal circulatory function, increased force of Vyana Vayu is required resulting into Vyanabala Vaisamyia and hence leading to the development of Hypertension.

**KEYWORDS:** Vyanabala Vaisamyia, Hypertension, Vyana Vata, Dhatu Kshaya, Dhamani, Srotas, Rasa, Rakta.

## INTRODUCTION

Ayurveda, which means “Science of life” is one of the oldest medical system believes in holistic approach. The Ancient Ayurvedic classics contain complete description about vitiated Dosha Lakshanas and symptoms and complications related to various diseases are scatterly described in different context. A direct disease condition comparable to hypertension is not mentioned in the classics, its Symptomatology is found in the chapters of Prameha, Hridaya Roga, and Vata Vyadhi. Charak has quoted that the physician should not worry about naming of particular disorder if it is not known to him. He should initiate treatment after assessing pathogenesis, location and etiological factors of the disorder.

The disease Vyanabala vaisamya seems to be resulted from the vikriti of Vyana vata. Vata is a unique Dosa which regulates and is responsible for the movement of other Dosas. It can produce more number of disease than the other two Dosas. Charka mentioned 80 types of Vataj disease. The Rasa-Rakta Dhatu, through which the body gets its nutrition, circulates throughout the body with the help of Vyana Vata through the 24 Dhamanis. As the Vyana Vata is responsible for the movement of this Rasa-Rakta Dhatu, any derangement in the Vyana Vata causes alteration in the circulation of Rakta Dhatu. It is due to the following reasons:-

1. The obstruction of the channels either by the constriction or by the increased hardness of the blood vessels or due to loss of elasticity of the blood vessels.
2. Aggravation of Vyana Vata, which increases ruksata (roughness) and kathinata (hardness) in the vessel wall producing sankocha (constriction) of the blood vessel.
3. Sometimes accumulation of unwanted materials like cholesterol inside the blood vessels reduces the internal passage of channels and causes sankuchna of passage.

## MATERIAL AND METHODS

References related to proposed title are collected from classical books of ayurveda. Various publications, books, research papers, internet, library, webinars and proceedings of seminars related to the topic are collected.

### Review of vyanabala vaisamya as hypertension

Vaisamya refers to vikriti or disequilibrium of the Dosa in which they are able to produce the disease. According to Charaka Vaisamya means Vriddhi or kshaya, i.e. either increase or decrease. Therefore Vyanabala vaisamya may either be considered as increased function or decreased function of Vyana Vata. In the present study hyper function of Vyana Vata is

considered under Vyanabala vaisamyā, which produces increased force in the wall of the channels (blood vessel) to produce hypertension. Disease is the effect of Dosa Dushya Sammurchna, which is also called as Samprapti. Along with Dosa and Dushya factors like Agnimandya, Ama, Srotovaigunya play important roles in the formation of disease. Here Srotas are considered as the key factors or the causation of disease as they carry the Dosa and Dhatu in them. According to C. Dwarkanath Srotamsi constitute the internal transport system of the body. They have parallel in the vascular capillary bed and plasma membrane of cells through which metabolically produced substances pass to and from the Dhatu. These channels are semi permeable and they exhibit selectivity. Metabolic changes take place at this level. Srotamsi form part of the Kala system of the body. Agni Dusti or Mandhya of the cells that compose the Srotamsi lead to Srotovaigunya or functional disturbance of the Srotas which may be followed by structural changes in them. This may lead to Srotodha which in term brings about an interaction between the excited Dosa and Dushya at the site of their obstruction.

### **Concept of Rasa and Rakta**

Rasa is colourless and it gets red colour under the influence of the Ranjak Pitta. According to Sushruta the origin of Rasa is food. IT is the quintessence of nutrition. This Rasa Dhatu turns into Rakta Dhatu in the Hridaya. Rasa significantly contributes in the formation of Rakta with parts of itself, which are homologous of this Dhatu. It circulates through the body through 24 Dhmanis to soothen, maintain and irrigate the body by oozing. While circulating through the various Ashayas, it causes in contact with Dosa, Dhatu and Mala. It is a viscous fluid and functions by lubricating, vitalizing, aristening and nourishing the body.

The entire Rasa is not transformed into Rakta Dhatu. i.e. Dhatu Rupa Rakta. The remaining parts of it, assumes red colour, as it traverses through Raktasthanas (Yakrit, Pleha). Acharya Sivadasa sen quoted that the Rasa Dhatu in the course of its circulation, first comes in contact with the Raktasthana where it is turned into a substance resembling Rakta in colour and it thus proceeds to nourish the Rakta Dhatu, with substances which are homologous to this Dhatu. This Rasa-Rakta Dhatu then gets circulated throughout the body with the help of Vyana Vata through the 24 Dnamanis. As the Vyana Vata is responsible for the movement of Rasa-Rakta Dhatu, any derangement in the Vyana vata causes disturbance in the circulation of Rasa Rakta Dhatu. Vata can be vitiated by Dhatu kshaya and Avarana (obstruction of pathway of Vata).

