



ISSN 2456-3110

Vol 5 · Issue 1

Jan-Feb 2020

Journal of  
**Ayurveda and Integrated  
Medical Sciences**

*www.jaims.in*

# JAIMS

An International Journal for Researches in Ayurveda and Allied Sciences



**Charaka**  
Publications

Indexed

# Management of *Shirobhitapa* w.s.r to Essential Hypertension - A Case Study

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## ABSTRACT

Hypertension is called a silent killer because it rarely causes symptoms before it damages the heart, kidneys or brain. It is estimated that 600 million people are affected worldwide with hypertension. By the year 2025, approximately 1 in 3 adults aged over 20 years, totally 1.56 billion people worldwide, will have hypertension. Many works have been carried out on hypertension to evaluate the perfect diagnosis and mode of treatment on the basis of Ayurvedic principles, different nomenclatures also have been adopted by Ayurvedic scholars like *Shonitamada*, *Raktagata Vyana Vayu*, *Shiragatavata*, *Rakta Chapa*, *Raktavrita Vata*, *Raktavridhi*, *Raktavata* etc.

**Key words:** Hypertension, *Shirobhitapa*, Cardiovascular diseases.

## INTRODUCTION

Essential hypertension also known as idiopathic hypertension or primary Hypertension is the form of Hypertension which has no identifiable cause it is the most common type of hypertension affecting 95% of the hypertensive patients.<sup>[1]</sup> Cardiovascular diseases caused 2.3 million deaths in India in the year 1990; this is projected to double by the year 2020. Hypertension is directly responsible for 57% of all stroke deaths and 24% of all coronary heart disease deaths in India. There is a strong correlation between changing lifestyle factors and increase in hypertension in India.<sup>[2]</sup> Hypertension is called a silent killer because it rarely causes symptoms before it damages

the heart, kidneys or brain.<sup>[3]</sup> It is estimated that 600 million people are affected worldwide with hypertension. By the year 2025, approximately 1 in 3 adults aged over 20 years, totally 1.56 billion people worldwide, will have hypertension.<sup>[4]</sup>

The disease Essential Hypertension is neither denoted in Samhita nor in any Samgraha Granthas, but it is stated that every disease cannot be given nomenclature.<sup>[6]</sup> The term "hypertension" was coined after the invention of sphygmomanometer, however before that about its existence, one can trace the pathway on the tract of symptomatology. Many works have been carried out on hypertension to evaluate the perfect diagnosis and mode of treatment on the basis of Ayurvedic principles, different nomenclatures also have been adopted by Ayurvedic scholars like *Shonitamada*, *Raktagata Vyana Vayu*, *Shiragatavata*, *Rakta Chapa*, *Raktavrita Vata*, *Raktavridhi*, *Raktavata* etc. the main pathogenesis occurs in *Rasa* and *Raktadhatu* in blood vessels. It is *Vata Pitta Pradhana Tridoshaja* disorder.<sup>[7]</sup>

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Submission Date: 07/01/2020 Accepted Date: 01/02/2020

Access this article online

Quick Response Code



Website: [www.jaims.in](http://www.jaims.in)

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## CASE REPORT

A male patient name Yogesh age of 42 years k/c/o hypertension since 1 year (not under regular medication) was said to be healthy before 10 years.

Gradually he started to get pain in temporal region on/off through day pain was in dull ache in nature aggravated by stress and exposed to cold and relieved by taking rest and tablets. He was also having complaint of pain in calf region it was not radiating type and dull pain aggravated by doing work and relieved by taking rest and oil massage. 1 year back he felt severe weakness, heaviness in head and giddiness on/off and consulted Columbia Hospital, Bengaluru, where he underwent vitals monitoring, ECG and blood investigations and blood pressure found to be 150/90mmhg and there by physician prescribed antihypertensive and antihyperlipidemic drugs for 3months (patient took only antihyperlipidemic for 3 months) and since 3 months patient feeling of heaviness in body and it increased generalized weakness since 15 days, with all these complaints patient visited SKAMCH&RC, Bengaluru and got admitted on 28/11/2019 (OPD no G816 and IPD no 5994/19)

### GENERAL EXAMINATION

Pulse: 96/min, Respiratory rate: 22/min, Blood pressure: 150/96 mm of Hg, Temperature: 98.6°F, General condition: fair, Pallor: Absent, Icterus: Absent, Lymphadenopathy: Absent, Cyanosis: Absent, Clubbing: absent, edema: absent.

