

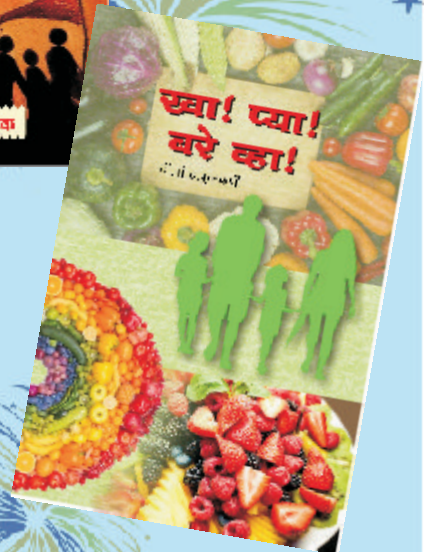


# DEERGHAYU International

The Peer Reviewed Quarterly Journal for Ayurveda & Health Science since 1984



## New Books



Issue Editor  
**Dr. Maheshwar Tagare**

Price Rs. 300

Swami Joythimayanda senior Fellow of Institute of Indian Medicine is organising International Ayurveda and Yoga conference every year since 1999 in Corinaldo, Italy.

This year, conference will be from 7th to 9th September 2018. Dr. Atul Rakshe will be chief guest and Dr. Manoj Phadnis and Dr. Vikas Chothe will be guest speakers. This trio are fellows of Institute of Indian Medicine and active members of council of editors of Deerghayu International journal, the peer reviewed journal since 1984.

In left side photo from left Prof. P. H. Kulkarni and Swami Joythimayanda. Best wishes for success of conference!



Fellows of Institute of Indian Medicine Prof. Dr. Atul Rakshe, Dr. Vikas Chothe And Dr. Manoj Phadnis organised various programs in different countries including Austria, Italy, The Netherlands and India. They represented International Ayurveda Association at various meets, seminars and conferences.



Prof. Dr. Atul Rakshe was the Chief guest at International Ayurveda Conference at the Ashram Joytinat, Italy. Around 150 delegates from all across Europe participated along with Dr. Annibale Di Angelo, Founder H. H. Swami Joythimayananda and his disciples.

For the first time, A Dhanwantari Yaag and a Shiva Pooja was performed for the European delegates and participant at the hands of Dr. Atul Rakshe.



Dr. Manoj Phadnis spoke about the benefits of Rasayana Chikitsa and its role in various ailments.

# DEERGHAYU INTERNATIONAL

ISSN 0970 - 3381

VOL. THIRTY FOUR - 04

ISSUE NO. 136

October-December - 2018

## FOUNDER / CHIEF EDITOR

Prof. Dr. P. H. Kulkarni

## ASSOCIATE EDITOR

Prof. Dr. Atul Rakshe,

*draksheatul@gmail.com, Mob. : 9422034506*

## EDITOR

Prof. Dr. Kavita Indapurkar

*E-mail : kavitaindapurkar@gmail.com, Mob. : 9890791688*

## ISSUE EDITOR

Dr. Maheshwar Tagare

## EDITORIAL CORRESPONDENCE

Kothrud Ayurveda Clinic,

Opp. Mhatoba Temple, Bodhi Vruksha, Navagraha Maruti,

36, Kothrud Gaothan, Pune - 411 038. (INDIA)

Telefax : +91 - 20 - 25382130 Tel. : 91 - 20 - 65207073, Mob. : 9822037665

Email : [deerghayuinational@gmail.com](mailto:deerghayuinational@gmail.com), [profdrphk@gmail.com](mailto:profdrphk@gmail.com),

Website : [www.ayurvedalokguru.com](http://www.ayurvedalokguru.com), Blog : <https://drphk.blogspot.com>

## Deerghayu International Council of Editors

- |                                       |                            |   |
|---------------------------------------|----------------------------|---|
| 1) Dr. Bhalsing Manisha               | 14) Dr. Kale Shashikant    | 27) Dr. Phalle Shailesh                 |
| 2) Dr. Bhandare Kishor                | 15) Dr. Kamat-Devkare S.   | 28) Dr. Pingle Kirti (CA, USA)          |
| 3) Dr. Bothare Mugdha                 | 16) Dr. Kamble Pushpalata  | 29) Dr. Puranik Geeta                   |
| 4) Dr. Chothe Vikas                   | 17) Dr. Khadilkar Ravindra | 30) Dr. Patwardhan Manish               |
| 5) Dr. Daspute Swapnil                | 18) Dr. Kulkarni Eknath    | 31) Dr. Pawar Chandrakant               |
| 6) Dr. Deshmukh Devika (CA, USA)      | 19) Dr. Kulkarni Yogini    | 32) Dr. Pund Sanjay                     |
| 7) Dr. Deshmukh Ramesh                | 20) Dr. Kurmi Kurush       | 33) Dr. Rokade Patil Sagar              |
| 8) Dr. Deshmukh Shubhada              | 21) Dr. Lalitha B. R.      | 34) Dr. Rokade Patil Sanvi              |
| 9) Dr. Ghodke Kaustubh                | 22) Dr. Mahajan Madhavi    | 35) Dr. Samant Rani (Melbourne, Austr.) |
| 10) Dr. Ghotekar Mrunali              | 23) Dr. Mohare Harshad     | 36) Dr. Sardeshmukh Sukumar             |
| 11) Dr. Gupta Shivani                 | 24) Dr. Muke Abhinandan    | 37) Dr. Tagare Maheshwar                |
| 12) Vd. Irani Farida (Sydney, Austr.) | 25) Dr. Mukherji Pradnya   | 38) Dr. Terwadkar Sharduli              |
| 13) Dr. Kadampatil Raturaj            | 26) Dr. Phadnis Manoj      | 39) Dr. Tommasini Lucia (Italy)         |