Excessive indulgence of Vata increasing diets produces Ruksata, Kharata, Kathinata etc and responsible for loss of Snigdghata, produces Dhatu kshaya in the body especially inside the channels. This in turn increases vacuum (riktasthana) inside the Srotas, which is further occupied by Vata Vriddhi.

### **Hypertension vis-a- vis other conditions of classics**

The change in the social and economic conditions, life style, dietary habits and an increasing stress and strain in earning the livelihood must have increased the frequency of this disease which necessitates the scientific community to describe in detail. Different conditions which can be correlated with Hypertension are discussed below:

#### **1. Dhamani paripurana**

According to Acharya Gananath sena the word hypertension has been translated as Dhamani paripurana because of its increased blood volume and increased pressure on the atrial walls. Increased volume of blood may be the only instating factor in the pathogenesis of hypertension, but it is the increased vascular resistance which keeps blood pressure high in advanced cases.

#### **2. Vyanabala vaisamyia**

The entity of blood pressure can be correlated with Vyanabala Vaisamyia as circulation of Rasa Dhatu in the body and its velocity depends upon Vyana Vata.

#### **3. Dhamani praticaya**

Dhamani praticaya is a Kaphaj disease according to Charaka, is correlated with hypertension. The word Dhamani Praticaya is loss of elasticity of atrial wall often seen in arteriosclerosis, which takes part in the pathogenesis of Hypertension.

#### **4. Siragata vata**

Siragata Vata has much similarity with description of arterial hypertension. (according to Caraka)

#### **5. Pittavrta vata**

When Vata is obstructed by Pitta, it manifests features like flushing, excessive thirst, pain, giddiness, unconsciousness; ingestion of pungent, sour, salty food causes indigestion and desire of cold things.

**6. Raktavruta vata**

When Vata gets obstructed by Rakta, it causes burning pain between skin and muscles. It also causes burning pain, redness, Odema and burning sensation.

**7. Pittavruta udana**

When Udana Vata is overlapped by pitta it causes fainting, burning sensation in navel region and chest, fatigue, loss of oja and malaise.

**8. Pranavruta udana**

When Parana Vata is overlapped by Udana Vata, it causes stiffness of head, coryza, and difficulty in respiration, cardiac disease and dryness of mouth.

**9. Raktagata vata**

The symptoms of Rakta gata Vata are body ache, emaciation, skin disorders, stiffness of body, loss of taste.

**Physiology of hypertension in ayurveda**

Blood pressure is the result of many physiological activities, therefore this process is considered to be produced by some organs like heart, energy which controls the movement of heart and other organs. In Ayurveda Tridosha, Sapta dhatu and trimala are the root cause of all the function of the body. The blood pressure in term of Ayurveda, consideration of various basic factors like Rasa and Rakta Dhatu, transport system (Srotas) , Sadhak Pitta, Avalambaka Kapha and Oja are necessary. Some factors interact with each other and responsible for the change the blood pressure:

- 1. Rasa/rakta paribhramana**
- 2. Manovaha srotas**
- 3. Vatavaha samsthana**
- 4. Mutravaha srotas**
- 5. Dosa vivecana**

**Rasa/Rakta paribramana**

Rakta circulates along with Rasa as both are fluids. Circulation of Rasa and Rakta takes place together with the help of heart pump through Dhamanis, Srotas and Sira. It can be supported by some points given below.

Hridaya is the organ which receives the blood from all parts of the body.

Circulation of Rasa and Rakta from Hridaya is with the help of Vyana Vata.

Samana Vata brings Rasa to Hridaya after digestion of ahaara rasa. This rasa after the action of Ranjak Pitta is converted into Rakta.

It is clear that Rasa enters in the Liver and there it is converted into Rakta with the help of Samana Vata. Then it enters in the Hridaya and through Dhamanis it circulates in the body.

### **Manovaha srotas**

According to Acharya Charaka worry, grief, anger, bliss, lobha are some factors which cause vitiation of Dosa and these vitiated Dosas reach Hridaya (brain and higher mental functions) and cause Manovaha srotovikara.

### **Vatavaha samsthana**

Any short of gati (movement) in the body is only regulated by Vata Dosa Vata vaha samsthana, in normal state maintains pressure and normal flow of blood inside the channels, when vitiated results into abnormal pressure. In the pathogenesis of hypertension, Vyana Vata along with Parana, Apana Vata get affected.

