



## A PILOT STUDY TO CLINICALLY EVALUATE THE ROLE OF MARMA CHIKITSA AND SARPAGANDHA CHURNA IN THE MANAGEMENT OF ESSENTIAL HYPERTENSION

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## ABSTRACT

Hypertension (HTN) is a lifestyle disorder that occurs due to a faulty lifestyle and stressful psychological conditions with a low rate of remission and recovery. In Ayurveda, Hypertension can be correlated with Vata Pradhana Tridoshaja Vyadhi. Many people with hypertension are undiagnosed for a long time or until diagnosed incidentally, so it can be considered a silent killer. About 1.13 billion people worldwide suffer from hypertension, so normalising abnormally high blood pressure is a difficult task. According to Ayurveda, systemic hypertension is caused by vitiated Doshas, among which Vata and Pitta are the predominant Tridoshas that obstruct these Doshas' movement in their respective Srotas. The idea of Avarana (occlusion at Dosha operating in a normal condition) provides better knowledge of hypertension, which should be considered for improved outcomes in Ayurvedic disease therapy. Thus, an attempt will be made here to explore the treatment of hypertension from an Ayurvedic perspective and to comprehend the problem from Ayurvedic concepts. There are 107 marmas in the body. Tal Hridaya and Ani Marma are natural remedies that have been shown to have beneficial effects on the circulatory system, aiding in the prevention of essential hypertension, and the Ayurvedic plant medication Sarpagandha is well known for its antihypertensive characteristic.

**Keywords:** Hypertension, Marma Chikitsa, Sarpagandha Churna

## INTRODUCTION

Hypertension (HTN) is a lifestyle disorder that occurs due to a faulty lifestyle and stressful psychological conditions with a low estimate of remission and recovery. Hypertension is directly responsible for 57% of all stroke deaths and 24% of all coronary heart disease (CHD) deaths in India.<sup>1</sup>

essentially, hypertension is not pronounced clearly in Ayurvedic literature; it may have existed since the beginning of life on Earth because typical consequences of hypertension, such as Pakshaghata, Mutraghata, and Hridroga, are thoroughly addressed in our texts. Acharya Charaka states that when a doctor is faced with an illness that is new to them, they should first attempt to determine the disease's aetiology by determining the Dosha, the location of the manifestation, and any etiological variables before starting treatment.<sup>2</sup>

In Ayurveda, there is no direct reference regarding this disease, which completely resembles hypertension. Many scholars have worked on hypertension and have given various nomenclatures that can be correlated with it, such as Raktagatavata, Avruta Vata, Siragatavata, Dhamani Pratichaya, Vyana Prakopa, Raktamada, etc. However, none of these terms were universally accepted.

Marma points are specific locations on the body that are connected to different internal organs, doshas, and srotas by pranic pathways. Stimulating these inner pharmacy pathways signals the body to produce exactly what it needs, including hormones and neurochemicals that heal the body, mind, and conscious-

ness<sup>3</sup>. Tal Hridaya and Ani Marma are natural remedies that have been shown to have beneficial effects on the circulatory system, aiding in the prevention of essential hypertension, and the Ayurvedic plant medication ashwagandha is well known for its antihypertensive characteristics.

### Aim and Objective

To study the effect of Marma Chikitsa and Sarpagandha Churna in managing Stage 1 Essential Hypertension.

### Material and Methods

Nine patients newly diagnosed with Stage 1 Essential Hypertension were registered for the study from the OPD and IPD of Pt Khushilal Sharma Ayurved College & Hospital, Bhopal, Madhya Pradesh, India. Informed consent was obtained from the patients before starting the intervention.

### Inclusion Criteria

Newly diagnosed patients of Stage 1 Essential Hypertension, i.e. SBP  $\geq 140$  mmHg &  $< 159$  mmHg DBP  $\geq 90$  mmHg &  $< 99$  mmHg of either sex between the age group of 40 -70 years, were included in the study.

### Exclusion Criteria

- Patients having renal or hepatic disease, complicated hypertensive cases, e.g., cardiovascular disease.
- Pregnant and lactating women should be excluded.
- Diabetic patients with uncontrolled sugar conditions.

### Diagnostic criteria:<sup>4</sup>

**Table 01:** The diagnostic criteria of hypertension were taken from Joint National Committee - 7.

BP Classification	SBP mmHg	DBP mmHg
Normal	$<120$	and $<80$
Prehypertension	120-139	Or 80-89
Stage 1 hypertension	140-159	or 90-99
Stage 2 hypertension	$>160$	Or $>100$

### Investigations for Screening

All patients were screened through history and routine investigations. Blood Pressure, Random Blood Sugar, Lipid Profile, ECG. Before starting the intervention, these investigations were carried out to exclude any other pathology related to the exclusion criteria.

### Treatment

Marma Chikitsa and two gms of Sarpagandha Churna were given water after meals for 21 days.

#### Assessment Criteria Table 02:

Sr. No.	Subjective Criteria	Grade 0	Grade 1	Grade 2	Grade 3
1	Shirashula (Headache)	Nil	Rarely headache relieves without medication	Headache relieves by rest. doesn't disturb. daily activities	Severe headache disturbs daily. activities require. medication
2	Svedadhikya ( Excessive Sweating)	Nil	Mild sweating from heavy work	Sweating with moderate work relieves soon.	Severe sweating with mild work disturbs the routine.
3	Bhrama (Giddiness)	Nil	Rarely Bhrama for some movement during change of posture	Often for some movement during change of posture	Often for each The movement, even in lying. condition also
4	Klama (Fatigue)	Nil	Rarely feeling of tiredness without any exertion	Rarely feeling of tiredness without any exertion with inability in concentration	Frequently feeling of tiredness without any exertion with inability in concentration
5	Santapa	Nil	A rare feeling of hotness in the head only; does not disturb functions and daily activities; relieves by cold application.	Frequent feeling of hotness in the head only disturbs functions, but not daily activities, relieved by cold application.	Frequent feeling of hotness all over the body.