### SYSTEMIC EXAMINATION

**Central Nervous System:** Higher mental functions normal, Patient is well conscious and oriented to time place person is intact, Cranial nerve examination intact, Both sensory and motor function examination intact, Superficial and deep tendon reflexes normal.

**Respiratory System:** No surgical scars rashes redness seen and Bilateral symmetrically chest movements on breathing on inspection, no local tenderness and palpable mass felt on palpation, Resonant note heard on percussion, no abnormal bronchovesicular sounds heard on auscultation.

**Gastrointestinal Tract:** No any surgical scar marks and scaphoid shape seen On inspection, No palpable mass and tenderness felt on palpation, Fluid thrill and

shifting dullness test negative On percussion Normal bowel sounds heard 8/min On auscultation

**Cardiovascular System:** Chest shape – normal, Position of trachea – central, Apex beat – not visible dilated and engorged veins, no surgical or any scars seen on inspection, Apex beat – palpable. Trachea – not deviated on palpation. Cardiac dullness heard on percussion. S<sub>1</sub> S<sub>2</sub> head no added sounds or murmurs heard on auscultation

Date & Time	Blood pressure (supine position)	Blood pressure (sitting position)
28/11/2019, 10:30am	150/96 mmhg	150/96 mmhg
29/11/2019 10:45am	168/100 mmhg	168/100 mmhg
30/11/2019 10:40am	162/96 mmhg	162/96 mmhg

### Dashavidha Pariksha (Ten important aspects for examination)

▪ *Prakriti - Pitta (Sadhak), Vata (Prana Vyana)*

▪ *Vikriti - Pitta*

*Hetu - Vatapittaprakopakaraahara Vihara*

*Dosha - Vata Pitta Pradhanatridosha*

*Dushya - Raktameda*

*Prakruti - Pitta Vata*

*Desha - Sadharana*

*Kaala - Hemantarutu*

*Bala - Madhyama*

▪ *Sara - Pravara*

▪ *Samhanan - Pravara*

▪ *Satmya - Sarva Rasa*

▪ *Satwa - Avara*

▪ *Praman - Pravara*

▪ *Ahara Shakti - Pravara*

- Vyayam Shakti - Madyama
- Vaya - Madhyama

#### Ashtavidha Pareeksha (Eight important aspects for examination)

- Nadi - Mandukagati
- Mala - Prakruta
- Mutra - Prakruta
- Jivha - Nirlipta Jihva
- Shabda - Prakruta
- Sparsha - Anushna
- Drik - Vikruta (laser treatment done for left eye for vision correction )
- Akrti - Prakruta

**Probable diagnosis:** Shiroabhitapa (Primary or Essential Hypertension)

#### Intervention

Sarvangatakradhara with *Musta*, *Amalaki* and *Takra* for 8 days.

*Sarvanga Abhyanga* with *Yashtimadhu Taila* followed by *Mrudubasphasweda* for 8 days

*Snehapanaarohanakrama* according *Samyak Snigdha Laxana*

On 9<sup>th</sup> day *Snehapana* with *Mahatiktaka Ghrita* 15ml + *Sukumara Ghrita* 15ml + 1 pinch of *Saindava Lavana*.