### Subscription Rates

1 Year	Rs. 500/-
Advertisement Tariff	Per Insertion
Full page B & W	Rs. 2000/-
Half page B & W	Rs. 1200/-
Full page 2/3 colour	Rs. 10000/-
Cover page 4 colour	Rs. 12000/-
Front Cover	Rs. 15000/-
Sponsoring one article	Rs. 2000/-
Discount for Annual contract	

- 1) Name of Account : "Deerghayu International"
- 2) Bank Name & Address : UCO BANK, Kothrud Branch, near Post Office, Pune - 38.
- 3) Bank Account No. 14690200000611.
- 4) IFSC (India Financial System Code) of the bank UCBA 0001469.
- 5) Code of the Bank - 411028011.
- 6) Tel. No. of Bank - 91-20-25380076

## Index

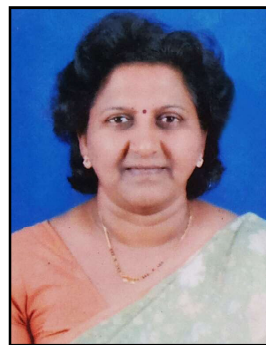
	Page No.
1) <b>Study of Physical Fitness In Individuals In Relation To Their Sharir Prakriti And Desha, With The Help of Harward's Step Test</b> Surbhi Raina, Mrs. Kavita Indapurkar	267
<b>Review :</b>	
2) <b>Role of <i>Kushta (Saussurea lappa C. B. Clarke)</i> as a pratinidhi (substitute) of <i>Pushakarmool (Inula racemosa Hook. f.)</i> with special reference to <i>Hridroga</i> : A review</b> Pansare Tabassum Arif , Shweta Satpudke	273
<b>Clinical :</b>	
3) <b>"Clinical Evaluation of Markatbeej Choorna In Avegavastha of Tamakshwasa"</b> Eknath G. Kulkarni, Sheetal S. Mandawkar, Vd. Shubhangi H. Harawane	282
4) <b>Efficacy of Aampramathini Vati In The Management of Aamvata</b> Bhavana V. Ankalkote Patil, Sunanda Pedhekar (Ghare)	293
5) <b>Efficacy of Rasayan Choorna in Chronic Renal Failure with special reference to Mootraghat</b> E. G. Kulkarni, Deodatt Chafekar, Supriya Vetkoli	313
<b>Review :</b>	
6) <b>Review Of Samsrishta Dosha Lakshanas</b> Sameer Joshi	321

**Study of Physical Fitness In Individuals In Relation To  
Their Sharir Prakriti And Desha, With The Help of  
Harward's Step Test**

Surbhi Raina, Kavita Indapurkar



Surbhi Raina



Kavita Indapurkar



## **Study of Physical Fitness In Individuals In Relation To Their Sharir Prakriti And Desha, With The Help of Harward's Step Test**

**Dr. Surbhi Raina**, M.D Scholar

Mob No. 7767001480, Email :Krishn.Surbhi@Gmail.Com

GUIDE : **Dr. (Mrs.) Kavita Indapurkar**, M.D, Phd, Professor And H.O.D

Department of Kriya Sharir

College of Ayurved, Bharati Vidyapeeth Deemed University, Pune.

### **ABSTRACT :**

All we need is a healthy body and sound mind . Physically fit body holds a paramount importance. In Ayurveda the concept of Prakriti refers to the sum total of one's Tridosha percentage. It is very important to add modern scientific parameters to study the age old concepts of Ayurveda.

The main objective of this study is to use Harward's Step Test (a modern technique) to access the endurance and physical fitness in individuals in relation to their pre dominant Prakriti and Desha.

KEY WORDS: Sharir prakriti, physical fitness, Desha, Harward's step Test.

Total no. of ref. -3

### **INTRODUCTION :**

In today's era we need is a healthy body and a sound mind. Physically fit body holds a paramount importance, as a physical fit body helps us to carry out our routine tasks with vigor and enthusiasm. In Ayurveda the concept of Prakriti refers to the sum total of one's tridosha percentage [ Vata , Pitta and kapha in the body] . It determines the natural characteristics of the individual established during conception. Charak Samhita, viman sthan, 8<sup>th</sup> chapter gives a precise information regarding the Sharirik prakriti of an individual. In this undermentioned study Harward's Step test, which is a scientific parameter is used, this step is used to determine the endurance in the given no. of subjects in relation to their pre dominant prakriti and desha.

### **AIM AND OBJECTIVES :**

This study was done to evaluate the fatigue index in subjects, to know how much physically fit they were.

