

## EUROPEAN JOURNAL OF PHARMACEUTICAL AND MEDICAL RESEARCH

www.ejpmr.com

SJIF Impact Factor 4.161

Review Article
ISSN 2394-3211

**EJPMR** 

# INTERPRETATION OF ETIOLOGICAL FACTORS AND PREVENTIVE MEASURES IN ESSENTIAL HYPERTENSION THROUGH AYURVEDA.

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Article Received on 01/12/2016

Article Revised on 21/12/2016

Article Accepted on 11/01/2017

#### **ABSTRACT**

Hypertension is one of the widespread disorders. It is a systemic disorder in which the blood vessels have persistently raised pressure, putting them under increased stress. It is a major risk factor for ischemic and hemorrhagic stroke, myocardial infarction, heart failure, chronic kidney disease. The principle focus of *Ayurveda* is on maintaining good health and adopting a healthy lifestyle. *Ayurvedic* texts do not provide any direct reference about Hypertension, but it is necessary to understand it through *Ayurvedic* terminology. By understanding the disease through *Ayurveda*, we can improve the quality of life of patient. As diseases are innumerable, it is not possible to mention each and every disease with its symptoms and treatment. Physician should understand it with *yukti pramana* and *dosha-dushya* involved in the disease. In this article, the etiological factors and preventive aspects of hypertension, in terms of *Ayurveda*, are discussed.

KEYWORDS: Hypertension, blood vessels, hemorrhagic stroke, myocardial infarction, yukti pramana.

## INTRODUCTION

Hypertension is a common lifestyle disorder. It is very important risk factor for cardiovascular diseases. The prevalence of hypertension increases with age. The disease hypertension is not clearly mentioned in *samhita granthas*. It is an *anukta yyadhi*.

Hridaya is formed from cream layer of shonita and kapha. [1] It is the mulasthana of rasavaha and pranavaha srotasa. [2] It is the seat of vyana vayu, sadhaka pitta and avalambaka kapha. Charaka Acharya stated clearly about circulation in Grahani chikitsa adhyaya. Heart contracts with the help of vyana vayu and do the rasa rakta vikshepana karya, hence nourishment of all dhatus takes place continuously. [3] Sadhaka pitta is responsible for discrimination, intelligence, pride, enthusiasm. Avalabaka kapha helps heart to perform its normal functions by its nourishing property. [4]

## AIM AND OBJECTIVES

- 1. To study etiological factors of Essential Hyertension.
- 2. To study etiological factors of Essential Hypertension in ayurvedic view.
- 3. To study preventive aspect for Essential Hypertension in Ayurvedic & modern view.

## MATERIAL AND METHOD

This is a review article. References regarding hypertension from modern medicine books and various

correlating references from samhita granthas were collected.

According to modern view, these are the etiological factors for Hypertension:

- 1. Role of genetics: Epidemiological studies suggest that 20% to 60% of primary hypertension is inherited and the remainder is acquired or environmental. [5]
- 2. Age and sex: Blood pressure increases with age in both men and women.  $^{[6]}$
- 3. Weight: There is 1mmHg rise of systolic blood pressure for every 1.25 kg of weight gain.  $^{[7]}$
- 4. Salt intake: Whos intake of sodium chloride is 3gms or less per day have low average Blood pressure. [8] Salt intake more than 3 gms per day leads to increase in blood pressure.
- 5. Alcohol intake: There is strong and independent positive relationship between alcohol intake and increase in blood pressure. [9]
- 6. Physical activity: Sedentary individuals have a 20% to 50% increased risk of developing hypertension. <sup>[10]</sup>
- 7. Smoking: Tobacco smoking has been reported to cause sharp rise in blood pressure. [11]

In *Ayurveda*, as previously mentioned, Hypertension is an *anukta vyadhi*. By the presentation of this disease in patients, one can elaborate the etiological factors, *dosha-dushya* involvement and *srotodushti* in it.

## Etiological factors according to Ayurveda

These can be classified into following groups:

- 1. Aharaja hetu
- 2. Viharaja hetu
- 3. Manasika hetu.

