



**REVIEW ON CURRENT SCENARIO OF ANTI-HYPERTENSIVE AYURVEDIC
REMEDIES**

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Article Received on 05/04/2020

Article Revised on 26/04/2020

Article Accepted on 17/05/2020

ABSTRACT

Ayurveda is not only an ancient medical science but it is a complete life science. The main aim of *Ayurveda* is to maintain the health of a healthy person & to cure the disease of diseased person. From last few decades due to globalisation there is drastic change in working pattern, dietary habits & lifestyle. According to a new research, lifestyle diseases replaced traditional health risk factors resulting in an increase in incidents of diseases & deaths in India in the last two decades. Now most of the diseases & deaths are caused by High Blood Pressure, high cholesterol, obesity, alcohol use and poor diet. Unhealthy lifestyle is the root cause of many diseases broadly termed as lifestyle disorder. Hypertension is the most common lifestyle disease affecting population all over the world. Now a days various researches carried out at different institutions found that variety of *Ayurvedic* drugs & therapies are successful in controlling Hypertension improving lifestyle of patient & there by preventing further complications. The present review article is aimed at compiling data on important *Ayurvedic* remedies & Yoga modalities that have been evaluated for their efficacy as an anti-hypertensive remedy at various institutions. This review article gives an idea about the efficiency of various Anti-Hypertensive *Ayurvedic* treatment & Yoga modalities in present scenario.

KEYWORDS: Hypertension, Herbal drugs, Lifestyle disorders, High blood pressure, *Uccharaktachap*.

INTRODUCTION

Hypertension is described as a metabolic disorder having multiple aetiologies.

Blood is driven through the arteries at a considerable pressure. If there were no pressure, there would be no circulation. It is highest when the heart contracts (systole) and lowest when it relaxes (diastole). In a healthy young male (adult) & the normal pressure at systole is 120 mm Hg. It is often a little lower in female. The blood pressure tends to rise with age.^[1]

Blood pressure is the pressure exerted by blood on the walls of blood vessels. It is characterised by increased systolic and diastolic blood pressure i.e. elevated BP. This also causes changes in large arteries. There is thickening of the media, increase in collagen and secondary deposition of calcium. These changes results in loss of arterial compliance which in turn leads to more pronounced arterial pressure wave. Endothelial dysfunction with alternations in agents such as Nitric oxide and endothelins appear to be involved.

Left ventricular hypertrophy and changes in renal vasculature can also be seen.^[2]

Transition of our ancestors from primarily diurnal standard of living to unhealthy diet habits, physical inactivity, excess workload, increasing mental stress, addiction of drugs, intake od alcohol & smoking & also the habit of sophisticated life style in developing countries are major contributors in the growing incidence of Hypertension.^[3]

An estimated 1.13 billion people worldwide have hypertension mostly two-third of them living in low and middle income countries.

It is a major cause of premature death worldwide. One of the global targets for non – communicable diseases is to reduce its prevalence by 25% by 2025.^[4]

It has become a serious health problem with continuously increasing rates of prevalence & mortality by increasing the risk of heart, brain, kidney & other diseases.^[5]

AIMS AND OBJECTIVE

The percentage of Hypertensive patients in society is rising sharply in spite of numbers of newly immerged anti-hypertensive drugs in modern medicine.

Now a days a large section of humanity globally is looking towards *Ayurveda* in search of an ideal & safe treatment with natural ways of life.

This review emphasizes on anti-hypertensive actions of herbal medicines, different yoga & *pranayama* modalities.

The primary aim of this article is to discuss therapeutic values of some of the herbal preparations observed in experimental studies & recent approaches to validate their anti-hypertensive efficacies.

MATERIALS AND METHODS

This article is based on review of current researches regarding anti – hypertensive values of *Ayurvedic* drugs and Yoga modalities.

Materials related to Hypertension, *ayurvedic* drugs and other relevant topics have been collected. Also referred to modern medicine books and explored various websites to gather information on the relevant topic. Recent researches & also various popular journals have also been reviewed while writing this article.