On 10<sup>th</sup> day *Snehapana* with *Mahatiktaka Ghrita* 30ml + *Sukumara Ghrita* 30ml + 1 pinch of *Saindava Lavana*

On 11<sup>th</sup> day *Snehapana* with *Mahatiktaka Ghrita* 120ml + *Sukumara Ghrita* 120ml + 1 pinch of *Saindava Lavana*

On 12<sup>th</sup>, 13<sup>th</sup>, 14<sup>th</sup> day *Vishrama Kala*

On 15<sup>th</sup> day *Virechana* according to *Koshta* and *Agniavastha* dosage given with *Trivritlehya* 70gms with 100ml of *Triphala Kashaya* at *Sleshmagata Kala* after *Abhyanga* and *Sweda*.

*Laingiki*, *Manaki Lakshana* were observed *Kaphapittante* accordingly.

*Vegaki Lakshanas* - Total number of *Virechana Vegas* observed - 25

No *Chardivega* observed

*Antaki Lakshanas* are also found according classics - *Kaphanta*.

#### Sarvanga Takradhara

##### Materials

*Takra* - 125 tola (125\*12=1500ml),

*Amalaki Churna* - 2 *Karsha* (2 \*12=24)

*Musta Churna* - 2 *Karsha* (2 \*12=24) *prasruta*,

*Jala* - 16 *Kudav* ( 16\*192=3072ml)

The powder of *Amalaki* and *Musta Churna*, water should be taken in the mentioned proportions. They should be heated on moderate fire on the stove until ½ of water remains (i.e. until 8 *kudava* = 1536ml) The contents should be filtered to this equal quantity of *takra* - 125tola (1500 ml) is added the medicine for *Takra Dhara* is ready for use.

##### Procedure

##### Poorva Karma

Preparation of Patient (*Atura Pariksha*)

A morning hour after the evacuation of the bowel and bladder as well as brushing the teeth, is the ideal time for the *Parisheka Sweda*.

The patient is advised to do some warming up exercise.

The therapist should chant the *Swasthivachana* or prayer before starting the procedure.

The patient is advised to sit on the *droni* with minimum clothing. If the condition is needed *Abhyanga* should be done prior to *Parisheka*.

##### Pradhana Karma

The *Parisheka* should be done by four therapists, two each perform the procedure on either side of the patient and other two therapists for collecting *Takra*.

**Procedure review**

Pouring of the medicine should be continuous, free flowing, uniform and the height of the tip of Gindi and surface of patient's body should be 9 inches (12 angula) throughout the procedure. The direction of pouring should be from above downwards in extremities and below upwards in trunk and it should cover the whole surface of the body.

*Parisheka* should be done to *Shiras* initially at frontal side (in the form of *Shirodhara*) followed by whole body in seven positions as follows;

Sitting position with fully extended lower limbs.

Lying down on the back with fully extended limbs.

Lying down on the left lateral position with right arm fully extended and kept on the right side. Lying down on the abdomen with fully extended limbs.

Lying down on the right lateral position with left arm fully extended and kept on left side.

Lying down on the back with fully extended limbs.

Sitting position with fully extended lower limbs.

Total duration of this procedure should be 36 to 72 minutes (11/2 to 3 *Ghatika*) or till the appearance of sweating to the patient.

Every day the *Takra* was prepared fresh for this procedure.

**Paschat Karma**

After performing *Parisheka*, the patient is advised to take rest for about 15 minutes.

Person should take hot water bath only when sweating stops completely.

Food should be *Laghupaki* and it should be served hot and fresh.

*Abhishyandhiahara* like *Dadhi* should be avoided.

Avoidance of *Ashta Maha Doshakara Bhava*

*Sweda Karma* rectifies the function of *Medadhatwagni* and *Bhutagni* and fastens the *Paka Karma* which causes *Srotomukhasodhana* and profuse *Sweda* production. That cause the displacement of

exudates hence relieve pain, relaxes muscular spasm. By *Swedana* due to arterial dilatation the part gets more circulation. So acts as *Stambhaghna*, *Gourabaghna*, *Sitaghna* and also *Prabha Varna Kara*. So *Sweda Karma* maintain the thermo regulation system of the body by maintaining equilibrium between core temperature (temp. inside the body) and shell temperature (skin temp.).

