



## MENTAL STRESS IN HYPERTENSION: AN AYURVED APPROACH

<sup>1</sup>\*Dr. Varsha Sadashiv Khot and <sup>2</sup>Dr. Jayashree Tongaonkar

<sup>1</sup>MD PhD Scholar, Department of Kayachikitsa, Sumatibhai Shah Ayurved Mahavidyalaya Hadapsar, Pune, Maharashtra, India.

<sup>2</sup>HOD Professor, Department of Kayachikitsa, Sumatibhai Shah Ayurved Mahavidyalaya Hadapsar, Pune, Maharashtra, India.

**Corresponding Author: Dr. Varsha Sadashiv Khot**

MD PhD Scholar, Department of Kayachikitsa, Sumatibhai Shah Ayurved Mahavidyalaya Hadapsar, Pune, Maharashtra, India.

Article Received on 28/05/2020

Article Revised on 18/06/2020

Article Accepted on 09/07/2020

### ABSTRACT

Hypertension is important health problem in today's era. Due to increasing stress in day to day life, people are more prone to psychosomatic diseases, essential hypertension is one of them. There is a close connection between our body and our mind. According to ayurved hypertension is nothing but a 'Vata pradhan tridoshaja vyadhi', be greatly influenced by morbid state of Mana. It may therefore be considered as sharir and manas roga (ubhayashrita vyadhi). Stress can be correlate with chinta mentioned in ayurved. Stress affects various entities in the body like tridoshas, dhatu, updhatu, mala, oja, srotas, prakruti, saratva and mana. By understanding hetu, lakshan, samprapti of chinta, chikitsa of stress related hypertension can be possible. Ashwasan chikitsa, shaman aoushadhi, rasayan, shirodhara, yog, sadvrutta palan are contributions of ayurved can apply in this regards, which is effective in prevention and management of stress related hypertension.

**KEYWORDS:** Stress, Hypertension, Ayurved, Mana, Chinta.

### INTRODUCTION

Due to the rapid modernization, people are leading more stressful lives. Many of them are not able to adapt to the stresses of day to day life and these people are prone to develop psychosomatic illnesses. There are several psychosomatic diseases, with essential hypertension (EHT) being an important one. Hypertension is an important public health problem in both economically developed and developing nations as well as in both rural and urban areas.<sup>[1]</sup> Prevalence of hypertension is increasing over the years in India and globally. It is expected to rise further by 2025 involving over 1.5 billion people all over the world.<sup>[2]</sup> It has been estimated that hypertension accounts for 6% of deaths worldwide and also it leads annually to 1.1 million deaths in India. We find stress everywhere: within the family, in business organizations or enterprises, and in every social or economic activity. In life an individual is exposed to various stressful situations. Thus, it is not surprising that interest in this issue has been increasing.

In susceptible persons stress causes a transient, sympathetically mediated rise in blood pressure.<sup>[3]</sup> It is still unclear if repetitive or continuing stress will induce fixed hypertension. Repetitive exposures to stress can result in habituation, with a consequent blunting of the sympathetic response and associated cardio dynamic

changes. But the exact coping mechanisms on which we depend for dealing successfully with stress are still incompletely understood. Plausible hypotheses linking stress to hypertension have been advanced, but the longitudinal information required for a satisfactory validation is not yet available. So it is need to search best solutions for relieving stress.

Ayurved is ancient science having great concepts in related to health of body and mind of human being. There is a close connection between our body and our mind. If there is a psychological factor affecting a medical condition, it is important to treat the psychological problem as well as the medical problem. According to Ayurved, Vata dosha and Mana (mind) are mainly vitiated in the psychic diseases. In ayurved no disease has been found which exactly simulates with essential hypertension. It is stated that every disease cannot be given nomenclature every time.<sup>[4]</sup> According to ayurved hypertension is result of vat-pittapradhan tridoshaj dushti, raktadushti and manas bhav dushti. The dosh dushya involvement in uccha raktachap i.e. hypertension reveals tridosh and manas bhav dushti along with ras, rakta, mansa, majja dhatu, kled and raktavahinya.