Literature Review in Ayurveda

Uccharaktachap (essential hypertension) is an instrumental disease which is the recent diagnostic invention of modern science. The term hypertension was nominated after the invention of Sphygmomanometer, but before that about its existence one can trace the pathway on the tract of symptomology only. *Uccharaktachap* has been described in details in the modern nooks with its aetiology, pathogenesis, symptomology and management. So far *ayurvedic* description is concerned, no specific term is coined for *Uccharaktachap*. However as *Acharya Charak* has mentioned, it is not necessary that every manifestation be named, but the problem can be measured according to their specific features itself.

Many works have been carried out on *Uccharaktachap* to evaluate the perfect diagnosis & mode of treatment on the basis of *ayurvedic* principles, but a widely acceptable theory is still not available. Different nomenclatures have also been adapted by research scholars like *Raktagata Vata*, *Avruta Vata*, *Rakta Vata* etc., but most of the disease entities are not in whole but collectively are the most probable routes of pathophysiology of *Uccharaktachap* according to *Ayurveda*.

In the pathogenesis of *Uccharaktachap* along with *Tridosha* & *Manovaha Srotas*, *Hridaya*, *Rasa*, *Rakta Samvahana* & *Oja* are the main responsible factors. They are vitiated due to disturbed psychological factors like fear, anxiety, stress, mental fatigue, depression etc. producing Hypertensive state. According to *ayurvedic* point of view, diseases are due to vitiation of *Dosha*, *Dhatu* & *Mala*. One of the main reasons of their vitiation is *Pragyaparadha* as mentioned in *Charak Samhita*.

Central Idea

Ayurveda is an ancient healing art. If we want our system to reach on an international platform, then we have to demonstrate it with proper evidence based documents. Then *Ayurveda* will be accepted globally as a Contemporary Science of Medicine.

Current Researches in Ayurveda & their Antihypertensive Efficacy

1) *Tagar*

Snehapoorvaka virechana karma with *shamanaushadha* (RGUHS,G.H. (*kayachikitsa*))

Hypertension is *vatapradhan tridoshaja vyadhi* & can be considered as abnormality of *rakta-dhatu* i.e. *Shonita dushti*.

30 patients of essential Hypertension were selected & *Panchkola churna* was given for *Amapachna*, *Snehapan* with *Moorchita til tail* by *Arohana vidhi* & *Virechan* by *Trivrita leha* after *sarvanga abhyanga* & *ushnaja snan*. Followed by cap *tagara* 1bd, *moorchita til tail* 30ml per day as *shaman aushadhi* after *sansarjana karma*. Total duration of treatment was 48days.

Blood pressure goal is to achieve <140/90. In patients with hypertension & renal disease, BP goal is <130/80.

In this study mean systolic & diastolic BP before & after treatment is 159.46/90.60 & 130.60/80.73 mmHg respectively. So the treatment showed a highly significant result. Decrease in symptoms & patients well being is also noticed during treatment.^[6]

2) *Sarpagandha*

B.P. lowering efficacy for *Reserpine* for primary hypertension. Shamon SD, PerezMI. University of British Columbia (Faculty of Medicine).

A randomised controlled trial was done for comparing *Reserpine* monotherapy to placebo or no treatment in patients with primary hypertension. This study showed a statistically significant systolic blood pressure reduction in patients taking *Reserpine* compared to placebo.^[7]

3) *Saptaparna*

Clinical evaluation of *Saptaparna* (*Alstonia Scholaris*) on essential HTN. Kamlesh Bhogayata¹, PP Sharma², BR Patel^[3] Dravyaguna, Shet J.P Ayurvedic College, Bhavnagar.

The clinical study was carried out on 30 patients of essential HTN in OPD of IPGT & RA, Jamnagar. They were divided into 2 groups. In group A 15 patients of essential HTN were given 15mg of decoction of bark of *Alstonia Scholaris* & rest were administered with 250mg of *Sarpagandha* (*Rauwolfia Serpentina*) *Ghanvati* twice daily.