**Virechana****Poorva Karma**

*Deepana Pachana* as per the condition of *Agni*, *Deepana* and *Pachana* was done for 2-3 days by *Tab. Chitrakadivati* in a dose of 2 tablets 3 times in a day before food for 3 days.

*Snehana* according to *Koshtha* and *Agni*, *Sukumaraghrita* and *Mahatiktakaghrita* was given for *Snehapana* in an increasing dose of 30-60 ml/day for a period of 3 days.

*Yastimadhu Bahya Sweda*, *Bahya Snehana* and *Sarvanga Mridu Bashpa Sweda* were done twice for 3 days after achieving *Samyak Sneha Lakshana*.

**Pradhana Karma**

*Virechana Karma* with *Trivritlehya* 70 gm with 100ml *Triphala Kashaya* given

**Pashchat Karma**

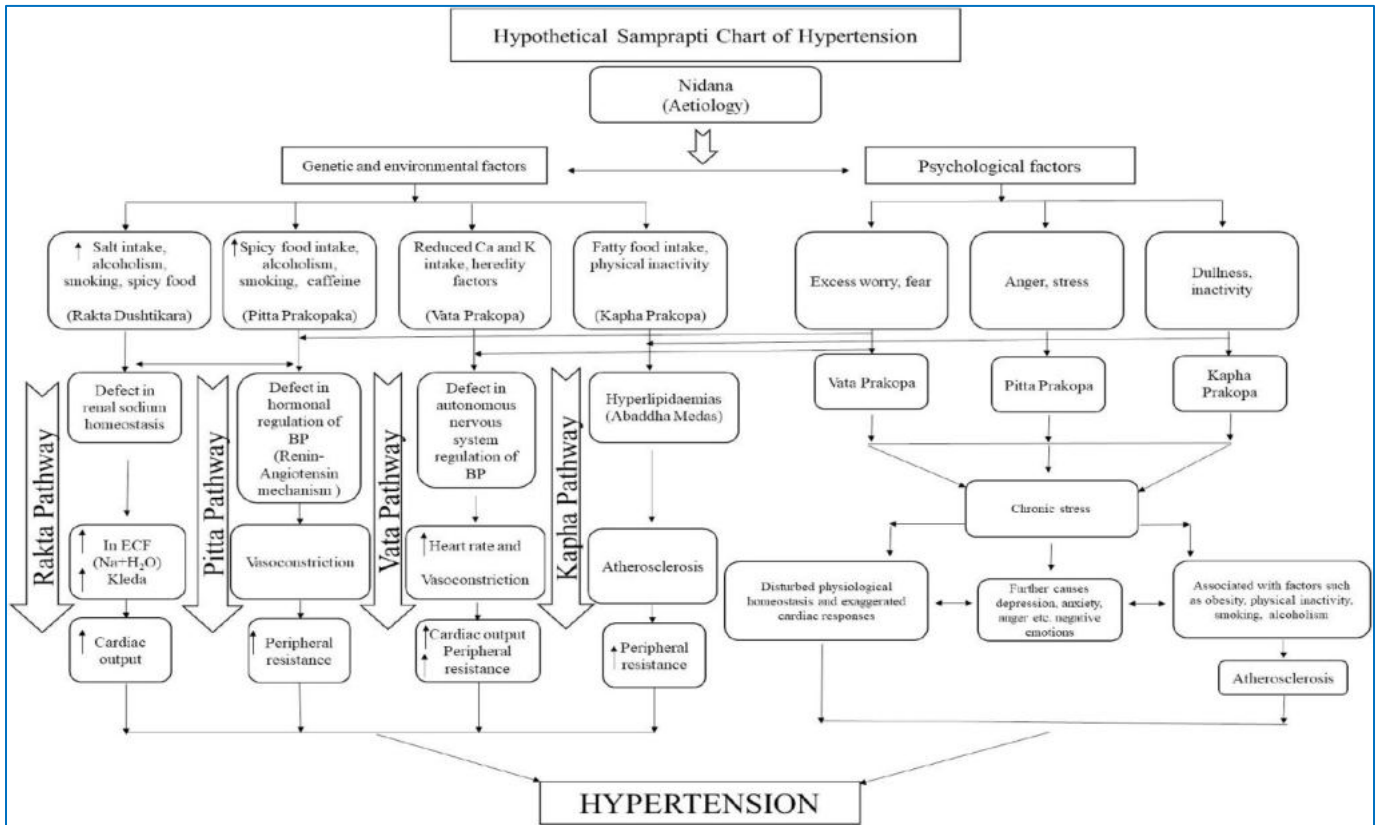
Advised *Samsarjana Krama* based on *Vegikimaana* of *Virechana*.