### **Mutravaha srotas**

Formation of mutra is also described in the Ayurvedic literature. It is a fluid waste of Ahaara, which is expelled from the body by Apana Vata. Acharya Sushruta has explained that process of formation of urine is through osmosis (syandana) which occurs day and night. This formed urine fills the basti from both sides.

### **Dosa vivecana**

According to Ayurvedic principles aggravated Dosa are the root cause for the origin of the disease. Indulgence in unsuitable or unhealthy foods and daily activities bring about change in equilibrium of Dosa. Food and activities which possess qualities and functions similar to those of one or more of Dosa bring about the Vriddhi in the Pramanas (quantity) , Guna (quality) and Karma (function) of one or more Dosa. When they possess dissimilar or opposite qualities and functions brings about the Kshaya in Pramanas, guna and karma of one or more of them. so it is the Vriddhi of Dosa that is responsible for the cause of every disease. So Dosa vivecana is important to understand the pathogenesis and treatment of the disease like hypertension.

## **Hypertension and Dosa correlation**

### **1. Vata dosa**

Headache (sira shoola, throbbing sensation in head), Mental irritability (kshubdhata), Dizziness (Brahma), Lassitude, Palpitation, Tingling sensation, Numbness, Tinnitus Emotional disturbance, Mental stress.

### **2. Pitta dosa**

Blurred vision, Epistaxis, Anger, Flushing, Burning sensation, Bounding pulse, Irritable aggressive personality, Excessive salt intake.

### **3. Kapha dosa**

Nausea, Odema, Polyuria, Drowsiness, Obesity, Less physical activity, Diabetes, Lipid disorders, Excessive cold.

## **DISCUSSION**

The noted health problems, Vyana Vata Vaisamya (hypertension) is a most troublesome disease, considering its incidence, Chronicity and long term complications. If this disease is not properly managed, it damages the Tri Marmas which are the vital parts of the body leading to early death. The disease Vyana Vata Vaisamya seems to be produced from the vitiation of Vyana Vata, one among the 5 types of the Vata. Vata is a unique Dosa, differs from other two Dosas in many ways; Pitta and Kapha Dosas cannot be movable on its own and Vata is responsible for their movement and also regulates their function. In the pathological state also it has double way of vitiation i.e. due to Dhatu kshaya or Anubandhya or Svatantra and due to Marga avarana or Anubandhyajanya or Partantra, as it depends on other factors (other than its own cause). The Rasa Rakta Dhatu, through which the body gets its nutrition, circulates all over the body with the help of Vyana Vata through the 24 Dharmas. As the Vyana Vata is responsible for the movement of their Rasa Rakta Dhatu, any derangement in the Vyana Vata causes alteration in the circulation of Rasa Rakta Dhatu. Alteration in the circulation of Rakta Dhatu may occur either due to obstruction of the channels or due to the increase of Vyana Vata, which produces increased force on the wall of the channels during the movement of the Rasa- Rakta Dhatu. Though Ayurveda mentioned, every action has been designated to single Dosa on its predominant involvement; however, it is known fact that any activities in the body could not take place without the harmonious involvement of Tridoshas. The circulation of Rasa-RAKTA in the body is the primary responsibility of Vyana Vata, but heart being the site of Sadhak Pitta and Avalambaka Kapha,

these two also play significant role in the maintenance of blood pressure. The important factors for maintenance of cardiac output are heart rate, contractibility and blood volume. The heart rate and contractibility depend upon the internal auto-regulation of Vyana Vata, Sadhak Pitta and Avalambaka Kapha with the help of Oja.

## CONCLUSION

The disease Vyanabala vaisamya (hypertension) occurs mainly due to the derangement of Vyana Vata in association with Pitta and Kapha. The Ayurvedic pathogenesis of the disease, it reveals that the prognosis is falling under Yapya (palliative) type of Vyadhi. Therefore it can be inferred that hypertension is a Tri dosas Vyadhi with predominance of Vata. Hence the factors which cause direct vitiation of Dosa they are Aharaj, Viharaja, Agantuja hetus, Prakruti, Sara, Bala, Agni, Vaya, Satva, Sthula, Madhya vikara, Ati lavan intake, Dhumapana. When mind is in stress and strain there is rise in the pulse rate and blood pressure. Mental stress also results in increased blood level of adrenaline, nor adrenalin, fatty acids and sugar. Hence meditation may limits their goals to reach a better level of health and stable state of emotional equilibrium, thus mental relaxation attained through yoga and meditation is important.

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