This study shows *Saptaparna* is relieving elevated Diastolic BP & Somatic symptoms. While *Saptaparna* is more essential in decreasing Systolic BP & psychological symptoms.^[8]

4) *Medhyarasayan Ghan Vati & Shirodhara*

Dr. Nishant Kaushik department of *kaychikitsa* Govt Ayurvedic College Raipur (CG).

Medhya rasayan ghan vati (*Guduchi, Shankhpushpi, yastimadhu, Mandookparni* one part each with 16 part of water) along with *shirodhara* (*Guduchi, Shankhpushpi, yastimadhu, Mandookparni* one part + 8 parts water) proved to be potent in alloying the melody. These medicaments when used in new and uncomplicated cases of *uccharaktachap* produced highly significant clinical improvements in symptoms like *Hrida dravata*, *Anidra*, *santaap*, *bhrama*, *shirahshool* & *ekagrata hrasa* the therapy gives better improvements. *Medhya rasayan Ghan vati* group A & *Shirodhara* Group B gave mild to moderate improvements when administered alone. When *Medhyarasayan Ghan vati* along with *Shirodhara* was employed in the management of *Uccharaktachap* it showed highly significant results than the two other groups.^[9]

Yoga Modalities

Shavasana, *Pavanamuktasana*, *Ardhahalasana*, *Viparitikarani*, *Ardhamatsyasana*, *Makarasana*, *Bhujangasana*, *Ardhshalabhasana*, *Vakrasana*, *Vajrasana*, *yoga mudra*, *Chakrasana*, *Tadasana*, *nadi shodhana*, *Om* recitation & meditation, these all helps in reduction of Hypertension.

DISCUSSION

The incidence of lifestyle disorders like hypertension, diabetes mellitus, dyslipidaemia, & obesity and cardiovascular diseases are increasing day by day.

Hypertension is not only a disease itself but also associated symptom of many other diseases causing major cause of mortality representing about 7.5 million deaths, 12.8% of the total of all deaths. Globally men aged 40 & over have higher prevalence of raised blood pressure than females.

In diseases like Hypertension one has to take medication regularly and long term use of this medication have many side effects like cough, diarrhoea or constipation, dizziness, erection problem, nervousness, tiredness, drowsiness, headache, nausea and vomiting.

Researches suggest that *yoga* & medications might sensitize the receptors in the arteries of heart and lungs and decreasing activity of the sympathetic nervous system which stimulates the body's fight or flight response. *Yoga* such as *Surya Namaskara* also helps in calorie burning & medication relaxes mind which helps in reducing raised blood pressure.

As Hypertension is the disease of circulatory system & *Ayurveda* doctrine believes in same constituents in morbid as well as physiological conditions by the only difference of normalcy & vitiation, it becomes necessary to discuss about *Ayurvedic* circulatory system.

Rasavaha srotasa explained in *Ayurveda* is nothing but a explanation of cardiovascular system. *Rakta dhatu* circulates along with *Rasa dhatu* as both are *drava* in nature. *Rakta* is the *drava dhatu* therefore it has natural property of flowing. To maintain the circulation upto end tissue, this is provided by the contraction and relaxation of the heart. This particular pressure exerted by circulation is known as blood pressure. BP is measurable end product of an exceedingly complex series of factors including those, which control the blood vessel's calibre and responsiveness, which control the fluid volume inside and outside vascular and those which control the cardiac output. None of these factors are independent. They interact with each other and respond to changes in BP. It is not therefore easy to sortout cause and effect. In *Ayurveda* three humors; *Vata*, *Pitta* & *Kapha*, seven *Dhatu*s and *Malas* are considered as the root cause of all the functions of the body. The *Ayurveda* medications mentioned here helps in balancing these *Tridosha*, *Saptadhatu*s and *Malas*, thus helps in reducing BP.

CONCLUSION

Ayurvedic and herbal drugs like *Tagar*, *Sarpagandha*, *Saptaparna*, etc., *Panchakarma* therapies like *Shirodhara* and *Yogasanas* are effective and priceless solutions for hypertensive patients.

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