**Drug**

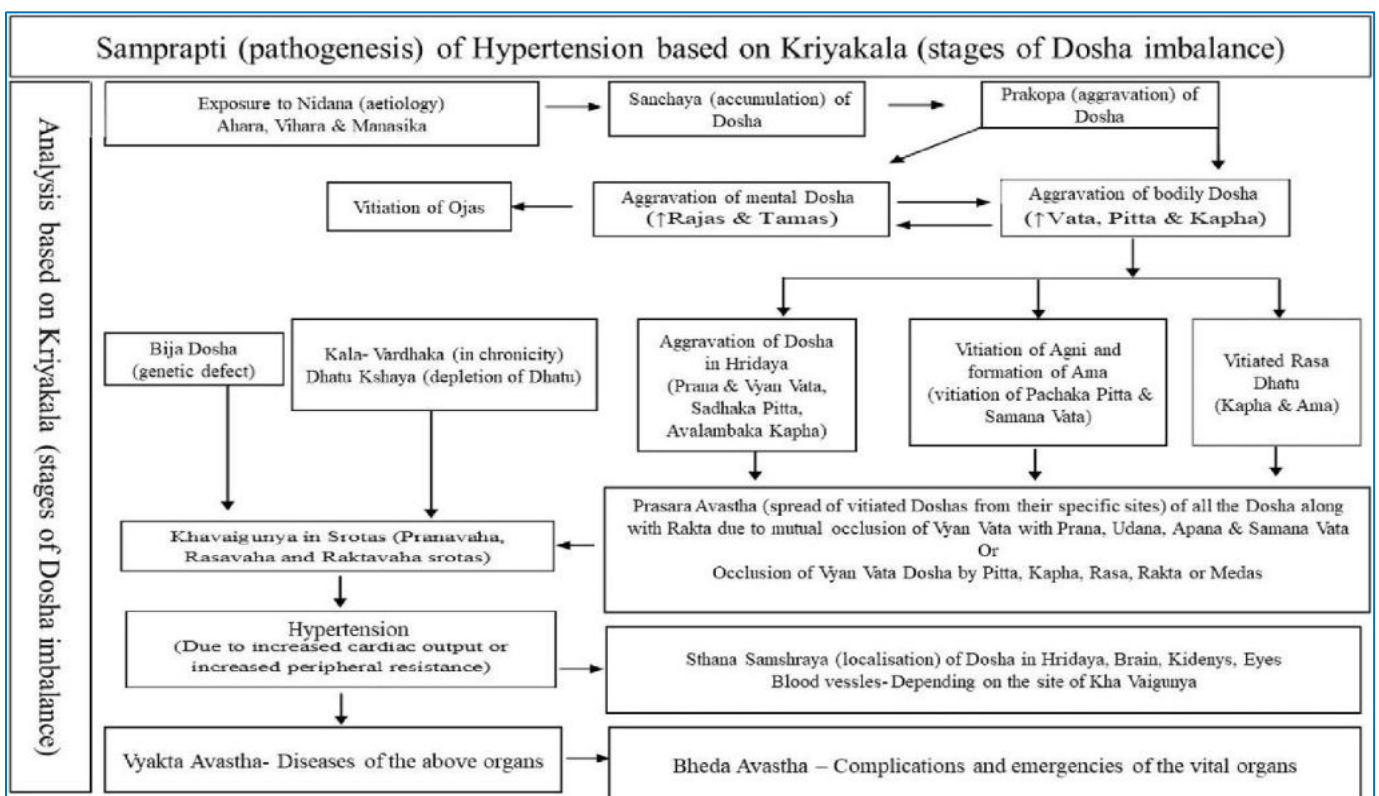
SN	Medicine	Reference
1.	<i>Moorchita Tila Taila</i>	<i>Bhaishajya Ratnavali Jwaraadhikara 5/1286-1287</i>
2.	<i>Mahatiktaka Ghrita</i>	<i>Bhaishajya Ratnavali Kushta Adhikara 118-124</i>
3.	<i>Sukumara Ghrita</i>	<i>Sahastra Yogam Ghrita Prakarana Atanga Hridaya Sutrasthana 15/9-10</i>
4.	<i>Trivrit Lehya</i>	<i>Atanga Hridaya Kalpasthana 2/9</i>
5.	<i>Triphala Kashaya</i>	<i>Bhaishajya Ratnavali Shotanrogadhikara 10</i>

