

Role of *Prapaundarikadi Tailam Abhyangam* (Massage) in Hypertension

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Abstract

Hypertension is becoming common ailment nowadays. Hypertensive patients are becoming dependent upon anti-hypertensive drugs. But these drugs are controlling blood pressure not uprooting it. In *Ayurveda* hypertension can be correlated with vitiated *Vata Dosha* along with *Pita Dosha* or *Kapha Dosha*. *Dhatu* affected may be *Rasa*, *Rakta* or *Meda Dhatu*. *Vata* can be considered as basic *Dosha* in hypertension. A case study was done on hypertensive patient to assess role of *Abhyangam* of *Prapaundrikadi Tailam* to cure hypertension. *Prapaundrikadi Tailam* was chosen as it can control both *Vata-Pita*. Patient was having hypertension for nearly five years. He was given *Abhyangam* of whole body for one month during evening time. It resulted into controlled heart rate, blood pressure and sound sleep.

Keywords

Abhyangam, *Dhatu*, *Dosha*, *Hypertension*, *Meda*, *Prapaundrikadi Tailam*, *Rakta*, *Sparshan*, *Vata*



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INTRODUCTION

In *Ayurveda* there is no mention of hypertension. But it has mentioned many diseases which can be compared with hypertension. Many scholars have compared the hypertension with following diseases of *Ayurveda* - *Raktagata Vata*, *Kaphapita Avrita Vyana Vata*, *Sirogata Vata*, *Dhamani Praticchaya*, *Dhamani Kathinya* etc. There are *Dhatu Dushti* symptoms which match with hypertension. *Vata* being main carrier of other *Dosha* plays an important role in hypertension. *Sparshan Indriya* (tactile sensation) in skin has *Vata* in excess. *Abhyangam* is best for skin or indirectly saying best to control *Vata*¹. Hypertension is a silent killer. It is a risk factor for all clinical manifestations of atherosclerosis. It is an independent predisposing factor for heart failure, coronary artery disease, stroke, renal disease and peripheral arterial disease. The National Center for Health Statistic Surveys (NCHS) reported hypertension increased from 53% over 1960-1962 to 89% over 1988-1991. The percentage of patients taking hypertension treatment increased from 35% to 79% during this period².

A 2005 NHANES report in the United States found that in the population aged 20 years or older, an estimated 41.9 million

men and 27.8 million women had prehypertension (SBP, 120-139 mm Hg; DBP, 80-99 mm Hg), 12.8 million men and 12.2 million women had stage 1 hypertension (SBP, 140-159 mm Hg; DBP, 90-99 mm Hg), and 4.1 million men and 6.9 million women had stage 2 hypertension (SBP \geq 160 mm Hg; DBP \geq 100 mm Hg)².

Genetic causes: The adrenergic receptor (ADRB1) and angiotensinogen genes are found responsible for hypertension³. Mutation almost always results in the development of hypertension⁴.

Etiology: When excess of *Vyaayaama* (Exercises), *Tikshana Aahar* (Spicy-salty diets), *Virechan* (Purgation) and *Basti* (Rectal route medicines) is done. *Chinta* (Tension), *Bhaya* (Fear), *Trasa* (Terror), *Gadatichara* (Due to non-cure of other ailments), *Chardi* (Excessive vomiting), *Aamdosha* (Excessive production of toxic by-products), *Sandharana* (to stop natural urges), *Karshan* (poor diet and over excursion), *Abhighata* (injury on heart or body parts) can lead to *Hridya* or Heart diseases⁵.

Different factors which can be compared in *Ayurveda* causing hypertension:

Vata: *Hritshoonya* (Emptiness in heart), *Dravta* (Sinking feel/Palpitation), *Sosha*

(dryness) and *Bheda* (stabbing pain in heart), *Stambha* (rigidity) and *Samoha* (loss of consciousness)⁶.

Pita: *Tamoduyan* (Blackout in front of eyes), *Daha* (burning sensation in body especially in heart), *Moha* (faintness), *Santrass* (fearsome), *Jvara* (fever) and *Pitabhava* (body appears yellow)⁷.

Kapha: *Stabhdha* (Tightness), *Guru* (Heaviness), *Stimita* (rigidity in heart), *Kapha Praseka* (Salivation), *Jvara* (Fever), *Kasa* (cough), *Tandra* (Hypersomnia) are seen⁸.

Pita and Rakta Dushti: *Raktapitta* (Oozing of blood from body external orifices), *Raktapradar* (Menorrhagia), *Akshiraga* (Redness in eyes), *Shirsruk* (headache), *Krodhachurta* (increase in anger), *Bhudhi Samoha* (Loss of consciousness), *Sweda* (perspiration), *Tamas Atidarshanam* (blackouts)⁹.

Meda Dhatu Dushti: Even on slight workout dyspnoea starts. Buttocks, breast and abdomen start hanging¹⁰.