The aim of this study was to see that how Dosha dominant Prakriti's and Desha alter or effect the physical fitness in individuals

**SELECTION OF TOPIC :**

This subject was selected for research to understand the influence of Dosha dominant Prakriti and Desha on physical fitness in an individual.

Since Harward's Step test can be used to evaluate the fatigue index in individuals and is a competent tool to keep a check on one's general physical health

**MATERIALS AND METHODOLOGY :**

Here in this study Harward's Step Test which is a modern technique , was used to access the physical fitness in individual's.

This was a pilot study where 20 female subjects were taken.

Prakriti Pareekshana was done in subjects with the help of Standardized Prakriti Pareekshana Proforma and interview method.Desha in individuals was considered and recorded. Comparative study was done between dominant Sharir Prakriti, Desha and Fatigue Index.

**HARWARD'S STEP TEST :**

- It is a 16 inch (40 c.m) high bench .
- The subject steps up and down 30 times per minute for four minutes
- Metronome is used to adjust the rate.
- Duration of exhaustion is noted in seconds.
- Pulse is counted and recorded during 1-1.5 minutes, 2-2.5 minutes, 3-3.5 minutes interval.
- Fatigue Index is calculated via the formula :

$$\text{Fatigue Index} = \frac{\text{Duration of exercise in seconds} \times 100}{2 \times \text{sum of pulse counts during recovery.}}$$

**INCLUSION CRITERIA :**

20 female healthy subjects within 17-22 years of age were taken.

**EXCLUSION CRITERIA :**

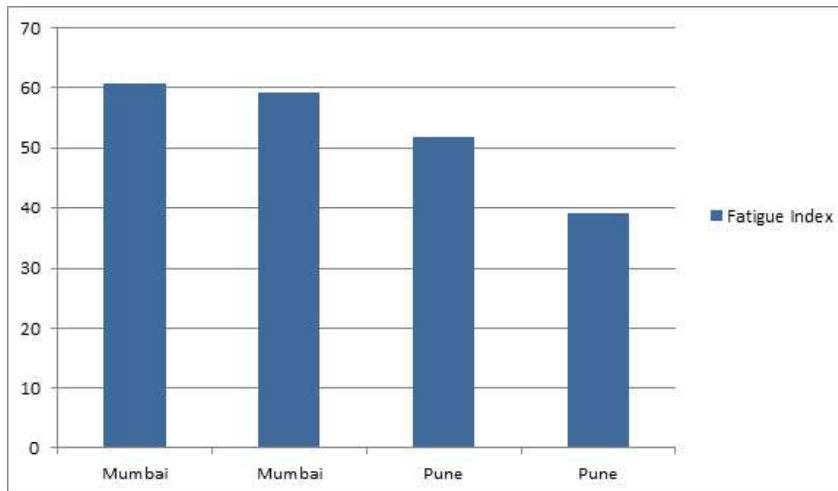
Males were excluded and females having major health problems were excluded.

**OBSERVATIONS ARE AS FOLLOWS :**

S.NO.	FATIGUE INDEX	PRADHAN PRAKRITI	DESHA
1	32.60	VAT PRADHAN	GUJARAT
2	44.37	KAPHA PRADHAN	GUJARAT
3	54.21	VAT PRADHAN	PUNE
4	63.63	VAT PRADHAN	KOHLAPUR

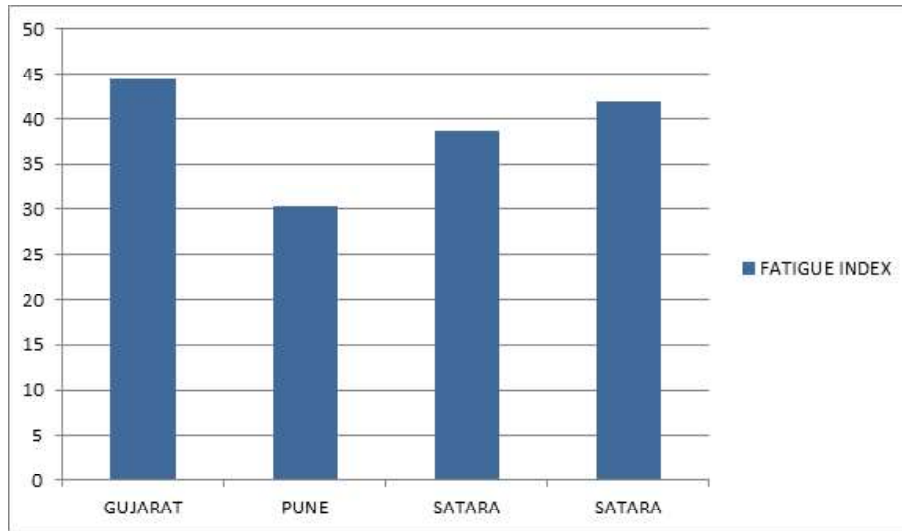
5	31.57	VAT PRADHAN	PUNE
6	31	VAT PRADHAN	PUNE
7	30.40	KAPHA PRADHAN	PUNE
8	60.81	PITTA PRADHAN	MUMBAI
9	49.07	VAT PRADHAN	PUNE
10	37.26	VAT PRADHAN	SANGLI
11	59.21	PITTA PRADHAN	MUMBAI
12	52.02	PITTA PRADHAN	PUNE
13	38.70	KAPHA PRADHAN	SATARA
14	18.40	VAT PRADHAN	PUNE
15	43.47	VAT PRADHAN	PUNE
16	42.47	VAT PRADHAN	PUNE
17	38.96	PITTA PRADHAN	PUNE
18	41.89	KAPHA PRADHAN	SATARA
19	25	VATA PRADHAN	PUNE
20	41.66	VAT PRADHAN	PUNE