Samprapti<sup>[20]</sup>

Flow Chart 1: Hypothetical Samprapti flow chart of hypertension.



Flow Chart 2: Samprapti (pathogenesis) of hypertension based on Kriyakala (stages of Dosha imbalance).



## DISCUSSION

### Probable Mode of action of Takradhara<sup>[21] [22]</sup>

Takradhara have a balancing effect on the deepest recesses of our brains, stimulating the endocrine system, the pituitary and pineal glands (for hormonal imbalances) and pleasure neurotransmitters (for depression or emotional insecurity). It is also said to enhance blood circulation to the brain, improving clarity and releasing deeply trapped Aama, or toxins.

If the Dhara is dropped on the forehead nearer to the eyebrows, it provides more relief to the patients. Sushruta has mentioned Sthapani Marma between the two eyebrows. It is Vishalyaghana type of the Sira Marma. The hypotensive effect of Takradhara proved by this study seems to be mediated through this Sthapani or Kurcha Marma. Being a Sira Marma it might have some reflex action on the baroreceptors which are disturbed in hypertension and may be held responsible for constriction of the arterioles leading to rise in blood pressure. Takradhara reduced both systolic and diastolic pressure in a more pronounced way.

The mode of action of takradhara is attributed to the therapeutic effects of the medicine, takra procedural effect of the process like pressure, rhythmic streaming, local application of heat, treatment timing, the rhythmic streaming, pressure of the medicine and temperature causes vasodilatation and helps the medicine to penetrate through the follicular pores to the follicles and then to the dermis via the sebaceous glands. The permeability of the cell of the sebaceous glands is greater than that of granular layer of epidermis. The procedure helps in oxygen consumption, normalizing blood pressure, brain cortisones and adrenalin levels, muscle tension and probably an increase in alpha brain waves. The space between the two eye brows is the seat of pituitary and pineal gland Pituitary gland is one of the main glands of the endocrine system and exhibits its action on other organs.

When Vitiated Vayu enter in Rakta dhatu (blood element) it causes. The blood and Pitta have an

inseparable relationship as Pitta resides in the blood. When the Pitta gets vitiated, it can vitiate the Rakta too and vice versa. Takradhara pacifies Rakta and Pitta dosha'susna (hot) and tisnaguna with its coolant property.

Chakras stimulation effect Takradhara may stimulate Chakra thereby improving the functions of mind which is vitiated in Stress as it is the place of subtle mind. Structures like Pituitary gland, pineal body, subcortical structures of mid brain are related with mental functions like anger, grief, pain, fear, memory and other higher intellectual functions. Dhara acts at this level improving their functions.

