



“EFFECT OF MANASIK BHAVA IN ETIOPATHOGENESIS OF ESSENTIAL HYPERTENSION AND ROLE OF KSHIRODHARA ON IT”

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ABSTRACT-

Hypertension is most prevalent cause for cerebrovascular and cardiovascular disorders, causing high rate of mortality and morbidity. So, hypertension is gaining more and more attention globally. Due to its high prevalence in our country, India is known as *Nation of Hypertension*.

Hypertension is also known as silent killer of mankind because most sufferers (85%) are asymptomatic and as per available reports, in more than 95% cases of hypertension underlying cause is not found. Such patients are said to have Essential Hypertension (EHT). However, these stressors play certain role in the development, progression, prognosis as well as management of the disease. This stressful life-style affects one's mind and homeostasis of body by several psychosomatic mechanisms and causes many psychosomatic disorders. The '*Uccharaktachapa*' (Essential hypertension) is one of such diseases. Shirodhara calms the mind and relaxes entire physiology thus, helps to alleviate stress, strain, anxiety etc. By drug specific shirodhara, various diseases can be dealt with effectively. In the pathophysiology of Essential Hypertension, Vata Dosha is mainly affected and the Kshira is having Shita, Snigdha and Vata-Pitta-Rakta shamaka properties

KEYWORDS- *Nidan, Uccharaktachapa, Manasa Bhavas, Ayurved, shirodhara, Kshirodhara*

INTRODUCTION-

In Ayurveda, various *Manasa Bhavas* (psychological conditions) like *Chinta* (worry), *Udvega* (anxiety) *Lobha* (greed), *Shoka* (grief), *Bhaya* (fear), *Krodha* (anger) etc. are described. When these *Manasa Bhavas* (emotional states) cross the physiological limit, they are considered as *Manasika Vikaras*, which is pathological state adversely affecting the mind and the body. So, *Charaka* has suggested controlling these *Manasika Bhavas* to maintain physical and mental wellbeing.

Though lots of researches have been carried out on hypertension still, there is enough scope to assess the role of *Manasa Bhavas* like *Chinta*, *Krodha*, *Bhaya*, *Lobha*, *Moha*, *Shoka*, etc. in the etiopathogenesis and manifestation of this disease with its management aspect because in modern medical science, its management aspect remains symptomatic with troublesome side effects.

So far as Ayurvedic description is concerned, no specific term is found for EHT. However, as *Acharya Charaka* has mentioned, “It is not necessary that every manifestation be named but, the problem can be measured according to their specific features itself”.

Hypertension can also be correlated with *Dushti of Vata* (*Vyana & Prana vayu*), *Pitta* (*Sadhaka*) and *Manovaha Srotasa* involving *Hridaya*, *Rasayani*, *Oja* and process of *Rasa Vikshepana*. It is due to disturbed psychological factors like *Chinta* (Worry), *Tanav* (Stress), *Krodha* (Anger) etc., producing Hypertensive State.

CHARACTERISTIC OF MANASA

वैवृत्यान्मनसो ज्ञानं सान्निध्यात्तच्च वर्तते। अणुत्वमथ चैकत्वं द्वौ गुणौ मनसः स्मृतौ॥१९॥

(Ch. Sha. 1/19)

Anuttvam (atomic dimension) and Ekattavam (oneness) are considered to be the two characteristics of the Manasa.

Chintya (things requiring thought), *Vicharya* (consideration), *Uhya* (hypothesis), *Dhyeya* (emotional thinking), *Sankalpya* (determination) or whatever can be known by mind are regarded as its subjects.

1. **Chintya:** Thing requiring thought, to think about to do or not to do with purposeful or purposeless manner.
2. **Vicharya:** It is a distinct analysis, which enough to direct the mind to accept or reject a thing.
3. **Uhya:** It is a speculation, hypothetical self-discussions and logical thinking about a thing.
4. **Dhyeya:** It is an emotional thinking about distinct thing.

5. **Sankalpya:** It is consideration, determination of mind about a thing.

❖ Functions of Manasa-

‘इन्द्रियेणेंद्रियार्थो हि समनस्केन गृह्यते कल्प्यते मनसा तूर्ध्वं गुणतो दोषतोऽथवा॥२२॥

जायते विषये तत्र या बुद्धिर्निश्चयात्मिका व्यवस्यति तया वक्तुं कर्तुं वा बुद्धिपूर्वकम्॥२३॥’

(Ch. Sha. 1/20)

Indriyabhigraha (control of sense organs), *Svasyanigraha* (self-restraint), *Uha* (hypothesis) and *Vichara* (consideration) represent the action of mind.