#### FATIGUE INDEX IN PITTA PRADHAN PRAKRITI INDIVIDUALS :

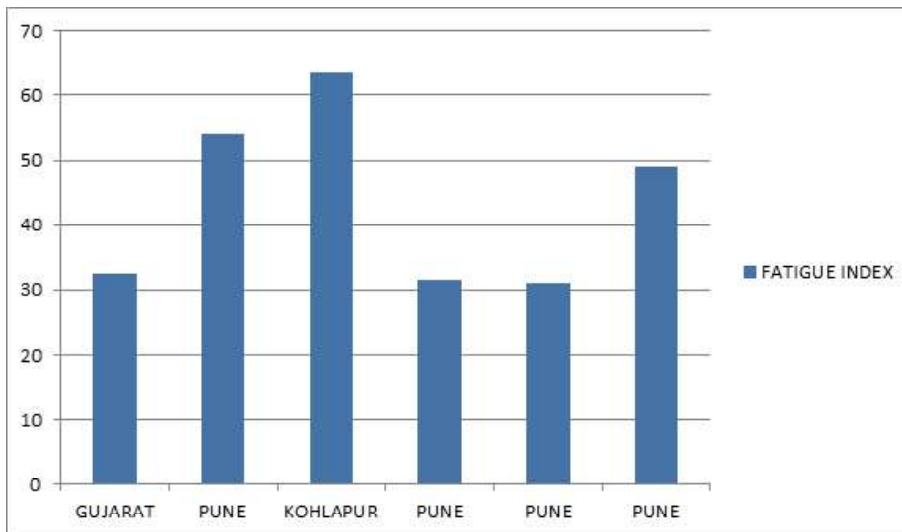




**FATIGUE INDEX IN KAPHA PRADHAN PRAKRITI INDIVIDUALS :**



**FATIGUE INDEX IN VATA PRADHAN PRAKRITI INDIVIDUALS :**



**DISCUSSION :**

In Pitta Pradhan Prakriti individuals, an average fatigue index of 52.57 was seen. In Pitta Pradhan Prakriti subjects, it was observed that subjects of Desha Mumbai showed higher Fatigue Index scores in comparison to others.

In Kapha Pradhan Prakriti individuals, an average fatigue Index of 38.84 was seen respectively. It was observed that subjects of Desha Gujarat showed a higher Fatigue Index scores in comparison to other Desha subjects.

In Vata Pradhan Prakriti individuals, an average fatigue index of 38.89 was seen. It was further seen that subjects of Desha Kohlapur showed a higher fatigue index scores.

**CONCLUSION :**

In the above study, it was concluded that the individuals of Kohlapur Desha showed a higher endurance capacity or fatigue index in comparison to other Desha individuals.

Thenceforth Pitta Pradhan prakriti individuals showed remarkably higher endurance in comparison to vata and kapha dominant Sharir Prakriti individuals.

**SCOPE AND LIMITATIONS :**

- Since it was Pilot Study with sample size of 20 female candidates, so the study was limited to this result.
- More Study can be done with a larger sample size.
- This Study can be more efficiently done taking more Desha into consideration, to understand more accurately the importance of Desha and its relation with Physical Fitness.

**REFERENCES :**

Charak Samhita, vidhyotini hindi vyakhya, pratham bhag, chokambha bharti academy.

Viman sthana, rogabhishagjitiya adhyay 8.

Walking for health and fitness, JAMA, 259.

Criteria for maximum oxygen uptake, Edward T Howley, Medicine and science in sports and exercise, 1995.

**Role of *Kushta* (*Saussurea lappa* C. B. Clarke)  
as a pratinidhi (substitute) of *Pushakarmool*  
(*Inula racemosa* Hook. f.)  
with special reference to *Hridroga* : A review**



Pansare Tabassum Arif



Shweta Satpudke

Review :

**Role of *Kushta* (*Saussurea lappa* C. B. Clarke) as a pratinidhi (substitute) of *Pushakarmool* (*Inula racemosa* Hook. f.) with special reference to *Hridroga* : A review**