Effect on Endocrine system We all know that The hypothalamus is the main regulator of endocrine system so effect of Takradhara on hormone secretion can also be postulated considering the effect on hypothalamus. The hypothalamic Neurons which secrete the regulatory hormones are themselves under the control of specialized Monoaminergic, neurotransmitter neurons which arise in the mid brain. These release Dopamine, nor-adrenaline and Serotonin. In turn, these mid brain nuclei are under the control of visceral brain and are responsive to stress and emotional disturbances.

### Probable mode of action of Virechana<sup>[23]</sup>

The Virechana Karma clears the Margavarodha (obstruction), eliminates the morbid Doshas from Rakta, and regulates the activity and movement of Vata. Thus, it controls the high BP. According to the modern point of view, during Virechana process, the inflammation of intestinal mucosa leads to hyperemia and exudation resulting into increased passage of protein-rich fluids through vessel walls to intestinal lumen. Increase in fluid volume also results in the dilution of toxic material. Evacuation of the fluid from Rasa Rakta by Virechana is the direct process that leads to decrease in fluid volume.

Few studies correlated acetylcholine with Vata, catecholamine with Pitta, and histamine with Kapha. It has been observed that after Virechana, there is reduction in the plasma catecholamine contents of

the patients to a statistically significant level. In that study, it has been observed that the effect of Virechana on neurohumors was highly significant.[17] Virechana evacuates all morbid Doshas from all micro to macro Dhatu channels and regulates Vata, thus decreasing all symptoms of Vata, Pitta, and Kapha on Srotas level.

## CONCLUSION

As explained above excessive salt intake, genetic factor, alcohol, stress etc. might be cause and the patient got complaints of shiroruk, tamodharashana, tandra, gurugatrata, dourbalya having similarity with symptoms of essential hypertension. As it is primary hypertention pathology is known. blood pressure was found to be 150/96 mmhg in both supine and sitting position by examining blood pressure in both upper limbs continuously 3 day and there not specific cause related to cardiac or other system so patient diagnosed as essential hypertention. Lakshanas seen at the time of admission like shirogurava, brhamashirashoola dourbalyata etc. were significantly reduced at the time of discharge with blood pressure in normal range 130/80. In modern science Many antihypertensive drugs have their primary action on systemic vascular resistance. Some of these drugs produce vasodilation by interfering with sympathetic adrenergic vascular tone (sympatholytics) or by blocking the formation of angiotensin II or its vascular receptors. In *Ayurveda Takradhara* acts on hypothalamus mid brain limbic system and both on sympathetic and parasympathetic system. *Virechana* acts on acetylcholine, catecholamine, histamine. On the other side *Takradhara Virechana Karma* acts on *Pitta* and *Vatadosha* and *Bahya* and *Abhyntara Snehana* acts on *Vatadosha* as disease concern *Shiroabhitapa* is *Vata Pitta Pradhna Tridoshajavyadi*. So proposed line of treatment having significant role in reducing blood pressure as its result patient got significant relief from symptoms with normal blood pressure. On the basis of our clinical observation, it is concluded that the trialed intervention is safe and effective without producing adverse effects in the management of Essential hypertension due to their

pharmacodynamics action. *Takradhara*, *Virechana* and bed rest reduces stress and strain and also acted on *Vata-Pittahara* along with unexplained effect on the body i.e. *Indriyaprassannata* with *Srotoshudhi* and also on PNI axis.