AIMS AND OBJECTIVE

To study role of *Abhyangam* (massage) with *Prapaundrikadi Tailam* in hypertensive patient.

MATERIALS AND METHODS

Literary work on *Ayurveda* and internet media. Measurement of blood pressure, twice a day of patient undergoing *Abhyangam*.

Contents of *Prapaundrikadi Tailam*, each 10 ml is prepared out of:¹¹

Tailam 10.000 ml (oil of *Cocos nucifera* Linn.)¹²

Dhatri 10.000 g (*Emblca officinalis* Gaertn.)¹³

Prapaundarika 0.125 g (*Nelumbo nucifera* Gaertn.)¹⁴

Madhuka 0.125 g (*Mudhuca indica* J. F. Gmel.)¹⁵

Pippali 0.125 g (*Piper longum* Linn.)¹⁶

Chandana 0.125 g (*Santalum album* Linn.)¹⁷

Ulpala 0.125 g (*Nymphaea nouchali* f.)¹⁸

Review of Literary work:

Prapaundrikadi Tailam is used for *Shiroroga* (head ailments) and all types of *Palitya*¹⁹. It is advised to use it in the form of *Nasya* (nasal medicine) or *Abhyangam*²⁰.

Name of Drug	<i>Guna</i> * (quality)	<i>Rasa</i> (Taste sensed by tongue)	<i>Vipaka</i> (Taste after metabolism)**	<i>Virya</i> (Heat released or absorbed after metabolism)***	<i>Karmukta</i> **** (functions)
Narikeltailam	<i>Guru</i> , <i>Snigdha</i>	<i>Madhura</i>	<i>Madhura</i>	<i>Shita</i>	<i>Vata-Pita</i> <i>Shamak</i>
Dhatri	<i>Guru</i> , <i>Ruksha</i>	Pancharasa, <i>Amlapradhan</i>	<i>Madhur</i>	<i>Shita</i>	<i>Tridosahara</i>
Prapaundrika	<i>Laghu</i> , <i>Snigdha</i> , <i>Pichila</i>	<i>Kashaya</i> , <i>Madhura</i> , <i>Tikta</i>	<i>Madhura</i>	<i>Shita</i>	<i>Kapha-Pita</i> <i>Shamak</i>
Madhuka	<i>Guru</i> , <i>Snigdha</i>	<i>Madhura</i> , <i>Kashaya</i>	<i>Madhura</i>	<i>Shita</i>	<i>Vata-Pita</i> <i>Shamak</i>
Pippali	<i>Laghu</i> , <i>Snigdha</i> , <i>Tikshna</i>	<i>Katu</i>	<i>Madhur</i>	<i>Anushnashita</i>	<i>Kapha-Vata</i> <i>Shamak</i>
Chandana	<i>Laghu</i> , <i>Ruksha</i>	<i>Tikta</i> , <i>Madhura</i>	<i>Katu</i>	<i>Shita</i>	<i>Kapha-Pita</i> <i>Shamak</i>
Ulpala	<i>Laghu</i> , <i>Snigdha</i> , <i>Pichila</i>	<i>Kashaya</i> , <i>Madhura</i> , <i>Tikta</i>	<i>Madhura</i>	<i>Shita</i>	<i>Kapha-Pita</i> <i>Shamak</i>

**Laghu* (Light), *Ruksha* (Rough), *Snigdha* (Greasy), *Guru*(Heavy), *Pichila* (Slurry) and *Tikshana* (Sharp)

***Madhur* (Sweet), *Amla* (Sour), *Katu* (Pungent), *Tikta* (Bitter) and *Kashaya* (Astringent)

****Ushna* (Hot), *Shita* (Cold) and *Anushnashita* (in between hot and cold)

**** *Vata/ Pita/ Kapha Shamak* (Pacifier) and *Vata/ Pita/ Kapha Hara* or *Rechaka* (remover)

Narikel Tailam: Raktapitashamak (Pacifier of *Pita* and *Rakta*), *Mutrakrichrta* (Oliguria/less and difficult urination) and *Balya* (general tonic) ¹².

Dhatri: *Medhya* (Brain Tonic), *Nadibalya* (Nervine tonic), *Hridya* (Heart tonic), Raktapitashamak (Pacifier of *Pita* and *Rakta*), *Yakritutejak* (Liver Tonic) and *Mutrakrichrta* (Oliguria/less and dysuria) ¹³.

Prapaundrika: *Medhya* (Brain Tonic), Raktapitashamak (Pacifier of *Pita* and *Rakta*) and *Mutrakrichrta* (Oliguria/less and dysuria) ¹⁴.

Madhuka: *Nadibalya* (Nervine tonic), Raktapitashamak (Pacifier of *Pita* and

Rakta) and *Mutrakrichrta* (Oliguria/less and dysuria) ¹⁵.

Pippali: *Medhya* (Brain Tonic), *Yakritutejak* (Liver Tonic) and *Mutravikaranashak* (Treats urine diseases) ¹⁶.