## OBJECTIVES OF STUDY

To study the role of stress factors involving in hypertension in ayurved perspective.

To understand hypertension related with stress and way of treatment in terms of ayurved.

## MATERIAL AND METHODS

This is based on conceptual study. Ayurved samhitas, modern literature, available research updates on internet and in magazines, journals were searched, compiled and analyzed.

Stress is one of the risk factor for heart diseases mentioned from ancient period to till date. According to ayurved sharir (body) and Mana (Mind) both are responsible for producing diseases. And also these both are dependent on each other. Stress can be correlate with chinta mentioned in ayurved. Stress affects various entities in the body like tridoshas, dhatu, updhātu, mala, oja, srotas, prakruti, saratva and mana.

### These entities can affected by stress as follows

Vat dosha: atidhyaan vat prakopak hetu.<sup>[5]</sup>

Pitta dosha: kshin sadhak pitta – bhayapratiti, budhi bhransha

Kaph dosha: Avalambak, tarpak, kledak kaph kshinata

Ras dhatu: atichinta - ras kshay<sup>[6]</sup> Ras dushti, abnormality in ras-rakta sanvhan (blood circulation)

Rakta dhatu: ras dushti, agnimandya (impaired digestive fire) Mansa, Med, Shukra dhatu: kshinata and dushti

Sira updhātu: med kshay, siragat vat dushti, ras-rakta vahan vikruti

Snayu Updhātu: Kaph, vata, rakta dushti, snayugat vat, abnormality in cardiac output.

Oja: seat of oja is hruday, ojakshay due to atidhyaan, shok.<sup>[7]</sup>

Annava srotas: dushti – agnimandya

Pranava srotas: Mulsthan hruday and mahasrotas both affected by chinta.

Udakava srotas: Aoupsargaj trushna, ras kshay – kantha gal talu shosh due to chinta

Purishvaha srotas: annava dushti and agnivaigunya – purish dushti

Mutrava srotas: saman, apan avaran – mutra vikruti; kledvahan vikruti

Swedvaha srotas: swed sravan is karm of vyan vayu, atiswed (sweating)

**Prakruti:** Dosha prakruti lakshanas are related with manas bhav which can be affected by stress:

Vata Prakruti lakshanas: Jagrukata (awakening), Bahupralap (talkative), Shighra kshobha (short tempered), matsari (jealousy), avyavsthit mati (disturbed mind), anavasthit avayav (increased movements of organs)

Pitta Prakruti: Kshiprakop (anger), Kleshbhiru (intolerance of sorrow due to stress)

Kaph Prakruti: Ashighra kshobh (due to good tolerance but do not release stress which may become harmful)

**Saratva:** Saratva pariksha is useful for examining strength of body and mind. Some lakshnas related with manasbhav can be affected by stress.

Twaksar: anandi, sukhi

Raktasar: manswitvam, Anati balvan (strong), akleshshahishnuta (good tolerance)

Mansasar: Kshamavan, Dhurutiman, Alloulya Arajavi, Balvan

Medsar: sukhi, upbhogi, arjavi

Asthisar: mahotshah, kriyavant, kleshshah

Majjasar: Balvant, Vidynani, Dighayushi

Shukrasar: Balvant, sukhi, arogyayukta

Satvasar: Smrutimant, dhir, tyaktavishad, kalyaniveshi

Raktasar persons can affected fast but can tolerance better to stress. In mansasar persons having less chances affected by stress due to kshamashilata, dhurutimanata and alloulya. Stress can not affect easily to uttam saratva people, but it can affect earlier and faster in hin (less) saratva people. By examining saratva we can prevent these actions due to stress in specific sara person.