## 1. Aharaja

Three *dravyas* viz. *Pippali, lavana* and *kshara* should not be used in excess. [12] *Lavana rasa* in excess causes *raktadushti*. It is *tikshna*, *ushna* and *kledakara*.

*Vidahi, ushna, drava, snigdha annapana* is responsible for *raktavaha srotodushti*, hence causes hypertension. <sup>[13]</sup>

Acharya Charaka says all the the dysfuntions in the body are due to Gramya ahara consumption. Gramya ahara consumption with diwaswapa, alcohol consumption, Vishamashana, adhyashana, emotional factors like lobha, shoka, bhaya, krodha, moha are seat for many diseases in the body. [14]

Excess of alcohol consumption is factor responsible for *medovaha srotodushti*. Apachita meda gets accumulated in the inner wall of blood vessels, which causes *dhamanipratichaya*. Due to *dhamanipratichaya*, blood pressure increases.

Excess of fatty food consumption (*medovardhaka ahara*) leads to *medovaha srotodushti*. Modern science considers weight gain to be a major risk factor for onset of EHT. The Framingham's study showed approximately 1mm Hg rise of Systolic Blood pressure for every 1.25 Kg of weight gain. [16]

Ati Guru, sheeta, snigdha bhojana or atimatra bhojana leads to rasavaha srotodushti. Hridaya is the mulasthana of rasavaha srotasa. Hence, due to kha vaigunya in hridaya, it causes increase in blood pressure.

## 2. Viharaja hetu, i.e. lifestyle regimen

Diwaswapa, sthaulya, avyayama vega dharana are the main factors causing this disease.

Diwaswapa (sleeping during day time) after meal is snigdha, tridosha prakopaka, but mainly kapha dushtikara. It leads to agnimandya, resulting in ama formation. Ama causes medo dhatwagni mandya resulting in obesity. Obesity is directly related to hypertension. [18]

Vegdharana is important nidana found now-a-days. Vegdharana of mala, mutra leads to pratiloma gati apana vayu, this leads to increased pressure on heart. Udavarta can be considered the main cause for heart diseases. Ashru vega dharana and nishwasa vegdharana leads to hridroga. [19]

Avyayama hetu is found commonly in present era. There is lack of physical exercise, sedentary lifestyle of people in these days. This hetu is responsible for medovaha

*srotodushti*,<sup>[20]</sup> *Sthaulya* or *prameha* and results in hypertension, as these factors are interrelated.

#### 3. Manasika hetu

Ati chinta (excess worrying) is the hetu for rasavaha srotodushti<sup>[21]</sup> and it also affects manovaha srotasa. Due to excess worrying, hridya sthita sadhaka pitta gets vitiated leading to increase in blood pressure.

Due to Ati shoka, bhaya, krodha sadhaka pitta gets vitiated leading to hypertension.

## PREVENTIVE ASPECTS OF HYPERTENSION

Main and the very first motto of *Ayurvda* is to maintain healthy status of body and then to treat the disease.

It is always better to take preventions for any disease than to treat it.

Nidana parivarjana is the first step in control & management of disease EHT. So, one should avoid the above mentioned etiological factors for this disease. Nidana parivarjana is preventive as well as basic line of treatment in a disease.

Charaka Acharya says Sanshodhana, Sanshamana and Nidana parivarjana are the three basic treatment principles for a disease. [22]

## 1. Sanshodhana

Seasonwise *shodhana karma* like *vamana*, *virechana*, *vasti*, *nasya*, *raktamokshana* can help in prevention as well as in management of disease.

For stress management, Shirodhara, shirobasti can be useful.

#### 2. Shamana

Shamana yoga can be used in EHT according to cause, dushya, desha, bala, kala.

#### 3. Nidanaparivarjana

*Charaka Acharya* explains that by leaving all other things behind, one should take care of his body because if there is lack of body, there is no use of all other things. <sup>[23]</sup>

As seen in etiology, stress factor while taking food is responsible for *agnimandya* and further disease progress, *Ahara* should be taken as per *Ahara vidhi*. [24]

Ayurveda explains importance of *Trimarma*. Hypertension causes major effects in 3 main organs viz. Heart & blood vessels(hridaya), Kidney(basti), nervous system(shira). Marmaghata to trimarmas can result directly into death or permanent impairment of these organ functioning. Hence trimarmas should be protected in EHT.

