Concept of essential hypertension in Ayurvedic perspectives

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ABSTRACT

Essential hypertension is an instrumental disease which is the recent diagnostic invention of modern science. However there is no any reference which directly resembles with its pathophysiological views in Ayurvedic classics. Lots of works have been carried out on concept of hypertension to evaluate the perfect diagnosis and mode of treatment on the basis of Ayurvedic principles, but a widely acceptable theory is still not available. Different nomenclatures also have been adopted by Ayurvedic researchers like Rakta pradoshaj Vyadhi, Uchharakta chapa and Ucharakatabhara etc. on the basis of pathophysiology and symptoms of disease. Different diseases were considered parallels to hypertension such as; Raktagata Vata, Raktavrita Vata, Pranavrita Vyana, Vyanavrita Prana and Shleshmavrita Vyana etc. Ayurveda believe that pathophysiology of other diseases routes through hypertension.

Keywords: Ayurveda, hypertension, Rakta pradoshaj Vyadhi, Raktagata Vata and Raktavrita Vata.

INTRODUCTION

Ayurveda, the science of medical system evolved globally emphasizes on the way of physical and mental fitness along with preservation of health status. This ancient science developed from extra-sensory logic of our great seers and knowledge which is acceptable globally till date. Ayurveda encompasses various ideas related to the health issue of mankind. These ideas established on the basis of high quality research. The well planned research can help ayurveda science to achieve its generosity all over the globe¹-⁴.

Prevalence of disease and death are the common fundamental attributes of human life. The analysis of these along with the search to find out the possible remedies remained always part of human development. Hypertension is common, asymptomatic, readily detectable, usually easily treatable, and often leads to lethal complication if left untreated. This may be the most important factor responsible for the cardio vascular mortality. Essential hypertension (EHT) is one of those disastrous diseases which are psychosomatic, hereditary and occurring as a result of aging. It is also called a silent or hidden killer because of its asymptomatic nature and dreadful effects. Hypertension is a major risk factor for the development of cardiovascular disease (CVD). Its impact is greatest on stroke and end stage is renal failure. It is also one of the contributing factors for the development of coronary artery disease (CAD). According to Allopathic science of medicine hypertension never be cure but only controlled with the help of Antihypertensive drugs. So in this condition patients of hypertension have to take the drug for a life time. On the other hand antihypertensive drugs may cause so many side effects to the patient. Therefore it is a great need of today to find out such type of herbal remedy which may control hypertension without creating any complication⁵-⁸.

CONCEPTIVE STUDY

Ayurveda not described any disease which can be resembles with hypertension but under certain headings the nomenclature is possible by taking the support of signs and symptoms. Raktapradoshaja Vikaras may be correlated with hypertension on the basis of sign & symptoms since it possesses symptoms like; Shirahashooola, Bhrama, Anidra, Santapa, Mada, Murchha and Sanyasa.

Ayurveda scholars also tried to explain hypertension on the basis of Ayurvedic principles adopting literal translation of hypertension as Rakta chapa, Raktabaha and Raktaavegaviddhi etc. However Raktavrita Vata, Shleshmavrita Vata and Raktagata Vata also taken in consideration on the basis of aetiologicalogenesis.
Acharya Charak has given a guideline to understand a new clinical entity not described by him in the Samhita. Acharya Charak narrates as a physician should not be puzzled while coming across a new clinical entity as it is not necessary that each and every disease should have nomenclature. That if a physician is unable to diagnose the disease, he should diagnose and treat the unknown disease by its Prakriti, Samuhthan and Adhishtan. Acharya Charak designed a treatment protocol for such disease; by ruling out vitiated Dosha out of Tridoshas and Nidan factors. Therefore with the help of symptomatology root of disease symptoms like Shirahshool (Headache), Bhrama (Giddiness), Hriddravatva (Palpitation) and Anidra (Insomnia) etc. are generally considered as part of essential hypertension. These symptoms and basic Nidan panchak help to understand psychosomatic disorder. Thus on the basis of glimpse of previous research works and concluded thoughts of different schools it can be say that hypertension is 'Vata Pradhan Tridoshaja Vyadhi', influenced by morbid state of Mana, therefore be considered as Shariir and Manas Roga.