### Objective Criteria

1. Systolic blood pressure
2. Diastolic blood pressure

#### Table 03: Criteria for Overall Assessment

Complete Relief	100%
Marked Improvement	> 75 - < 100%
Moderate Improvement	> 50 - < 75%
Mild Improvement	> 25 - < 50%
No Relief	< 25%

**Treatment Plan**

**Table 04: Marma Chikitsa**

S. NO.	Marma	Stimulation time	Sitting	Total time
1	TALHRIDAYA	0.8 Sec	Twice a day	21 days
2	ANI	0.8 Sec	Twice a day	21 days

**Table 05: Drug And Posology**

Drug	Dose	Total time
Sarpagandha Churna	2 gm BD	21 days

**Results**

**Table 06: Assessment of the effect of therapy on Subjective parameters**

Assessment Parameters	Before T/t Mean	After T/t Mean	Mean Difference	SD	SE	% Relief	T Value	P value & Significant	Result
Shirashula	2.11	0.67	1.44	0.71	0.389	97.89%	3.7143	0.0019	Very statistically significant
Swedadhikya	1.78	0.44	1.33	0.53	0.369	98.22%	3.6181	0.0023	Very statistically significant
Bhrama	1.89	0.89	1.00	0.60	0.369	98.11%	2.7136	0.0153	statistically significant
Klama	1.33	0.67	0.67	0.71	0.333	98.67%	2.0000	0.0628	Not quite statistically significant
Santaap	2.11	1.00	1.11	0.50	0.261	97.89%	4.2640	0.0006	Extremely statistically significant

**Table 07: Assessment of the effect of therapy on Objective parameters**

Assessment Parameters	Before T/t mean	After T/t mean	T Value	P value	Result
Systolic Blood Pressure (SBP)	174.44	141.67	9.508	0.0001	Extremely Significant
Diastolic Blood Pressure (DSP)	80.56	75.00	2.857	0.0212	Statistically significant

**Table 08: Assessment of the total effect of therapy on the basis of percentage of relief in subjective parameters**

Total effect of therapy	Range	% of Relief
Controlled	100%	(1)11.1%
Marked Relief	75 ≤ 100%	(4) 44.4%
Moderate Relief	50 ≤ 75%	(4) 44.5%
Mild Relief	25 ≤ 50%	0 (0%)

No Relief	≤ 25%	0 (0%)
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## DISCUSSION

Hypertension is linked to various factors, such as stress, poor dietary habits, and an unhealthy lifestyle. Managing these modifiable risk factors is essential for achieving the best treatment outcomes. Ayurveda offers a holistic approach to disease management, combining pharmacological treatments with psychological and behavioural interventions, including lifestyle modifications.

In Ayurveda, Marma points are vital energy centers in the body. Tal Hridaya Marma and Ani Marma are two important marma points often discussed concerning the heart and cardiovascular system. Understanding these marma points in the context of cardiac disease and hypertension involves examining their significance and how they can impact health.

In Essential hypertension, stimulating Tal Hridaya and Ani Marma may help regulate heart function by influencing energy flow through the body. It's believed that this Marma connects with the heart, affecting the circulatory system.

Stimulating Tal Hridaya Marma can help manage hypertension by calming the mind and reducing stress, indirectly benefiting cardiovascular health. Ani Marma can improve blood flow and balance Vata and Pitta energies, preventing imbalances that contribute to high blood pressure.

In Ayurveda, hypertension is often linked to an imbalance in Doshas (Vata, Pitta, and Kapha). By targeting specific Marma points like Tal Hridaya and Ani, practitioners aim to restore balance in these energies, reduce stress, improve circulation, and promote relaxation. Regularly stimulating these Marma points through massage or other techniques may support blood pressure management.

Sarpagandha Churna is an Ayurvedic herbal drug that possesses anti-hypertensive properties<sup>5</sup>—in their Cochrane database review, reported the anti-hypertensive activity of reserpine, a significant Phyto-constituent of Sarpagandha<sup>6</sup>. Reserpine, a major alkaloid of Sarpagandha, acts through binding to protein receptors called vesicular monoamine transport-

ers at presynaptic neurons and inhibits the uptake of neurotransmitters like norepinephrine, dopamine, and serotonin into presynaptic storage vesicles<sup>7,8</sup>. This, in turn, causes a reduction in catecholamine and serotonin levels at nerve terminals and leads to a decrease in heart rate and arterial blood pressure<sup>9</sup>.

## CONCLUSION

Hypertension is a common disorder in the present era. The use of Marma Chikitsa and Sarpagandha Churna offers a comprehensive approach to managing essential hypertension, addressing both its symptoms and root causes. While Marma Chikitsa balances energy flow and reduces blood pressure, Sarpagandha Churna provides a direct antihypertensive effect, creating a synergistic impact on blood pressure regulation. This integrative treatment approach aligns with the Ayurvedic philosophy of holistic healing, emphasising the importance of balancing the mind, body, and spirit in managing chronic conditions like Essential hypertension.

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