Pansare Tabassum Arif<sup>1\*</sup> Dr. Shweta Satpudke<sup>2</sup>

1. Associate Prof., Dravyaguna Dept., Govt. Ayurved College, Osmanabad.

\* E-mail : tabasum.pansare@yahoo.com Mobile No.: 9850298909

2. P. G. Scholar, Dravyaguna Dept., Govt. Ayurved College, Osmanabad

E-mail : sweta.satpudke15@gmail.com Mobile No.: 9511843728

**Abstract :**

*Hridroga* (heart diseases) has become a serious medical issue all over the world. Based on the survey in the world, 97 crore people per year are suffering from different types of heart diseases. In 1.7 crore people per year are dragged into the heart diseases. In India, it has become the leading cause of mortality. Ayurvedic classic texts like *Charak Samhita*, *Bhaishajya ratnawali Pushakarmool* (*Inula racemosa* Hook.f.) have mentioned *Pushakarmool* in *Hridroga chikitsa* (i.e. for treatment of heart diseases). As decade passes, *Pushakarmool* plant has turned into endangered species and unavailable due to deforestation and loss of habitat. *Acharya Bhavmishra* mentioned *Kushta* (*Saussurea lappa* C.B. Clarke) as a *pratinidhi dravya* of *Pushakarmool*. *Pratinidhi dravya* is a unique concept about usage of substitute drug in the absence of an original drug. The substitution is based on the principles that both original and substitute should possess similar properties and therapeutic activities. *Pushakarmool* and *Kushta* both have *Katu*, *Tikta rasa*, *Katu Vipaka* and *Ushna Veerya*. They possess same chemical compositions as well as similar pharmacological activities related to cardiovascular system. This review shows the role of *Kushta* in *Hridroga chikitsa* in an absence of *Pushakarmool*.

**Keywords :** *Hridrog*, *Inula*, *Kushta*, *Pratinidhi*, *Pushakarmool*, *Saussurea* (47)

**Introduction :**

In modern therapy, depending upon the medication or combination of medication patients suffered by side effects on body. [1] However the treatment with medicinal herbs is considered very safe as there is no or minimal side effects. These drugs are easily available and cost effective as compare to modern treatment. [2] Heart diseases pose an alarming threat to global health. Cardiovascular disease is still the leading cause of death in India, Killing 1.7 million Indians in 2016. *Hrid* means *hridaya*, heart and *Roga* means diseases. Under section of *Hridroga*, there is a compilation of various diseases aspect related to cardiovascular system. Ayurvedic concept is difficult to understand in correlation with modern pathology and etiology, but ayurvedic treatment of *Hridroga* is much effective and preventive. [3] Many herbs are mentioned for treatment of *Hridroga*, *Pushakarmool* is one of them. As we know, *Pushakarmool* is now endangered species and unavailable for therapeutic uses. [4] *Acharya*

*Bhavamishra* has mentioned that *Pratinidhi dravya* (substitute drug) of *Pushakarmool* is *Kushta*. [5] Ayurveda suggests use of appropriate available plant which is easy to obtain.

#### **Concept of *Pratinidhi dravya* :**

*Pratinidhi* is a unique concept about usage of substitution drug in absence of an original drug (*Abhavdravya*). [6] *Pratinidhi* means representation, substitute or vicegerent. [7] The substitution in Ayurveda is based on similarities in *Guna* of both the drugs and not on inferior qualities. *Pratinidhi* works to overcome problem of non-availability of expensive, rare, and difficult to obtain drugs of plants as well as animal original drugs. [8]

#### ***Hridroga* (Heart disease) :**

*Hridroga* is mentioned as a disease of *rasavaha strotas*. *Rasa* is the circulating medium and vitiated *rasa* leads to *Hridroga* according to *Sushruta*. [9] *Vyan vayu* takes this *rasa* to whole body including heart. [10] The causative factors like consumption of excessive sweet, heavy on digestion, unctuous, greasy, cold substances for long time, lack of exercise etc. affect the function of *Agni*. The hypo-functioning of *Agni* leads to generation of *Ama* which is contaminating and toxic in nature. And it exhibits a unique capacity to cause occlusion of various spaces and channels in the internal environment. The contaminated *Rasa* and vitiated *Dosha* complex arrives at the heart. This complex is unable of nourishing the heart as a normal *Rasa* is, in combination with *Avalambaka Kapha*. This causes malnourishment of the heart which manifests as *Hridroga*. *Ama* is the un-metabolized or intermediate product of metabolism, resulting due to compromised activity of *Agni* at the three different levels i.e. *Jatharagni*, *Bhootagni* and *Dhatvagni*. The impaired metabolic functioning fails to metabolize completely, thus producing intermediate compound which can't be utilized by body tissue, furthermore they impart their characteristic features on the tissue and also produces hindrance in their activities thus leading to heart disease. [11] Ayurvedic *chikitsa* for *Hridrog* and metabolic syndrome involves a multi-faceted approach. After determining the main *doshas*, the treatment should focus on *Ama* and *Agni*, pacify the involved *doshas*, initiate appropriate diet and lifestyle changes and recommend specific herbs for heart health. [12]

#### **Mention of *Pushakarmool* in *Hridroga Chikitsa*.**

***CharakSamhita***- *Pushakarmooladi Kalka*, *Pushakarmooladi kwath*, *Pathyadi Kalka* (*Pushakarmool* is one of its content) in *vatajHridrog*. [13]

***Bhaishajya ratnawali***- *Pushakarmooladi Kalka*, *Pushakarmooladi kwath*, *Pushakarmool churnain vataj hridrog*. *Trivrutadi churanam* in *kaphaj hridrog*. *Hingwadi churnam*, *Kakumbhadi churnam*, *Pathyadi churnam* in *tridoshaj hridrog*. (*Pushakarmool* is one of its content) [14]