Modern science also affirms this fact; Sharir and Satva (Mana) have been designated as the habitats of vyadi by Acharya Charak. Prior to tracing the details regarding the etiology to understand a new disease, a concept of Vata, Pachak Pitta, Jatharagni, Pachakagni, Jathargni, Pachakapitta, Rasa dhatu, Jatharagni, Pranavayu, Prana and organ systems. This was an approach of Acharya Charaka in Vata vyadhi and Grahalini. In this way, better understanding of Samprapti is possible and it can be explained in terms of altered physiology.

Pachakagni, jatharagni, antaragni, koshagni, kavyagni and dehagni are loosely said as the synonyms of Pachak Pitta. The human body is the outcome of consumed food. The health of an individual is dependent on not only the nutrients of the body, but also the proper digestion and assimilation of them. The importance of the Pachak Pitta (Agni) is emphasized by the statement that every disease is due to impaired/hypop function of this factor. Therefore Kayachikista has also been defined as Antargani chikista. The digestion of food is possible only when it comes in contact with Pachakapitta (Ch.Sha.6-15) in annavahasrotas. Entry of food into Annavahasrotas is facilitated by Prana & Samana Vayu (Ch.Sha.6-15). Annapraveshakriya represented by the swallowing reflex is the function of pranavayu, the function being easily appreciated in various degrees of Aruchi like; arochak, abhaktachhand, asyavairasya, annanbhilasha etc. After the food enters annanadis-oesophagus, the further movement of food is taken over the samanavata through the collective movements of koshta and aaharparinamkara bhava. Jathargni converts aahara into aahar rasa which travels via Pratithariniad Rasaprappa to Hridaya (heart) from where it is propelled into the system by the Vyanavayu as the basic nutrition (Su.su.14/3, Bhela su. 21/2).

Besides, Vata is concerned with gati (motor) and ghandan (sensory) functions of the body. All movements are affected through the contraction and relaxation of the muscles. The vyana vata, a subdivision of vayu control the voluntary movements of the body. According to Vaghabhata the Vyana is located in Hridaya, but travels throughout the body (A.S.Su.20/4). The Gati of Rasa dhatu against gravitation is because of Vayu only (A.H.Su.12/6-7).

When Vyan vayu combine with Rasa dhatu it exerts pressure on the walls of the Rohini (Dhamani or artery) which causes continuous supply and movement of Rasa dhatu (Su. Su.14/13). According to Susruta the function of Vyana Vayu is effective transport, circulation of Rasa dhatu or aahararasa in the body, circulation of blood and sweat from the body. There are different types of movement’s mentioned in Ayurveda classic for the functioning of Vayu such as; extension (prasarana), contraction (aakunchana), bending (vinamana), up-word movement (unnamana) and lateral movement (tiryaggyamana) (Su.N1/17-18.Dhalana).

Circulation of Rasa dhatu and other dravahadhus like Rakta offers nourishment to the body since the body is made up of judicious admixture of seven dhatus (Su. Su. 15/5). The circulation is effected by the force of the regular contraction of the heart. Therefore proper nourishment of the body by the Rasa is entirely dependent on the function of the heart. Elasticity of arterial wall regains its position after pressure and forward movement of the Rasadhatu to other dhatu. This is the normal Rasa Samhavahanam (Su.N1/17).

Many Ayurvedic researchers proposed theories of single Avarana for explaining the concept of hypertension but none has adopted the theory of Mishra Avarana, a concept of Charaka (Ch.Chi.28/232) which might have been left incomplete for researchers (Ch.Chi.28/217).

In Raktrapradosa Vikaras most of the symptoms compiled by Charaka are an assembled form of essential hypertension symptoms (Ch.Su.24), in the same chapter Charaka has described the aetiopathogenesis of Mada, Murchha and Sanyasa which may be the effect of hypertension. Therefore Raktrapradosa is also the reference which provides the key in the right direction towards the theory of essential hypertension based on Ayurveda.

