

# Clinico-Pathological Study of Uchharaktachapa (Hypertension) and Upashayanupashyatmaka Effect of Medhya Yoga

Nita Mahalle<sup>1</sup>, Snehal Bhele<sup>2</sup>

<sup>1</sup>Associate Professor, Dept. of Rognidan and Vikruti Vigyan,

<sup>2</sup>Assistant Professor, Dept. of Kayachikitsa,

Yashwant Chawhan, Ayurved Medical College, Aurangabad, Maharashtra

Corresponding Author: Nita Mahalle

## ABSTRACT

High blood pressure or elevated arterial blood pressure is common, asymptomatic, readily detectable, usually easily treatable and often leading to lethal complication if left untreated. Hence, it is one among the leading life threatening disease now days. The WHO rates hypertension as one of the most important causes of premature death worldwide. It is estimated that 26% of overall population worldwide and 29.8% in India, is affected by hypertension. Though, Ayurvedic texts provides no clear reference to Essential Hypertension, here is an effort to understand the possible pathogenesis in terms of involved factors like Dosha, Dushya, etc. In Allopathic medical science, there are so many types of Antihypertensive drugs are available, but they have number of side effects. Therefore, it is a need of today to find out such type of herbal remedy which can control the Hypertension without creating any complication or side effects. As mental tension is one of the important factors for causing hypertension, so Medhya yoga (in churna form) as medicine was selected for the present study, its Upshayatmak effect on hypertension was studied. There found to be significant impact of the medicine on symptoms of hypertension.

**Keywords:** Arterial blood pressure, Hypertension, Medhyayoga, Upshayatmak effect

## INTRODUCTION

Hypertension is common, asymptomatic, readily detectable, usually easily treatable and if left untreated leads to lethal complication, making it is one among the leading life threatening disease now a days. [1] Till date in modern Ayurvedic text, various synonyms have been formed for hypertension like Raktachap, Raktavidhi, Damniraticaya, etc. But in the classical Ayurvedic text no disease has been denoted by such term and occurrence of these terms in Ayurvedic text is not at all possible because hypertension was discovered much later in 17<sup>th</sup> century. But in day to day life many patients suffering from hypertension are seen in practice. Hence there is an urgent need to put one specific term for it. so the term Uchharaktachapa has been used in this instance, which is easily understood and also the word to word translation of Hypertension. [2]

Though, Ayurvedic texts provides no straight reference to Essential Hypertension, here is an effort to understand the possible pathogenesis in terms of involved factors like Dosha, Dushya etc. [3,4] In Allopathic science of medicine there are many types of Antihypertensive drugs are available. But they have number of side effects. Therefore it is need of today to find out such type of herbal remedy which can control the Hypertension of patient without creating any complication or bad effects. As

mental tension is one of the important factors for causing the high blood pressure so Medhya yoga (in churna form) has been selected for the present study, it contains Sarpagandha, Jatamansi, Punarnava and Mandukparni. They are all well known for their Medhya, Rasayana property as well as Nidrajanaka, Vednasthapana, Mutrala, Anulomana and Deepana-Pachana property. This paper is aimed towards studies of Aetiopathology and Clinical features of Uchharaktachapa (Hypertension) and Upashayanupashayatmaka effect of Medhyayoga.

## **MATERIALS AND METHODS**

Proposed Medhyayoga is combination of four drugs - Sarpagandha, Jatamansi, Punarnava and Mandukparni, for study purpose these drugs were taken in equal proportion for formulation. These drugs are highly notable for their respective properties, [5-8] Sarpagandha has anti-stress and tranquilizer effect, Jatamansi and Mandukparni are anti-stress drug whereas Punarnava is diuretic. Ant-stress property is common in all four constituents of Medhyayoga.

### **Inclusive criteria**

- 1) Patients having sign and symptoms of Hypertension
- 2) Age between 20 to 70 years
- 3) Patients willing to sign the consent form for the clinical trial

### **Exclusive criteria**

- 1) Age below 20 yrs and above 70 years
- 2) Pregnancy / Lactation
- 3) Acute conditions (Malignant HT)
- 4) Acute renal disorders.