#### ***Pratinidhi dravya* for *Pushakarmool***

***Bhavprakash nighantu***- *Acharya Bhavamishra* mentioned that *Pushakarmool* is the variety of *Kushta* and can be used as substitute drug. (*Poorvankhanda* of *nighantu*)[15]

***Sharangadhara Samhita***- according to *Samhita*, in case of unviability of *Pushakarmool*, *Kushta* can be considered as substitute drug. [16]

**Yogratnakara-** substitute for *Pushakarmool* is *Kushta* and *Erandmool*. [17]

**Bhaishajya ratnawali-** substitute for *Pushakarmool* is *Kushta* [18]

**Taxonomy of *Pushakarmool* and *Kushta*** [19,20]

	<i>Pushakarmool</i>	<i>Kushta</i>
<b>Kingdom</b>	Plantae	Plantae
<b>Clade</b>	Angiosperms	Angiosperms
<b>Order</b>	Asterales	Asterales
<b>Family</b>	Asteraceae	Asteraceae
<b>Genus</b>	Inula	Saussurea
<b>Species</b>	<i>I. racemosa</i>	<i>S. lappa</i>

**Rasapanchaka of *Pushakarmool* and *Kushta*.** [21]

Name of <i>dravya</i>	<i>Rasa</i>	<i>Vipaka</i>	<i>Veerya</i>	<i>Guna</i>	<i>Doshaghata</i>
<b><i>Pushakarmool</i></b>	<i>Katu, Tikta</i>	<i>Katu</i>	<i>Ushna</i>	<i>Laghu, Tikshna</i>	<i>Vata-kaphgha</i>
<b><i>Kushta</i></b>	<i>Katu, Tikta</i>	<i>Katu</i>	<i>Ushna</i>	<i>Laghu, Tikshna, Ruksha</i>	<i>Vata-kaphgha</i>

**Similarity in synonyms-** some synonyms are same for both drugs like *Pushakar*, *Vapya* and *Kashmir*. [22]

**Morphological similarities-** both *Pushakarmool* and *Kushta* belongs to same family as Asteraceae. The morphological features of roots of the both plants are very identical. [23]

**Habitat of *Pushakarmool* & *Kushta*-** Both drugs found within India at an altitude range of 2800-3200 meters. Also outside India in regions across Afghanistan, Pakistan & Nepal. [24]

**Qualitative tests of *Pushakarmool* and *Kushta*.** [25]

Sr. No.	Metabolies	Pushakaramool	Kushta
1.	Carbohydrates	+ve	+ve
2.	Protein	+ve	+ve
3.	Alkaloids	+ve	+ve
4.	Tannins	-ve	+ve
5.	Resins	+ve	+ve
6.	Quinones	-ve	-ve
7.	Saponin	+ve	+ve
8.	Steroids	+ve	+ve
9.	Coumarins	+ve	+ve
10.	Flavonoids	+ve	+ve
11.	Cardiac glycoside	+ve	+ve

**Role of *Pushakarmool* and *Kushta* in *Hridrogchikitsa***

*Hridaya* is a *mulstana* (origin) of *rasavaha* and *pranvaha* strotasas. The main symptoms of *Hridroga* are *Shoth* (Inflammation), *ruja* (pain and discomfort in the chest), *Shwaskasa* (breathlessness). *Pushakarmool* and *Kushta* have *Katu, Tikta rasa* and *Katu Vipaka*. Due to these attributes, they alleviate *Kapha (kaphagha)*. With *Ushna Veerya*, they alleviate *Vata (Vataghna)*. With *Katu, Tikta rasa*, they perform properties like *Deepan (stimulates Agni)*, *Pachana (digests Aam)* which balance and maintain *Agni* and reduces *Ama* from body. *Tikta* and *Katu rasa* repairs altered *Jatharagni* and *Rasadhatvagni*. The both *Rasas* are *srotoshodha* (Channel cleaning.) Because of *Vayu & Agni* predominance *Katu rasa* absorbs the fluid and expels the obstructive material. *Tikta rasa* acts likewise by absorbing the fluid and slimy material due to *Vayu* and consequently vacating space on account of *Aakash*. Owing to *Sookshma* guna it permeates even to minute channels thus helps the drug to reach at cellular level and it helps to deplete vitiated *Kapha* and *Kleda*. *Katu Vipaka* and *Tikshna, Laghu gunas* perform *Srotoshodhana* karma which reduces excessive *Kleda* from body as well as clears the channels and improve circulation of *Rasa dhatu*. Thus alleviation of *Kapha* and *vata* help to relieve symptoms of *Hridroga* like *Shwaskas, Shota* and *Shula*.

**Traditional uses :****Ethno-medicinal uses of *Pushakarmool* and *Kushta***

Traditionally both *Pushakarmool* and *Kushta* are used in chest pain, cough, breathlessness, weakness, fatigue and have *rasayana* effect.