❖ PHYSIOLOGY OF MANASA

Physiology of *Manasa* can be divided into three stages:

1. Perception (Cognitive or Sensory)
2. Discussion and Determination
3. Stimulation or Initiation (Conation or Motor Reflex)

❖ MANOVAHA SROTASA

Charaka has mentioned that the channels of the whole body transport the *Tridosha*, similarly *Manasa* is transported through same channels to provide *Chetana* to all the living cells of the body (Ch. Vi. 5/7).

PSYCHOPATHOLOGY IN AYURVEDA

Scriptures of Ayurveda has mentioned the ‘abnormal status of mind’ i.e. psychopathology in various contexts. *Charaka* states that *Raja* and *Tama* are chief pathogenic factors of the mind and due to them many *Manasa Vikaras* are produced. *Bhavas* (Ch. Vi. 8/96-98).

Manasa Bhavas: (Ch. Vi. 4/8).

Charaka has given brief explanation of *Manasa Bhavas* in *Vimana sthana* 4, which are 22 in number and can be explained as follows:

- ❖ *Mano - Artha* (*Avyabhicharena*) By perception of specific objects in the presence of all other senses along with their respective objects.
- ❖ *Vijnana - (Vyavasayena)* - By proper reaction to activities.
- ❖ *Rajah - (Sangena)* - By attachment.
- ❖ *Moha - (Avijyanena)* - By lack of understanding.

- ❖ *Krodha (Abhidrohena)* - By revengeful disposition.
- ❖ *Shoka (Dainya)* - By sorrowful disposition.
- ❖ *Harsha (Amodena)* - By happiness or celebrativeness.
- ❖ *Priti (Toshena)* - By satisfaction which is reflected by joyful appearance of the face etc.
- ❖ *Bhaya (Vishadena)* - By apprehension.
- ❖ *Dhairya (Avishadena)* - By fearlessness.
- ❖ *Virya (Utthanena)* - By initiation of action.
- ❖ *Avasthana (Avibramena)* - By stability of mind.
- ❖ *Shraddha (Abhiprayena)* - By request or quests.
- ❖ *Medha (Grahena)* - By the power of comprehension.
- ❖ *Sanjna (Nama grahena)* - By recollection of names.
- ❖ *Smriti (Smaranena)* - By the power of retrieval.
- ❖ *Hriyam (Apatrapanena)* - By bashfulness.
- ❖ *Shila (Anushilena)* - By habitual intake or following.
- ❖ *Dvesha (Pratishedhena)* - By disinclination.
- ❖ *Upadhi (Anubandhena)* - By subsequent manifestations.
- ❖ *Dhriti (Alaulyena)* - By firmness.
- ❖ *Vashyata (Vidheyata)* - By compliance with others.

These *Bhavas* are also described by Acharya Bharata in “*Natya Shastra*”. These *Bhavas* are also known as “*Sthayi Bhavas*” there. With these *Bhavas* other shortterm *Bhavas* also originate and they are known as “*Vyabhichari Bhavas*”. They also affect our body and produce some changes. We find that in ancient Indian literature these *Bhavas* have been greatly stressed. The Gita lays great stress on overcoming these human weaknesses.

These *Bhavas* are broadly divided into two divisions – *Sukha* and *Dukha*. According to *Prashastapada* *Sukha* and *Dukha* are originated by the *Sannikarsha* of *Atman*, *Manasa*, *Indriya* and *Artha*, which are known as “sensory feelings” in modern view.

HRIDAYA RELATED TO EMOTIONS, ELEMENTARY EMOTIONAL DRIVES AND EGOISM:

In *Ayurveda*, *Sadhaka pitta* is deemed to be essentially responsible for the higher mental faculties and emotional states of the human being. *Sushruta*, *Vagbhata*, *Chakrapani*, *Dalhana* etc. have clearly mentioned that *Sadhaka pitta* is responsible for emotional activities. All the acharyas have unanimously described that *Sadhaka pitta* is located at *Hridaya* and it is responsible for *Bhaya*, *Shaurya*, *Krodha* and *Harsha*. *Sushruta* has observed that *Pitta*, located in *Hridaya*, is known as the *Sadhakagni*, whose function is to enable one to achieve one's aspiration (Su. Su. 21/10). While commenting upon this, *Dalhana* has further elaborated the functional aspect that it (*Sadhaka pitta*) does its functions by dispelling the *Kapha* and *Tamas* of the *Hridaya* and thus enables the *Manasa* to perceive things clearly. *Dalhana* has clearly correlated *Manasa* and *Hridaya* with the functioning of *Sadhaka pitta*. *Vagbhata* has also located *Sadhaka pitta* in *Hridaya* and attributed to it *Buddhi* (intelligence), *Medha* (memory and intellect), *Abhimana* (selfesteem and ego factor) and the capacity that enables one to achieve one's aspiration. While describing the etiology of mental disease, *Charaka* has described the close relation of the emotions are shown to be deeply related and dependent upon *Hridaya*.