Subjects who did not undergo treatment properly, did not attend follow-up were dropped out from the study

### **Plan of the Study**

The trial was randomized. 30 patients of hypertension were clinically diagnosed. They were treated with drug Medhyayog Churna daily for 30 days in the dose of 2 gms twice a day with plain water. At the end of the treatment, Upashayanupashayatmaka effect of the drug

was statistically analyzed for various symptoms of hypertension.

Laboratory parameters - Blood pressure, RBS, Sr. Calcium, Sr. Cholesterol

### **Parameters of assessment of symptoms**

Following were various hypertension attribute symptoms [9] and respective grading used for the study -

1) Headache

0 – Absent

1 – Headache does not prohibit activities and does not negatively influence the patient's job performance

2 - Headache influence the patients job performance but patient does not miss work

3 -Headache influence the work and social situation and patient loses time from activities

2) Dizziness or Giddiness

0 - Absent

1- Occasionally present but patient able to do routine work

2 – Frequently present but patients routine work hampers

3 - Continuously present so patient unable to do routine work

3) Palpitation

0 - Absent

1 - Occasionally present only in stress but patient able to do routine work

2 - Frequently present with or without stress hampers routine work.

3 - Continuously present with or without stress so patient unable to do routine work

4) Fatigue

0 - Absent

1 - Occasionally present only after over exertion relived by some rest.

2 - Frequently present even after routine work relived by more rest.

3 - Continuously present so patient unable to do routine work and not relived by rest.

5) Mental irritation

0 - Absent

1 - Mental irritation present only for reasonable cause

2 - Mental irritation present even for unreasonable cause

3 - Highly irritable for no reasonable cause, uncontrollable, body gestures

(6) Insomnia

0 - Sound sleep

1 - Intermittent insomnia patient can sleep only 3 to 4 hrs

2 - Intermittent insomnia patient can sleep only 3 to 4 hrs with help of tranquilizer

3 - unable to sleep more than 1 hr even with tranquilizer.

7) Dysphonic

0 - Taking normal breathe as per individual (i.e.no shortness of breath)

1 - Shortness of breath after heavy physical exertion.

2 - Shortness of breath after routine work.

3 - Shortness of breath even after rest

## RESULT AND OBSERVATION

**Table 1 - Effect of therapy according to symptoms**

Sr. No.	Symptoms	Mean (n=30)		Sd		S.E		P Value summary	Recovery %
		BT	AT	BT	AT	BT	AT		
1	Headache	2.13	0.53	0.57	0.51	0.10	0.09	***	75.00
2	Giddiness	1.60	0.77	0.62	0.56	0.11	0.10	**	52.08
3	Palpitation	1.60	0.33	0.62	0.47	0.11	0.08	***	79.16
4	Fatigue	2.13	0.80	0.57	0.48	0.10	0.08	***	62.50
5	Insomnia	2.03	0.46	0.55	0.50	0.10	0.09	***	77.04
6	Mental irritation	2.13	0.56	0.57	0.56	0.10	0.10	***	73.43
7	Dyspnoea	1.40	0.80	0.72	0.66	0.13	0.12	*	42.57

Test used - Kruskal Wallis test with Dunn's multiple comparison test

**Table 2 - Effect of therapy according to laboratory parameter**

Sr. No.	Parameter	Mean (n=30)		Sd		P value summary
		BT	AT	BT	AT	
1	SBP, mm Hg	167.1	154.7	9.12	8.15	***
2	DBP, mm Hg	98.47	93.6	5.05	4.18	**
3	RBS, mg/dl	106.7	106.1	11.23	9.737	NS
4	Sr. Calcium, mg/dl	8.873	8.82	0.7538	0.595	NS
5	Sr. Cholesterol, mg/dl	229.7	228.3	11.94	11.55	NS

