

INTEGRATIVE UNDERSTANDING OF RAKTAGATA VATA

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ABSTRACT

Hypertension is a major public health problem and an important area of research due to its high prevalence and it being a major risk factor for cardiovascular disease and other complications. In Ayurveda, hypertension is not mentioned as a separate *Vyadhi*, but different authors propose various theories like *Avaran*, *Vata Prokopa* due to obstruction, etc. The aim is to find an ideal line of treatment for hypertension by understanding the *Samprapti* of hypertension according to Ayurveda. A detailed review of the Ayurvedic literature and various articles on hypertension was carried out, and we came to the conclusion that Ayurvedic intervention from all the aspects of treatment can be effective in treating hypertension.

Keywords: Raktagata Vata, Blood pressure, Shamana Chikitsa, Shodhana Chikitsa.

INTRODUCTION

The whole world is becoming full of lifestyle disorders. Due to the rapid modernization people are leading more stressful lives. As a result of the modernization hypertension is one of the biggest worldwide spread disorders which comes across in practice. Hy-

pertension is characterized by persistently high blood pressure (BP) in the systemic arteries. BP is commonly expressed as the ratio of the systolic BP which is the pressure that the blood exerts on the arterial walls when the heart contracts and the diastolic BP

which is the pressure on the walls when the heart relaxes. Hypertension is directly responsible for 57% of all stroke deaths and 24% of all coronary heart disease (CHD) deaths in India. It is the most potent risk factor for diseases of the brain, kidney, heart and peripheral arteries which may prove fatal if not managed effectively. Hypertension is a silent killer because most sufferers (85%) are asymptomatic. In 95% of the cases of hypertension, the exact underlying cause is still unknown but is believed to be due to genetic and environmental factors. Hypertension cannot be considered as a *Vyadhi* (Disease) as per Ayurveda, but it can be understood by assessing the involved *Doshas*, *Dooshyas* (Entity which is affected by morbid *Dosha*), *Srotas* etc. Many Ayurvedic scholars have proposed different theories about how hypertension can be understood in Ayurveda, but there is no standardized and widely accepted view about the Ayurvedic pathogenesis of this condition. Thus, an attempt is made to understand the *Samprapti* of various types of hypertensions and to find an ideal *Chikitsa Sutra* (treatment protocol) for the management and treatment of Hypertension¹⁻³.

Physiology of blood pressure in Ayurveda:

Looking from the Ayurveda perspective we have to consider the *Dosha* and *Dhatu* involved, which *Srotas* gets affected, the site of *Kha Vaigunya*, the type of pathology whether *Avarana*, *Margavarodha*, etc. According to various research articles it is proposed that hypertension is to be understood as the *Prasara-Avastha* which means spread of vitiated *Doshas* from their specific sites, specifically of *Vyana Vata*, *Prana Vata*, *Sadhaka Pitta* and *Avalambaka Kapha* along with *Rakta* in their disturbed states. At first, it is essential to understand the physiological aspects of blood pressure in Ayurveda which is fundamentally based on the theory of *Tridosha*. In Ayurveda it is said that the blood from the *Hridaya* (heart) is distributed all over the body through the *Dasha Dhamani* (10 vessels). As it is known, blood pressure is the lateral pressure exerted by the flow of blood on the walls of the arteries. The two components of blood pressure are the systolic and diastolic blood pressure. The heart has its pacemaker (SA node) that generates

electrical impulses on its own, which makes the heart contract during the systole. The contraction activity of the muscles can be compared with the action of *Vyana Vayu*. The SA node generates impulses on its own, the rate of its impulse generation is controlled by the autonomic nervous system via sympathetic and para-sympathetic nerve fibers emerging from the brain. This action can be compared with that of *Prana Vayu* which is situated in the *Moordha* (brains) which controls the heart. Thus, heart rate is controlled by *Prana Vayu*. The diastole is attained when the heart muscles relax. Here, diastolic blood pressure is only due to blood flowing through the narrow structures of the chambers of the heart and arteries and there is no active push by the heart. Thus, diastolic BP can be taken under the domain of *Kapha Dosha* mainly the *Avalambaka Kapha*. Auto-rhythmicity of the heart is due to the action potential created by the rapid influx of Na^+ and Ca^{++} ions and efflux of K^+ ions across the membrane of the SA node. The involvement of these chemical ions can be taken under the purview of *Pitta* due to its *Tikshna* (Rapidness) *Drava* (Fluidity) and *Sara* (Diffusion/Dispersion) quality, mainly *Sadhaka Pitta* situated in the heart. The basal metabolic rate (BMR) has a direct but imperfect positive correlation with the pulse rate and pulse pressure of the heart. This means to say that variations in the basal metabolic rate cause changes in blood pressure as well. Thus, the basal metabolic rate can be understood as a result of the action of *Agni* or *Pitta*, more precisely, *Pachaka Pitta*. The blood volume and viscosity can be determined by the quality and quantity of the *Rasa* and *Rakta Dhatu*.