PATHOPHYSIOLOGY OF STRESS DISEASES

Stressor: Any stimulus that produces a stress response is called a stressor. A stressor may be almost any disturbance like:

- Heat or cold
- Environmental poison
- Toxins given off by bacteria during a raging infection.
- Heavy bleeding from a wound or surgery.
- Strong emotional reaction.
- Stressors vary among different people and even in the same person at different times. Following any physical or mental stress there occur two types of reactions.
- **Homeostatic Mechanism:** It attempts to counteract the everyday stress of living. If they are successful, the internal environment maintains normal physiological limits of chemistry, temperature and pressure.

FACTORS AFFECT IN PATHOPHYSIOLOGY OF ESSENTIAL HYPERTENSION, RESPONSE TO MANASA BHAVAS

- In the response of *Manasa Bhavas*, the factors affect the pathophysiology of EHT, are discussed here, which may rise blood pressure both in patients with EHT and in the

small minority of patients with an underlying cause.

- EHT is known as the multi-factorial diseases as multiple conducting factors are responsible for its inducement.
- A great deal of research has been centered on the mechanisms underlying EHT.
- An understanding of these mechanisms might help to prevent the development of high blood pressure.

❖ **The Autonomic Nervous System:**

- The autonomic nervous system, particularly the sympathetic, can cause both constriction and dilation of arterioles of smooth muscle.
- In some psychological conditions like stress, strain, anxiety, anger etc. sympathetic nerves of autonomic nervous system more activates. These over activities increase heart rate, increase cardiac output and increase peripheral vascular resistance by its contractions. Therefore, the over activity of sympathetic nervous system has been suggested as possible cause of EHT.
- With the response of stressors, sympathetic nerves increase secretion of epinephrine and norepinephrine, resulting rise in B.P.

The Renin-Angiotensin –Aldosterone System:

- The renin angiotensin system is very important among the hormonal systems that affect the control of blood pressure.
- Renin is secreted from the juxtaglomerular apparatus of the kidney in response to reduced Na^+ level in blood. It is also released in response to stimulation from the sympathetic nervous system in such psychological conditions (Stress, Anxiety, Anger, Fear etc.)
- Renin is responsible for converting renin substrate to angiotensin-I, an inactive substance, which is converted to angiotensin – II by Angiotensin Converting Enzymes (ACE)
- In addition, it stimulates the secretion of aldosterone from the adrenal cortex, which results in a further rise in blood pressure related to sodium retention at the expense of potassium loss.

In response to Manasika Bhavas, there are many other vasoactive systems and mechanisms occurred, which affect sodium transport and vascular tone that are involved in the pathophysiology of EHT.

Shirodhara is one of the allied Panchakarma procedures. It can be applied to rejuvenate body and mind alleviating Chintadi Manasika Bhavas, which induce psychosomatic disorder. Shirodhara calms the mind and relaxes entire physiology thus, helps to alleviate stress, strain, anxiety etc. By drug specific shirodhara, various diseases can be dealt with effectively. In

the pathophysiology of Essential Hypertension, Vata Dosha is mainly affected and the Kshira is having Shita, Snigdha and Vata-Pitta-Rakta shamaka properties.

Acharya Charaka has also mentioned Kshira as Shita, Snigdha and Vata-Pitta shamaka (Ch. Su. 1/108-113). Moreover, Kshiradhara is also indicated in “Dharakalpa” for some psychic conditions like Anidra. Therefore, shirodhara with milk i.e. Kshiradhara has been selected for the second group of present study.

Kshira (Milk) :

प्रायशो मधुरं स्निग्धं शीतं स्तन्यं पयो मतम्।

प्रीणनं बृंहणं वृष्यं मेध्यं बल्यं मनस्करम्॥१०७॥

जीवनीयं श्रमहरं श्वासकासनिबर्हणम्।

हन्ति शोणितपित्तं च सन्धानं विहतस्य च॥१०८॥

सर्वप्राणभृतां सात्म्यं शमनं शोधनं तथा।

तृष्णाघ्नं दीपनीयं च श्रेष्ठं क्षीणक्षतेषु च॥१०९॥(Ch. Su. 1/108-110)

Acharya Charaka has mentioned regarding milk that it has Madhura, Snigdha, Shita etc. properties and it can be used everywhere named Nasya, external application etc. Moreover, milk has same properties like Oja, therefore prompts the Oja also (Ch. Su. 27/217-218).