As avyayama i.e. lack of physical exercise is the cause for EHT, Vyayama can help reducing risk for the disease. Vyayama gives laghavata in the body, agnivriddhi, dosha kshaya, sthairya and important one is dukha sahinshnuta. [25] Emotional factors like chinta shoka will not affect EHT If vyayama done regularly.

The disease can be prevented or target organs can be saved from damage.

## DISCUSSION

Hypertension is a burning issue in present era. Number of hypertensive patients come to *Ayurvedic* hopsitals for treatment. As hypertension is not stated in *Ayurvedic* classical texts, it has become importatant duty of scholars to understand it in *Ayurvedic* terms, to give better quality of life to patients. If we follow proper regimen of diet and lifestyle, there will be no need of medicines. And if we don't follow regimen then also there is no need of medicines because medicines are of no use without following diet and lifestyle regimen.

In short, the following preventable measures should be followed in prevention for hypertension: Reduced salt intake.

Increase physical activity as *avyayama* is the etiological factor for EHT.

Avoidance of excess alcohol, fatty food consumption, Avoidance of *Diwaswapa*.

Stress management with exercise, meditation.

Food intake with proper *vidhi* like *ushna*, *snigdha*, without anger or sadness during *sevana kala*.

## CONCLUSION

There is a major role of dietary and lifestyle factors in the etiology of EHT.

Lifestyle modifications, dietary changes, preventive measures, daily exercise, stress management play important role in prevention and control of this disease. One can prevent the disease and its complications by lifestyle and dietary modifications. the *purusha* (body) is *Rasaja* and one should take care of it with proper food, liquid, *Achara*.

## REFERENCES

- Sushruta samhita with ayurved tatwasandipika, Hindi Commentary by Kaviraj Dr. Ambika Datta Shashtri, Chaukhmba Sanskrit Sanshthan, Varanasi, Sharirsthana 4/30, Pg.no.42.
- 2. Agnivesha, Hindi Commentary by Prof. Ravidatta Tripathi,; edited by Acharya Vidhyadhar Shukla and Prof. Ravidatta Tripathi; Charak Samhita Vol.1, Chaukhmbha Sansrit Pratishthana Delhi, Vimanasthana 5/.