Understanding of pathology of Hypertension in Ayurveda:⁴⁻⁵

The main sign of this disease is increased pressure exerted on the wall of the vessels. This pressure can be only understood by focusing on the pathology of *Vata Prokopa*. Hence to understand the pathology of hypertension in Ayurveda we must focus on the concept of different types of *Vata*, their *Prokopa* and the symptoms presented by each type of *Vata Prokopa*.

1) *Prana Vayu*:

Hridaya is the seat of *Prana Vayu*. In Ayurveda *Hridaya* can be considered as both heart as well as the brain. So, any pathology to the functioning of *Prana Vayu* can have direct impact on the functioning of the heart. This can be correlated to the vagal inhibition of the nervous system. Vasomotor Centre controls the blood pressure by autonomic nervous system. *Prana Vayu* in the same way controls the blood pressure by controlling the *Vyana Vayu*. So, *Prana Vayu Dushti* can cause abnormalities of the heart and its vessels. Stress related hypertension can be considered under this heading. Symptoms like *Bhrama* (giddiness), *Murcha*(fainting) can also be considered.

- 2) *Vyana Vayu*: *Hridaya* is also the seat of *Vyana Vayu* and this *Vata* is responsible for the spread of *Rakta*(blood)from heart to all the parts of the body. It is also responsible for the contraction and relaxation and various movements of the body. So, any defect in the functioning of this *Vata* or *Vyana Vayu Prakopa* directly affects the contraction and relaxation movement of the heart, thus directly being the cause for Hypertension. In these symptoms like palpitation are commonly presented.
- 3) *Samana vayu*: *Samana Vayu* helps in the digestion of the food and plays an important role in the *Sara kitta vibhajan*. This *Vayu* may not be the primary cause, but it can act as a secondary cause by vitiating the other *Vayus*. Any defect in the functioning of this *Vayu* can lead to gastric problems like acidity, constipation etc. which can later cause hypertension.
- 4) *Apana vayu*: *Apana Vayu* is responsible for the excretion of urine and feces. The normal flow of *Apana Vayu* is in the downward direction. In conditions like *Udavarta*, *Kasa*(cough), constipation the flow of *Apana Vayu* is obstructed and it moves in the upward direction. This can exert pressure on the heart, thus affecting the *Vyana Vayu* and leading to the presentation of hypertension.
- 5) *Udana vayu*: *Udana vayu* has its seat in the *Urah Pradesh*(chest region), hence any defect can lead to *Sthanika Dushti*(Regional deformity) eventu-

ally affecting the *Prana* and *Vyana Vayu* thus causing hypertension.

- 6) *Mana* (mind): There is a close relation between the body and the mind. Emotional factors like *Chinta* (Over thinking) , *Krodha* (Anger), *Bhaya* (Fear, Anxiety) play an important role in the pathogenesis and prognosis of all the diseases. Hence the mind also plays a role in Hypertension. Modern medical science also considers that the involvement of psyche (*Mana*) can be causative factors for hypertension. According to Ayurveda, *Vayu* is the regulator and stimulator of *Mana*. This basic principle of *Ayurveda* should not be neglected while treating hypertension.
- 7) Essential hypertension or idiopathic hypertension. There has no known cause, however many of the lifestyle factors contribute to this condition. About 90–95% of cases of hypertension are categorized as primary hypertension with no obvious underlying cause. This is found in most of people who have crossed the middle age. This can be considered to the pathology of *Dhatukshaya Janya Vata Prakopa*(wasting of muscles and faster degeneration) mainly the *Vyana Vaayu* due to increase in the age factor.⁶⁻⁷