Rasa	- Madhura
Guna	- Snigdha, Pichhila, Bahala, Shlakshana, Guru, Manda, Mridu, Prasanna
Virya	- Shita
Vipaka	- Madhura

प्रयोगः शमयेद्वाधिं योऽन्यमन्यमुदीरयेत् ।

नासौ विशुद्धः, शुद्धस्तु शमयेद्यो न कोपयेत् ॥२३॥(Ch. Ni. 8/23)

The course of treatment, which cures the original disease, but produces some other kind of complication is not the correct line of treatment. The correct one is that which cures but does not provoke.

The disease, EHT is very much found in Indian population. Though, it is Yapya type of disease, its treatment is life longer. So the disease gives financial loss to the patients. Despite of so many researches have been carried out in modern as well as Ayurvedic field, EHT is yet troublesome and problematic disease for patient and physician also. The regimen of modern side is effective to EHT, but it having troublesome side effects also. In allopathic medicine with hypotensive drug sedative, hypnotic and anxiolytic drugs are also used, to counteract the psychological factors (Manasika Bhavas). These drugs may lead to side effects like drowsiness, impaired motor function, forgetfulness and sometimes suicidal tendency may also develop. Hence, the study with entitle of “The Role of Manasika Bhavas in the etiopathogenesis of Uccharaktachapa (Essential

Hypertension) and its management with kshirodhara” was done in our panchakarma department for outdoor patients who gives follow up regularly.

❖ DISCUSSION-

Manasa Bhava/emotions is a kind of psycho-physiological phenomenon, which expressed outwardly in the form of smiling, laughing, crying, screaming, running in flight and so as well as internally in the form of visceral and vascular changes through autonomic nervous system. So with every emotion whole body is affected. During emotional stress through activation of autonomic nervous system and hypothalamus, different neuroendocrine changes occur which in turn affect the normal homeostasis of body. When the emotion is continued for a longer duration, the physical changes may themselves become to some degree modified or permanent. During stress the body gears up to take action. This preparation is called the “fight or flight” response. In this response, the level of many hormones shoots up. The defensive endocrine response is useful since it raises resistance to stress, but the resulting endogenous hormone over dosage may cause certain disease called “Diseases of Adaptation” or in another words “Psychosomatic Disorders”.

Essential Hypertension is one of the psychosomatic disorders. Obesity & overweight, positive family history, excess of salt intake in diet act as predisposing factors for the disease. First frank manifestation of the disease may occur during these stressful situations of they may worsen the condition of Hypertensive. The hormones like catecholamine, epinephrine, norepinephrine, mineralocorticoids increase during stress and directly affect the blood pressure.

PROBABLE MODE OF ACTION OF KSHIRADHARA:

- Kshiradhara is continuous pouring of milk over the forehead and is an effective treatment for reducing stress and expanding one’s consciousness. The mind, body and spirit are intimately connected, and Kshiradhara by calming the stressful mind, relaxes the entire physiology. Imbalance of Prana, Vyana Vayu and Sadhaka Pitta can produce stress and tension.
- Kshiradhara re-establishes the functional integrity between these three subtypes of Dosha through its mechanical effect. Sahasra Chakra is the seat of pituitary and hypothalamus.
- As we know, the pituitary gland is the master gland of the endocrine system, which responds to stress, anxiety etc. via hypothalamus. Moreover, Kshiradhara stimulates the pituitary gland by its penetrating effect. Both these help to achieve the hormonal balance.
- In relation to the Doshas, Ucharaktachapa is mainly produced due to Vata and Pitta Dosha.

- Kshiradhara have a calming effect over Vata Dosha. The milk has also Vata and Pitta shamaka properties.
- Kshiradhara also provide coolness to reduce Pitta Dosha. Hence, Kshiradhara has a calming, penetrating and cooling effect, which are very useful in eradicating Ucharaktachapa.

❖ CONCLUSION-

Manasa Bhavas like *Chinta* (worry), *Krodha* (Anger), *Bhaya* (Fear) etc. play an important role in the etiopathogenesis, progression and prognosis of disease as well as response to the treatment of the disease – *Uccharaktachapa*. Hence, that type of drug/therapy should be recommended, which pacify these disturbed *Manasika Bhavas* to calm the mind and relax the entire physiology. The reduction in SBP and DBP may be due to the calming down the stressed mind through Kshiradhara. Hence, it can be concluded that Kshiradhara course decreases the systolic and diastolic blood pressure. On the basis of this study, a better line of management can be offered to the patients, if stress-relieving procedure like Shirodhara is given with mental health promoting drugs – *Medhya Rasayana*. The plus point observed in case of Ayurvedic management is absence of any hazardous effect, which is really a great benefit to the patient and is of vital importance in view of the global acceptance of Ayurveda.

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