Chandana: It is *Medhya* (Brain tonic), *Hridya* (Heart tonic), Raktapitashamak (Pacifier of *Pita* and *Rakta*), *Swedajanan* (causes perspiration) and *Mutrakrichrta* (Oliguria/less and dysuria) ¹⁷.

Ulpala: *Medhya* (Brain Tonic), Raktapitashamak (Pacifier of *Pita* and *Rakta*) and *Mutrakrichrta* (Oliguria/less and dysuria) ¹⁸.

CASE STUDY

A male patient aged 35 years was taken for the case study. He was suffering from hypertension due to stress for about 5 years. Before starting treatment his blood pressure was recorded to be 180/120 mm of Hg and heart rate 104 beats/minute. He was then advised treatment of *Abhyangam*. During evening time five minutes of *Abhyangam* with *Prapaundrikadi Tailam* was given to each part of body in supine position taking about 45-60 minutes for whole body.

RESULTS AND DISCUSSION

From the first day only patient's sleep became sound. Later on with each passing day heart rate started to control. On thirtieth day of his treatment heart rate was 78 beats/minute. On measuring blood pressure after completion of full treatment it was 124/90 mm of Hg. It was observed that during the course of treatment first heart rate started to control followed by blood pressure. This *Prapaundrikadi Tailam* used in *Abhyangam* works in controlling blood pressure.

Nervous system role: Sympathetic nervous system tends to raise blood pressure and the parasympathetic nervous system lowers it²¹. The mechanisms of increased sympathetic nervous system activity in hypertension

involve alterations in baroreflex and chemoreflex pathways at both peripheral and central levels^{22, 23, 24}. Exposure to stress increases sympathetic outflow, and repeated stress-induced vasoconstriction may result in vascular hypertrophy, leading to progressive increases in peripheral resistance and blood pressure. Angiotensin II causes constriction of all blood vessels and acts on adrenal glands to release Aldosterone. It increases re-absorption of salt and water leading to raised blood volume and raised blood pressure. Recent studies claim that obesity is a risk factor for hypertension because of activation of the renin-angiotensin system (RAS) in adipose tissue^{25, 26}. The endothelium of blood vessels produces an extensive range of substances that influence blood flow and, in turn, is affected by changes in the blood and the pressure of blood flow. For example, local nitric oxide and endothelin, which are secreted by the endothelium, are the major regulators of vascular tone and blood pressure²⁷.

Action of *Abhyangam*: *Abhyangam* reduces old age, lethargyness and *Vata Roga*. Skin is site of *Vata*, so it cures *Vata* by direct action. *Dalhana* says during *Abhyangam* oil stays in hair follicles for three hundred *Matra*, four hundred *Matra* in Skin, five

hundred *Matra* in *Rakta*, six hundred *Matra* in *Mansa*, seven hundred *Matra* in *Meda*, eight hundred *Matra* in *Asthi* (bones) and nine hundred *Matra* in *Majja* (bone marrow) curing their *Vata-Pita-Kapha Dosha*²⁸. It decreases cortisol level which increases blood pressure by increasing the sensitivity of the vasculature to epinephrine and norepinephrine; in the absence of cortisol, widespread vasodilation occurs. Massage improves blood circulation, bringing with it what the muscle needs-oxygen and other forms of nourishment. The muscle then relaxes, and pain decreases. Massage relieves mental stress and anxiety²⁹. *Abhyangam* also increases dopamine which decreases blood pressure³⁰. Dopamine and angiotensin II serve counter regulatory functions in the kidney³¹.

Action on *Dosha* and *Dhatu*: Oil can reach upto the level of *Majja* through *Abhyangam*. After entering inside body, it works on different *Dosha* and *Dhatu*. *Vata* along with *Pita* and *Kapha Dosha* are involved in hypertension. Ingredients of this oil works as; being *Raktapitashamak* means they have ability to correct vitiation of *Rakta* and *Pita*. *Medhya* and *Nadibalya* correct improper functioning of hormones and neurotransmitters at brain and other levels of

body, *Yakritutejak* function to remove any anomaly in conversion of angiotensinogen secreted from the liver into the peptide angiotensin I, it works on *Mutrakrichrta* which in turn improves secretion of dopamine and controlling hypertension, *Hridya* property helps in proper functioning of heart not leading to anomalies in pumping or beating action leading to hypertension. *Balya* property helps body in fighting all odds which leads to hypertension due to release of neurotransmitters. As it can pacify *Kapha* and *Vata* also due to action of *Abhyangam*³². So, hypertension due disturbance of *Vata-Pita-Kapha* will be rectified.

CONCLUSION

Abhyangam of *Prapaundrikadi Tailam* helps to correct hypertension. It also works on vitiated *Dosha* through physiological actions of its contents. This study can be further done on larger scale to collect more data for proving its authenticity and efficacy.

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