***Pushakarmool***- Root powder of *Pushakarmool* is taken with honey for heart diseases. Root powder of *Pushakarmool* is taken with dashmool kasaya for cough and breathlessness. Combination of *Pushakarmool* and *Guggulu* is used for chest pain. [26]

***Kushta***- In chest pain, root power of *Kushta* is taken with milk/decoction of root powder. Oil heated with root is massaged the affected area to reduce pain. [27] Root powder is taken with warm water for treatment of cough and breathlessness. [28] In weakness and fatigue, root is boiled in milk and milk is taken twice daily. For *rasayana* effect, root powder ingested with cow's milk and cow's ghee. [29] It is used locally against the heart diseases of cattle. [30]

**Relevant research on *Pushakarmool* and *Kushta***

*Pushakarmool* and *Kushta* have shown various pharmacological activities and have been proved for activities such as efficacy on cardio vascular diseases, antioxidant, Anti-hyperlipidemic, Anti-inflammatory activities in different and suitable in-vitro and in -vivo models.

**Cardio vascular effects :**

***Pushakarmool***- Study demonstrated that hydroalcoholic extract of *I. racemose* roots, prevents the depletion of myocardial antioxidants and restores cardiac function, following



isoproterenol-induced myocardial infraction. Study also suggest that *I. racemose* may serve as an adjunctive therapy in patients of ischemic heart disease or as a preventive agent in delaying the progression of ischemic heart disease.[31] Another study shows that Petroleum ether extract of the roots has exhibited a negative chronotropic and positive inotropic effect on isolated frog heart and has shown adrenaline induction beta blocking activity in rats.[32] In human trials, a combination of *I. racemosa* and *Commiphora mukul* shows effect in reducing the chest pain and dyspnea associated with angina.[33]

**Kushta-** Extract of *S.lappa* helps in lowering of blood pressure and prevents blood coagulation. *S. lappa* also showed vasodilation and reduction in cholesterol and triglycerides in the blood. [34] The volatile oils of *S. lappa* inhibit ADP- induced platelets coagulation that was mainly due to dehydrocostus lactone and costunolide content of oil. [35] Aqueous decoction of *S. lappa* strengthen fibrin content of blood [36] *S. lappa* extract and costus oil also reported to exhibits hypoglycemic effect. [37]

#### **Anti-oxidant activity :**

**Pushakarmool-** Study shows that oral administration of alcoholic extract of *Inularacemosa* roots has antioxidant properties because greater availability of GSH to the cell would lead to higher rate of destruction of deleterious hydrogen peroxide and lipid peroxides by glutathione peroxide and hence, protection of vital biomolecules, nucleic acids, carbohydrates, proteins and lipids against oxidative injury associated with chemical toxicity and certain disease. [38]

**Kushta-** Study observed that ethanol extract of *S. lappa* C.B. Clarke shows reducing power is generally associated with the presence of reductone, which have been shown to exert an anti-oxidant effect by donating a hydrogen atom and breaking the free radical chain. [39]

#### **Anti-hyperlipidemic activity :**

**Pushakarmool** -The experimental result conferred significant antihyperlipidemic activity of *I. racemose* in experimentally induced hyperlipidemia model and antioxidant activity. [40]

**Kushta-** The aqueous extract of *S. lappa* orally administrated to rabbits at dose of 2mg/kg body weight shows significant hypolipidaemic effect.[41] The ethanolic extract of *S. lappa* reduces the triglycerides level as well as it significantly increased the HDL-C level in both serum and the tissue. [42]

#### **Anti-inflammatory activity :**

**Pushakarmool-** Study revealed that aqueous extract of *I. racemosa* shows potential anti-inflammatory property in carrageenan model and also analgesic effect in writhing by acetic acid and tail immersion test in a dose dependent manner. These potential activities were found to be equal as to respective standard drugs. [43]

**Kushta-** The major anti-inflammatory ingredient in *S. lappa* are Sesquiterpene, which stabilize endosomal release and prevent and cell proliferation. [44] The ethanolic extract of *S. lappa*

was tested at a dose ranges of 50-200 mg/kg, on acute and chronic inflammation induced in both mice and rats. [45] The methanolic extract of *S. lappa* was investigated for anti-inflammatory activity. It was observed that at 0.1 mg/mL concentration, it exhibited more than 50% of inhibition on the cytokine induced neutrophil chemotactic factor induction. [46]

#### Conclusion :

Cardiac diseases are the leading cause of death in globally as well as in India. *Pushakarmool* has been mentioned in Ayurvedic classics for its therapeutic effect on cardiac diseases. But now *Pushakarmool* is red-listed plant. [47] So can't be easily available in market. Ayurvedic classic mentioned *Kushta* for its substitution drug. Present review shows that *Pushakarmool* and *Kushta* have same rasapanchaka. Chemical compositions of both drugs are nearly same. Modern researchers also conclude that both *Pushakarmool* and *Kushta* are effective for the treatment of cardiovascular diseases. These findings validate the claim of *Kushta* as a *pratinidhi* (substitute) of *Pushakarmool*. Further studies are also required to isolate active compounds and clinical trial for better use of *Pushakarmool* and *Kushta* in *Hridrog chikitsa*. Conservation and cultivation of both drugs is need of time because they are disappearing at a high speed. So new biotechniques should be applied to improve yield and modify the potency of *Pushakarmool* and *Kushta*.