## REFERENCES

1. [https://en.wikipedia.org/wiki/Essential\\_hypertension](https://en.wikipedia.org/wiki/Essential_hypertension)
2. <https://pubmed.ncbi.nlm.nih.gov/14730320-trends-in-hypertension-epidemiology-in-india/>
3. WHO report of prevention and control for Cardiovascular diseases, 2001-2002. Available from: [http://www.sld.cu/.pdf/.international\\_cardiovascular\\_disease\\_statistics.page2](http://www.sld.cu/.pdf/.international_cardiovascular_disease_statistics.page2). [Last cited on 2002 Aug 25].
4. Kearney PM, Whelton M, Reynolds K, Muntner P, Whelton PK, He J. Global burden of hypertension: Analysis of worldwide data. *Lancet* 2005;365:217-23.)
5. Agnivesha, Charaka samhita, Dipika commentary of Chakrapanidatta, edited by Vaidya Jadavaji Trikamaji Acharya, 5<sup>th</sup> edition, Varanasi Chaukhamba publications, 2001, p 124)
6. Agnivesha, Charaka, Dridhabala, Charaka Samhita, Sutra Sthana, Trishothiya Adhyaya, 18/44, Vaidya Jadavji Trikamaji Acharya, editor, 2nd ed.
7. Varanasi: Chaukhamba Sanskrit Sansthan; 2008. p. 108.)
8. Hemlata soni, kartar singh bansali amj ayurvedic management of essential hypertention a case study issn: 2320 5091
9. Bhramanand Tripathi. Charaka Samhita. Sharirsthana (3/17), Chaukhambha Subharti Prakashan, Varanasi, reprint edition, 2009;p.872.
10. Anantram Sharma. Sushruta Samhita, Sharirsthana (4/36), Chaukhambha Surbharti Prakashan, reprint edition, 2004;p.57.
11. Anantram Sharma, Sushruta Samhita, Sutra Sthana (24/5), Chaukhambha Surabharti Prakashan, reprint edition, 2004;p.202.
12. Anantram Sharma. Sushruta Samhita, NidanaSthana (1/20), Chaukhambha Subharti Prakashan, reprint edition 2004;p.459.
13. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5444798/>



14. Bhramanand Tripathi. Charaka Samhita, Sutra Sthana (24/05), Chaukhambha Surabharti Prakashan, Varanasi, reprint edition, 2009; p.429.
15. Bhramanand Tripathi. Charaka Samhita, Sutra Sthana (26/42), Chaukhambha Surabharti Prakashana, reprint edition, 2009; p.483.
16. Bhramanand Tripathi, Charaka Samhita, Vimana Sthana (1/15,18), Chaukhambha Surabharti Prakashan, Varanasi, reprint edition, 2009; p.660-661.
17. Anantram Sharma. Sushruta Samhita. Chikitsa Sthana (24/30-31), Chaukhambha Surabharti Prakashan, reprint edition, 2004; p.581.
18. Anantram Sharma. Sushruta Samhita. Uttara Sthana (47/03). Chaukhambha Surabharti Prakashana, reprint edition, 2004; p.383.
19. Charaka Samhita of Agnivesha with Ayurvedadipika commentary of Chakrapani Dutta, Sutra Sthana 24/11-16, Edited by Vaidya Yadavji Trikamji Acharya, published by Chaukhambha publication, 2005.
20. Charaka Samhita of Agnivesha with Ayurveda dipika commentary of Chakrapani Dutta, Sutra Sthana 28/11-13, Edited by Vaidya Yadavji Trikamji Acharya, published by Chaukhambha publication, 2005.
21. M. Menon, A. Shukla / Journal of Ayurveda and Integrative Medicine 9 (2018) 302e307
22. Daksha Kanaksinh Rathod, Jour. of Ayurveda & Holistic Medicine, Volume-V, Issue-V (Sept.- Oct. 2017), ISSN- 2321-1563.
23. Kuldeep et al. Int J Ayu Pharm Chem 2018 Vol. 8 Issue 3 [e ISSN 2350-0204]
24. Shukla, et al.: Efficacy of Virechana and Basti Karma in essential hypertension, AYU | Jan-Mar 2013 | Vol 34 | Issue 1

**How to cite this article:** Dr. Mahesh D. Kalled, Dr. Abdul Khader, Dr. C. V. Rajashekhar. Management of Shirobhitapa w.s.r to Essential Hypertension - A Case Study. J Ayurveda Integr Med Sci 2020;1:276-283.

**Source of Support:** Nil, **Conflict of Interest:** None declared.

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