**Mana:** Chintan is karm of mana, if it is excess produces stress. Atiyog of chintan is vikruti hetu. The seats of vedana are man and sharir. Hruday is sthan of mana and atma. For protection of hruday and their related bhav especially care of sorrow of mana is necessary.<sup>[8]</sup> Hrudhya is chikitsa for manas bhav vikruti. These are some factors for easy understanding of cause and effect relationship of mana and vikruti of hruday due to stress. Hina, mithya and atiyog of mana are vikruti hetu for samprapti of physical, mental and psychomotor diseases. Atiyog of chinta causes rasavaha srotodushti leads to less prinan karm of rasa, produces lakshanas like utsahani, vaichitya, arati, glani etc. It also causes vikruti in ras-rakta sanvahan. Vyan vayu control manogati, pran vayu stabilizes mana, udan vayu produces bodhan of mana. These three vata can affected by stress leads to abnormality in hruday and ras rakta sanvahan. Excessive sorrow, stress and happiness affects hruday instantly which can leads to hrudsthambh, hrutshool. Stress causes acute and chronic adverse effects on body and mind.

### Hetu of Chinta

- Dosha prakop respective with kala can be considered for stress production. Utapatti, sthiti and laya are avastha of stress are related with kala.
- Panchmahabhutas are responsible for formation of mana and sharir. If these are affected produces impact on mana vikruti.
- Swabhav of every person i.e. prakruti can produces stress.
- Vegodirandharan - suppression of natural urges causes vatprakop lakshanas – affects mana
- Dincharya, rutucharya, ratricharya, ahar vihar rules if not followed properly, causes stress on mind and body.
- Manas bhav like irshya, moha, mad, matsar, krodh, lobha, causes continues stress.

**Samrapti of Chinta**

Udan vayu – smritibhransh – mana santap – chinta  
 Sadhak pitta – buddhibhransh – manovikruti – chinta  
 Tarpak kaph – dhurutibhransh – manovikruti - chinta  
 Dhi dhruiti smruti – vikrut sannikarsh with mana leads to chinta.

**Lakshanas:** Shirahshool (Headachae), anidra (Insomnia), khandit nidra, bhram (Giddiness), klam (Fatigue), dourbalya (generalized weakness) etc.

**Sadhyatva:** Nij hetu or aagnatuj hetu, acute or chronic condition, mithyayog or atiyog of chinta decides sadhya asadhyatv of chintajanya diseases (stress related diseases).

**Chikitsa**

1. Ashwasan chikitsa: Identify root cause or source of stress. Assure and council to patients according to that.
2. Aoushadhi chikitsa: Various ayurved drugs effective in manas bhav dushti shamak, vatshamak, nidrajanan, sandyasthapan and rasayan. Jatamansi, sarpagandha, khurasani owa, brahmi, ashwagandha, medhya dravyas and formulations maid by various drugs combination mentioned in ayurved samhitas used for relieving stress and controlling stress related hypertension. Sarpagandha is used in hypertension effectively and useful in Anidra. Sarpagandha vati and takradhara reduces systolic and diastolic blood pressure and lakshanas of stress like shirahshool, bhram, anidra etc. Medhya Rasayan Vati (which is made of medhya drugs such as Brahmi, Shankhpushpi, Ashwagandha, Jatmanasi, Parsik Yavani) and kshirodhara showed statistically high significance in all parameters and it also showed comparatively better result in nullifying psychological factors.<sup>[9]</sup>
3. Rasayan chikitsa: Medhya rasayan like guduchi. Shankhpushpi, yashtimadhu, mandukparni are effective in manas dushti. Achar rasayan i.e. ideal behavioral regulations can prevent and manage stress.
4. Panchkarma: Abhyang of body increases blood circulation which relaxes body. Shirodhara may have sedative effect on hyperactive limbic system caused by stress. It leads to facilitates inhibitory presynaptic action of GABA and also reduces high level of noradrenaline which are found high in anxious state of mind.<sup>[10]</sup> Stress causes imbalance of prana udan and vyan vayu, sadhak pitta and tarpak kapha. Shirodhara reestablishes the functional integrity between three dosha through its positive effect.<sup>[11]</sup>
5. Yog and Pranayama: Health benefits from regular yoga practice have been shown to decrease stress, improve sleep and immune function. Pranayam decreases feelings of stress.
6. Sadvrutta Palan: Dincharya (daily routine rules), Rutucharya (seasonal routine rules), ratricharya

(night schedule rules), nidra (proper sleep) should follow for preventing from stress related diseases.