Ayurveda is the science which depends upon signs and symptoms of the diseases for their diagnosis. As the signs and symptoms of the essential hypertension can be correlated with Vyadhi Avasthas e.g. Raktrapradosa Vikaras and complex Avarana then it becomes a light job by taking the etiological factors quoted under the same headings.

In Vidhishoniitya Adhyaya following are the Hetus quoted for Raktrapradosa manifestation:

- Rotten & putrefied food possesses contradictory qualities (Viradhha).
- Sleeping during day time after taking liquid, unctuous and heavy food.
- Excessive anger, excessive exposure to the sun and fire.
- Unwholesome, hot and sharp wine and excessive food.
- Consumption of salty, alkaline, acid and pungent food items.
- Kulattha, Masha, Nishpava and Til oil.
- Pindalu, Mulaka and all green eatables.
- Meat of aquatic, marshy, Prasaha and the animals living in holes.
- Curd, sour whey (Mastu), vinegar, Suru and Sauviraka.
- Suppression of the urge for vomiting, avoidance of bloodletting (in Sharada).
- Exertion, external injury, heat, taking food before previous food is digested.

Other consideration on Essential Hypertension

The diseases like Pakshaghatya, Hridroga and Mutrarogas existed at least since the existence of science of ayurvedic medicine. These three diseases are described in Ayurveda in different chapters. These diseases belong to Trimaarmas and this is a fact from modern science that these three Marmas get more afflicted by the high blood pressure. Thus all these can be taken as indirect references concerned to hypertension. As the blood pressure is a disease of circulatory system and Ayurveda doctrine believes in same constituents in morbid as well as physiological conditions by the only difference of normalcy and vitiation, it becomes
necessary to discuss about Ayurvedic circulatory system. 

Mula of Rasavaha srotasa is Hridaya and Dasha Dhamani (CVI.5/8).

Sushruta has accepted Hridaya and Dhamani as Mula Sthana for Pranavaha and Rasavaha Srotasa both. Sushruta has also accepted Raktavahi Dhamani as a Mula sthana for Rakttavaha and Mansavaha Srotasa both (S.Sha.10/12). In the other hand Sushruta has described the arterio-venous system in 7th chapter of Sharira by the name of Sira. Therefore it is essential to discuss about the following organs as a part of circulatory system. Thus circulation takes place in three directional ways (S.Su.14/16: Dalhana):

- **Shhabdasantanavata:** Tiryagagamitvam
- **Archisantanavata:** Urdhvagamitvam
- **Jalasantanavata:** Adhogamitvam

Here Dalhana has commented about direction of Rasa and it is seem to be more logical. Many other learned people correlate Shabdadi Gati with the actual Kinetics of Rasa and Rakta. In fact these two opinions are very important in the contribution of the Avarana concept related to essential hypertension; direction and intensity of kinetic force. These two factors concerned to Vata are having great pathophysiological importance in the Avarana process. Blood pressure in different places is different this can be understood by Rasa-Rakta Samvahana based on Shadba, Archi and Jala Santanavata and which is mainly related to the intensity of kinetic force (cardiac output). If any how there is any alteration in the direction and kinetic force of Vata then it may lead high or low blood pressure. These conditions may be altered by the obstruction of natural direction and kinetics leading hypertension.

**DISCUSSION**

According to Ayurveda Mana and Purusha both generate and nourish from food. If food is un-homologous then it will cause imbalance in both Mansa and Sharira Doshas to result many diseases. Hypertension is one of disease which is the outcome of such a faulty food regimen and life style. Hypertension is a psychosomatic and hemodynamic disease. It is also known as silent killer or hidden killer because of its associated hazards without expressing any symptomatology. Therefore awareness for hypertension in the society has been increased.