Symptoms as the *Dosha* predominance:

- *Vata Dosha*: When *Vata* predominates, an increase in blood pressure will be followed by worry, strain, overwork, anxiety or insomnia. It frequently associated with nervous system disorders. Anxiety, worry, stress, and strain are usually the main factors.
- *Pitta Dosha*: When *Pitta* predominates, anger, nosebleed, irritability, and Violent headaches Sensitivity to light contribute to high blood pressure.
- *Kapha Dosha*: When *Kapha* predominates, there may be dull headache, edema, and lethargy with obesity. Blood pressure remains continually high. *Kapha* type of hypertension is almost all due to arteriosclerosis.

Treatment:

- 1) *Nidana Parivarjan*

- Avoiding the etiological factors of a disease is known as *Nidana Parivarjanam*. The following causative factors of hypertension should be strictly avoided.
 - Excessive intake of salt, vegetable oils, chillies, fast foods, junk foods, spicy foods, tea and coffee etc. Alcohol consumption and smoking, Day sleeping and awakening at night, Excitation, provocation, quarrelling, worries and anxieties, Excessive indulgence in sexual activity.
- 2) Lifestyle modification: Weight reduction, Regular physical exercise, daily brisk walking for half an hour, Well-timed sleeping and awakening, Regular practice of Yoga and herbal Meditation, Intake of balanced diet, Consume diet more use of wheat, Barley, Sorghum, green gram, horse gram, Bitter gourd, Bottle gourd, Turnip, Carrot, Radish, Indian gooseberry, Cucumber, Black grapes, Pomegranate etc.
 - 3) *Shamana Chikitsa*: Following drugs can be used singly or in compound form for the treatment of hypertension *Sarpagandha*, *Ashwagandha*, *Jatamamsi*, *Brahmi*, *Shankhapushpi*, *Lasuna*, *Mandookparni*, *Yashtimadhu*, *Arjuna Twak* etc drugs are generally administered in the form of *Churna*(powder), *Swarasa*(Juice), *Kwatha*(Decoction) and *Sheeta Kashaya* (Cold decoction).
 - 4) *Shodhana karma*
 - a) *Basti karma*- *Basti karma* is considered as the best treatment for *vata dosha*. As in hypertension the main *dosha* that is involved in *vata*, hence it acts as an ideal line of treatment.
 - b) *Virechan*- *Virechan* is mainly advised for *pitta dosha*. This procedure also helps in *vatanuloman* (downward movement of *vata*). Hence according to the strength of patient, need of hour and *dosha* dominance this line should be opted.
 - 5) Other Procedures
 - a) *Shirodhara*- it mainly acts on the head region and the *Prana vayu*. It helps in calming the mind and hence is used for the treatment of stress. Thus, *Shirodhara* can be used in hypertension when

Manasika B bhava are involved. The tail used is *Brahmi* tail.

- b) *Talam*- it is a procedure like *Shirolepa* which again helps to stimulate the brain and calm the mind.

6) Yoga and Pranayama:

Stress is a main cause for Hypertension. Following asana (posture) and pranayama (breathing exercises) can help to relieve the above. Sukhasana, Shavasana, Vajrasana, Makarasana, Omkar chanting, Sheetal, Sitkari, Bhramari, Relaxation postures of body are reducing the activity of Sympatho-Adrenal system, this helps in reduction of catecholamine activities and gradually reduce the blood pressure⁸⁻¹⁰.

CONCLUSION

Hypertension is a lifestyle disorder. Hence along with medication, change in the lifestyle is also very necessary. There are various drugs for the treatment of hypertension in the modern science but there is no guarantee of permanent relief from the condition. Hence Ayurveda line of treatment can act as a whole, from prevention of the causative factor, lifestyle modification which is following the *dinacharya* (daily regime) and *ritucharya*(seasonal regime), internal medication, external therapy and yoga practices. Hypertension can also be controlled by following the *pathya* (wholesome food) *apathya* (unwholesome food). These various factors help to maintain the homeostasis of the human body, thus promoting the balance of all 7 *dhatu*, thus helping in the prevention and treatment of hypertension.

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