**DISCUSSION**

Blood pressure control is multifactorial, stress management is one of them. According to modern science emotions like excitement, anger etc. increase blood pressure as cerebral cortex especially limbic system through hypothalamus stimulates vasomotor center and thereby increase activity of sympathetic nervous system. Emotional stress, sociocultural stress, occupational stress, intellectual stress are various types of stress can produce rise in blood pressure. Transient blood pressure rises are observed after exposure to acute physical or emotional stress in normotensive persons and in those with borderline, early, labile, or persistent hypertension.<sup>[12]</sup>

Ayurved concepts like Tridosha, Dhatu, Mala, Prakruti, Saratva, Oja, Mana having major role in pathogenesis of stress related diseases. Along with these manasa bhavas like Chinta(worry), Bhaya (Fear), Krodha(Anger), etc., play an important role in the pathogenesis, progression, and prognosis of diseases and also have effects on the response to treatment of hypertension. Ayurved chikitsa by various drugs, formulations, procedures can play effective role in treatment of stress related hypertension and other psychosomatic diseases. Dincharya, rutucharya, vegvidharan, nidra, yog and pranayama are helpful in preventing and managing stress level.

**CONCLUSION**

Ayurved concepts of various manas bhava like chinta considered for stress related factors. It can apply in psychosomatic diseases like hypertension. This can be accomplished by understanding of basic concepts mentioned in ayurved in pathogenesis of such conditions and combining a mental health-promoting ayurved therapies to relieve stress. On the basis of this study, it is possible to understand stress related hypertension by considering various aspects mentioned in ayurved.

**REFERENCES**

1. Alwan A. Global status report non communicable diseases 2010 World Health Organization, 2011; 9-31.
2. World heart federation retrieved 11 January 2017 (available from <http://www.worldheartfederation.org/cardiovascular-diseaseriskfactor/hypertension>)
3. Mustacchi P: Stress and hypertension. West J Med., Aug, 1990; 153: 180-185.
4. Charak Samhita of Agnivesha with Ayurved dipika commentary of chakrapani datta, sutrasthan 18/44, Edited by Vaidya yadavji Trikamji; Acharya published by chaukhambha Publication, 2005.
5. Kaviraj Atridev Gupta, Ashtang Hruday nidansthan, 16/23, Choukhambha Sanskrit Sanshtan Varanasi, 2005; 281.

6. Acharya Charak edited by Vidyadhar Shukla, Ravidatta Tripathi, Charak Samhita, vimansthan 5/12, Choukhambha Sanskrit Sanshtan Varanasi, 2007; 589.
7. Kaviraj Atridev Gupta, Ashtang Hruday sutrasthan, 11/39, Choukhambha Sanskrit Sanshtan Varanasi, 2005; 89.
8. Acharya Charak edited by Vidyadhar Shukla, Ravidatta Tripathi, Charak Samhita, sutrasthan 30/4-5, Choukhambha Sanskrit Sanshtan Varanasi, 2007; 440.
9. Dhanjay Patel et.al. 2003: the Role of Manasik Bhavas in the etio pathogenesis of Uccha Raktachapa and its management with Medhya Rasayan & Shirodhara; M.D. (Ayu) thesis, Gujarat Ayurved University, Jamnagar.
10. Tank N, A comparative clinical study of jaladhara and taildhara in the management of stress, PhD thesis. I.P.G.T. and R.A.G.A.U. Jamnagar, 2006.
11. Patel D., Evaluation of the role of manasik bhav in the etiopathogenesis of madhumeha (NIDDM) and its management by polyherbal antidiabetic formulation with and without medhya rasayan, PhD thesis. I.P.G.T. and R.A.G.A.U. Jamnagar, 2009.
12. Baumann R, Ziprian H, Godicke W, et al: The influence of acute psychic stress situations in biochemical and vegetative parameters of essential hypertensives at the early stage of the disease. *Psychother Psychosom*, 1973; 22: 131-140.