If Vata is having Gati other than these it is called as Prakupita Vata. This Prakopa takes place in two ways according to Charaka. First two types are much related to Avarana and Vimargagamanam as third type is related to pure Vata prakopa. Pure Vata prakopa can be categorized in two parts as Swandanena prakopa and Dhatukshayajanyapraakopa as explained earlier. Vata-Prakopa is an important phenomenon in the manifestation of the hypertension along with the involvement of morbid Kapha, Pitta, Rakta, Mansa and Meda.

Following Dosha are involved in the pathophysiology of hypertension:

**Vata:** Vyana, Udana, Prana, Samana and Apana

Vyana, Udana and Prana Vayus have a direct role in the physiology of circulation. any type of derangement of them can cause the derangement of circulatory system; hence these Vayus are primarily concerned to hypertension. Samana and Apana types are secondarily important in the manifestation of the hypertension because hypertension is the disease mainly concerned to Madhyama Rogamarga and Bahya Rogamarga, and secondarily to Koshta Margya. But the Karma of Samana and Apana is found to be in the separation and excretion of Kleeda part from the normal fluid which can be correlated with the ‘Na’ excretion and ‘K’ retention and thus these two types can be taken for prime importance in the manifestation of the disease.

**Pitta:** Sadhaka Pitta

Sadhaka Pitta is responsible for intellectual, grasping and ego (A.H.Su.12/13). if Sadhaka Pitta vitiates then it can induce several psychic symptoms like Bhaya, Chinta, Krodha, Arati, Shoka, Dukkha, Vishada etc.

**Kapha:** Avalambaka Kaptha

It nourishes and maintains all Kapha Sthanas including Hridaya.

In modern science the therapy for hypertension is a palliative in nature. Hence there is no perfect answer for hypertension in allopathic medicine. For Ayurveda the concept of disease is new because it is an instrumental disease invented recently. But it is present at-least since the existence of Ayurvedic Samhitas in the form of signs and symptoms because many references present in Samhitas like Pakshaghati, Hridroga, Muraroga and other symptomatologies give the accurate indirect references of hypertension, but lack of proper detail description in Ayurvedic Samhitas made Ayurvedists to study upon it, but still no theory is complete.

The Adhisthanas of hypertension are whole body and Mana, particularly Hridaya and Sira-Dhamani. All these Adhisthanas are capable only for denoting the characteristic of the disease e.g. essential hypertension is a psychosomatic disease. Many Ayurvedic workers named hypertension on the basis of many ways including according to Adhisthana; Sira, Dhamani e.g. Siragata Vata, Dhamani Pratichaya, according to pathophysiology e.g. Raktavrita Vata, Shleshmavrita Vata and so on, but as difference of opinions is a well evident part of Ayurveda, hence none of the nomenclature of hypertension is accepted widely.

**CONCLUSION**

- According to Ayurvedic point of view, the increased blood pressure is result of Mura Avarana, Anyonyavarana and Raktapradosh. Vyana, Udana and Prana vitiate after the obstruction of their channels by morbid Dosha Dushya along with Raktapradosha, leads to rise in the blood pressure. The symptomatology quoted under Raktapradoshaja Rogas by Charaka almost coincides with essential hypertension symptomatology among those Shirahashoola, Bhrama, Klama, Anidra, Arati, Krodhaprachurata, Buddhisanmohaa and Shariragaurava are the common symptoms, thus it can be say that Raktapradosh is common factor which always associated with essential hypertension.

- The pathogenesis of essential hypertension may be explained with the concept of Rakta, Pitta, Kapha, Meda Avarana and Anyonyavarana. In essential hypertension Avarana process is derived primarily by Vyana, Udana and Prana Vayus and primarily or secondarily by Samana and Apana. The Avaranas may be simple or Anyonya.

- The hypertension is a psychosomatic disease; hence its seat is Kaya (somatic) and Mana (psychic) both. The first involvement of the entity depends upon the related dominancy of etiology in the patient. There is intertwining relation between Kaya and Mana.
Physician should try to understand the nature of the disease (*Dosha*), the site of manifestation and etiological factors and should then initiate the treatment. There is no need to give the definite name to each and every disease. Thus in case of hypertension it is essential to understand the nature of the disease rather than to give the name.

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