Test used - paired t-test

**Table 3 - p-value details**

Sr. No.	Level of significance	Remark	p-value
1	Not significant	NS	p > 0.05
2	Significant	*	p < 0.05
3	More significant	**	p < 0.01
4	Highly significant	***	p < 0.001

## DISCUSSION

Medhyayoga churna owing to its contents Sarpagandha, Jatamansi, Punarnava and Mandukparni showed better improvement in symptoms of hypertension viz. headache, giddiness, palpitation, fatigue, insomnia and mental irritation (Table -1). Results are confirmed statistically. significant result. Since, the trial drug is

In Medhyayoga, Sarpagandha has shamak, vednasthapan and nidrajanan properties, owing to which headache and giddiness had reduced very significantly. This is as per Bhavprakash Nigantu and other references [5-7]

Jatamansi and Mandukparni shows balya and hridaya, [5-7] hence palpitation and fatigue showed significantly reduction.

Insomnia can be cured by nidrajanan properties of Sarpagandha and Jatamansi.

All four drugs Sarpagandha, Jatamansi, Punarnava and Mandukparni have active stress reducing action, hence mental irritation reduction is found to highly significant.

Dyspnoea, which is shortness of breath shows significant reduction due katu, ushna and cough vaat shamak properties of Sarpagandha

Blood pressure - all drugs are with anti-stress property and Sarpagandha has anti-hypertensive effect - owing to which blood pressure showed significant reduction.

## CONCLUSION

Proposed Medhyayoga churna showed statistically significant results in

various symptoms of hypertension. Regarding the nidana factors mainly genetic, dietary, psychological and environmental factors were observed practically, it may be asserted that not only one factor influence the expression of the disease, They interact amongst each other in a variety of permutations to develop the disease. On subjecting the Samprapti as per Ayurvedic fundamentals, it is evident that there is predominance of vata pitta dosha and kapha as its accompaniment with rasa rakta dushti and the symptomatology of the disease also propound to above dosha dushya prominence. Dhamani upalepa (Atherosclerosis) is one of the main incidence in EHT and is stated in kapha nanatmaja vyadhis. Hence, the EHT can be assigned as Tridoshaja Vyadhi with predominance of vata and pitta. [4] Clinical study of Medhya yoga on 30 patients of Uchharaktachapa in the form of Upashayanupashayatmak effect shows statistically highly significant favorable results on clinical features. A Medhya yoga used in the present study proved to be a good Tridoshshamaka, Nidrakar and Anti stress property

## REFERENCES

1. Harrison's Principle of Internal Medicine by Hunter John Published by Mc. Grawhill health Professions Division USA.
2. Ayurved Shabdakosha by Joshi Venumadhava and Narayana Hari 1968, Maharashtra Rajya Sahitya and Sanskrit Mandal, Bombay
3. Sushruta Samhita with Nibandhsangraha Commentry of Shri Dalhanacharya, Choukhamba Orientalia, 8th edition.
4. Charaka Samhita by Agnivesha with Ayurved Dipika commentary of Chakrapani Datta 1941 Nirnaya sagar press.
5. Bhavaprakash Nighantu by Shrikrishna Chandra Ganekar, published by Choukhamba Bharti Academy.
6. Dhanwantary Nighantu by Priyavrata Sharma published by Chaukhamba Bharati Academy 1st edition. 1982.
7. Dravya Guna Vigyana by P.V. Sharma published by Choukhamba Sanskrit Series Varanasi.
8. Ayurveda Materia Medica by H.V. Savnu, 1988, Published by Shri Satguru Publisher, Delhi.
9. Ashtang Hridaya by Vagbhata with commentary Sarvanga Sundara by Arundatta and Ayurveda

How to cite this article: Mahalle N, Bhele S. Clinico-pathological study of uchharaktachapa (hypertension) and upashayanupashyatmaka effect of medhya yoga. International Journal of Research and Review. 2020; 7(3): 348-351.

\*\*\*\*\*