- 3. Agnivesha, Hindi Commentary by Prof. Ravidatta Tripathi; edited by Acharya Vidhyadhar Shukla and Prof. Ravidatta Tripathi; Charak Samhita Vol.2, Chaukhmbha Sansrit Pratishthana Delhi, Chikitsasthana 15/.
- 4. Vidyotini hindi commentary by Kaviraj Atridev Gupta, Ashtanga Hridaya, Sutrasthana 12: 13,15. Page no.121, 122.
- API Textbook of Medicine, Edited By YP Munjal, Published By The Association Of Physicians Of India, 10<sup>th</sup> Edition 2015, vol 1, Chapter 19 pg.no.916.
- API Textbook of Medicine, Edited By YP Munjal, Published By The Association Of Physicians Of India, 10<sup>th</sup> Edition 2015, vol 1, Chapter 19 pg.no.916.
- API Textbook of Medicine, Edited By YP Munjal, Published By The Association Of Physicians Of India, 10<sup>th</sup> Edition 2015, vol 1, Chapter 19 pg.no.916.
- API Textbook of Medicine, Edited By YP Munjal, Published By The Association Of Physicians Of India, 10<sup>th</sup> Edition 2015, vol 1, Chapter 19 pg.no.916.
- API Textbook of Medicine, Edited By YP Munjal, Published By The Association Of Physicians Of India, 10<sup>th</sup> Edition 2015, vol 1, Chapter 19 pg.no.916.
- API Textbook of Medicine, Edited By YP Munjal, Published By The Association Of Physicians Of India, 10<sup>th</sup> Edition 2015, vol 1, Chapter 19 pg.no.916.
- 11. API Textbook of Medicine, Edited By YP Munjal, Published By The Association Of Physicians Of India, 10<sup>th</sup> Edition 2015, vol 1, Chapter 19 pg.no.916.
- 12. Agnivesha, Hindi Commentary by Prof. Ravidatta Tripathi; edited by Acharya Vidhyadhar Shukla and Prof. Ravidatta Tripathi; Charak Samhita Vol.1, Chaukhmbha Sansrit Pratishthana Delhi, Vimanasthana 1/.
- 13. Agnivesha, Hindi Commentary by Prof. Ravidatta Tripathi; edited by Acharya Vidhyadhar Shukla and Prof. Ravidatta Tripathi; Charak Samhita Vol.1, Chaukhmbha Sansrit Pratishthana Delhi, Vimanasthana 5/.
- 14. Agnivesha, Hindi Commentary by Prof. Ravidatta Tripathi; edited by Acharya Vidhyadhar Shukla and Prof. Ravidatta Tripathi; Charak Samhita Vol.2, Chaukhmbha Sansrit Pratishthana Delhi, Chikitsasthana 1.
- 15. Agnivesha, Hindi Commentary by Prof. Ravidatta Tripathi; edited by Acharya Vidhyadhar Shukla and Prof. Ravidatta Tripathi; Charak Samhita Vol.1, Chaukhmbha Sansrit Pratishthana Delhi, Vimanasthana 5/.
- 16. Agnivesha, Hindi Commentary by Prof. Ravidatta Tripathi; edited by Acharya Vidhyadhar Shukla and Prof. Ravidatta Tripathi; Charak Samhita Vol.1, Chaukhmbha Sansrit Pratishthana Delhi, Vimanasthana 5/.

- API Textbook of Medicine, Edited By YP Munjal, Published By The Association Of Physicians Of India, 10<sup>th</sup> Edition 2015, vol 1, Chapter 19 pg.no.916.
- 18. Agnivesha, Hindi Commentary by Prof. Ravidatta Tripathi; edited by Acharya Vidhyadhar Shukla and Prof. Ravidatta Tripathi; Charak Samhita Vol.1, Chaukhmbha Sansrit Pratishthana Delhi, Sutrasthana 7/.
- 19. Agnivesha, Hindi Commentary by Prof. Ravidatta Tripathi; edited by Acharya Vidhyadhar Shukla and Prof. Ravidatta Tripathi; Charak Samhita Vol.1, Chaukhmbha Sansrit Pratishthana Delhi, Vimanasthana 5/.
- Agnivesha, Hindi Commentary by Prof. Ravidatta Tripathi; edited by Acharya Vidhyadhar Shukla and Prof. Ravidatta Tripathi; Charak Samhita Vol.1, Chaukhmbha Sansrit Pratishthana Delhi, Vimanasthana 5/.
- 21. Agnivesha, Hindi Commentary by Prof. Ravidatta Tripathi; edited by Acharya Vidhyadhar Shukla and Prof. Ravidatta Tripathi; Charak Samhita Vol.1, Chaukhmbha Sansrit Pratishthana Delhi, Vimanasthana 7/.
- Agnivesha, Hindi Commentary by Prof. Ravidatta Tripathi; edited by Acharya Vidhyadhar Shukla and Prof. Ravidatta Tripathi; Charak Samhita Vol.1, Chaukhmbha Sansrit Pratishthana Delhi, Nidanasthana 5/.
- 23. Agnivesha, Hindi Commentary by Prof. Ravidatta Tripathi; edited by Acharya Vidhyadhar Shukla and Prof. Ravidatta Tripathi; Charak Samhita Vol.1, Chaukhmbha Sansrit Pratishthana Delhi, Vimanasthana 2/.
- 24. Agnivesha, Hindi Commentary by Prof. Ravidatta Tripathi; edited by Acharya Vidhyadhar Shukla and Prof. Ravidatta Tripathi; Charak Samhita Vol.1, Chaukhmbha Sansrit Pratishtha.