#### References :

1. Balch James f, 'Precription for natural healing'. a very publishing group, garden city park, 2<sup>nd</sup> ed.1997, NY:, pp320-4
2. <http://www.tsijournals.com>
3. Swapnilpatil, "To explore Ayurvedic principle of management of Hridroga", International Journal of Ayurvedic Medicine, 2015,6 (1) supplement, pgs.44-47.
4. Shindegurudatta p., "Review on lifestyle as hetu of Hrudrog", Ayurlog, ISSN23220-7329.
5. Bhavamishra, 'Bhavprakash Nighantu'. Chaukhambha Bharti Academy:In: Gangasahayapandey(Ed) 2010: pages121
6. P.V. sharma,'Dravyaguna vidnyan. Vol.1'Chaukhambha Bharti Academy, Varanasi, 2007, pages 512.
7. Vamanshivramapte, 'the practical Sanskrit English dictionary'. Motilalbanarsidas, Varanasi, 2006, pages1160.
8. Charusheela m. giri, "Concept of abhava pratinidhi dravyas, a rational substitution of drugs-a review", IJAAYUSH2013 vol.2,pp.148-161. ISSN:2320-0251.
9. Acharya sushruta, 'Sushruta Samhita', Niryanasagar press, Mumbai, pages.su.su.14/3
10. Acharya sushruta, 'Sushruta Samhita', Niryanasagar press, Mumbai,pages.su.su.1/17
11. Nishantshukla, "Management of cardiac emergencies in Ayurveda-a clinic-literaryapproach". 1:203.doi:/scientificreportpp.203

12. Alakandadevi, "Ayurvedic approaches to heart disase."[www.namaskarhealing.com](http://www.namaskarhealing.com)
13. Y.G.joshi, 'CharakSamhita', Vaidyarnitru Prakashan, pp.580
14. Kavirajambikadattashashtri, 'Bhaishajya ratnawali', chaukhamba Sanskrut Sansthan, Varanasi.pages. 585-588
15. Krushanachandrachunekar, 'Bhavprakash Nighantu', Chaukhamba Bharti Prakashan, pages142
16. Khubchandrasharma, 'Sharandhar Samhita' Tejkumar book depot pvt. Ltd, Lucknow 2014, ChXXVIvpages70-73
17. Shreelakshmipati Shashri, 'Yogratnakar' Chaukhamba Bharati Prakashana.pages.234
18. Kaviraj Ambikadattashashtri, 'Bhaishajya ratnawali', Chaukhamba Sanskrut Sansthan, Varanasi, pages.487
19. Inula racemosa- [wikipedia://en.m.wikipedia.org](http://en.m.wikipedia.org).
20. Saussuria lappa-[wikipedia://en.m.wikipedia.org](http://en.m.wikipedia.org)
21. P.V.sharma, 'Dravyaguna vidnyan vol II', Chaukhamba Bharti academy-pages.266,572.
22. Dr.Guruprasadsharma.,Dr.Priyavratsharma, 'Dhanvantarinighantu', Chaukhambha Oriyantaliya, Varanasi. 2012, pages.34
23. Nagarlalit, "A simple test to differentiate between Pushkaramool and Kushta", Int.J.Res. Ayurveda Pharm.2017 volume 8(5).
24. <http://www.planetayurveda.com>
25. Dr. Kiranvashisht, "Parmacognostical, phytochemical and chromatographic finger printing profile of Pushkarmula and Kushta", World Journal of Pharmaceutical Research, 2018vol 7, issue 08.
26. Manishkumarsoni, "Pushkarmool, a Ayurvedic review", WJPMR, 2018,4 (3), pg.199-201
27. Kulsoonzahara, Shaista Tabassum, "A review of therapeutic potential of Saussura lappa – an endanaged plant from Himalaya", Asian pacific journal of tropical medicine2014;7 (suppl I):S60-S69
28. Jain SP, 'Ethnobotany of morni and kalesar (Ambala,Haryana)' JEcon Taxon Bot 1986;5: pages.809-813
29. Kulsoonzahara, Shaista Tabassum, "A review of therapeutic potential of Saussura lappa – an endanaged plant from Himalaya", Asian pacific journal of tropical medicine 2014;7 (suppl I):S60-S69
30. Sharma S, "Conservation of biodiversity of highly important medicinal plants of India through tissue culture technology –a review", Agric boil J N Am 2010;10 (5), pages 827-833.
31. Shreenathojha, "Effect of Inula racemose roots on cardiac function and oxidative stress against isoproterenol-induced myocardial infarction", Indian J Biochem. Biophys. February 2011, Vol 48,

32. Sharma Ashwinikumar, "Medicinal value of *Inula racemosa* Hook.", *Unique Journal of Ayurvedic and Herbal medicines* 2014, 02 (02);page 11-13
33. Vidhyaumnikrishanan, "Cardio protective activity of herbal formulation of Bhavmishra: a review", *IAMJ*, February 2011, volume 3; Issue 3.
34. Upadhyay OP, "Studies on anti- diabetic medicinal plants used in Indianfolkore." *Ayurvedian*, 9:pages159-167
35. Hou PF, "Analysis of chemical composition of the essential oil from *radix aucklandiae*", *zhongguoshiyan fang jixuezazhi*, 14(7):pages26-30
36. Yu ZJ, "Observation of action o 21 types of Chinese traditional medicine on vitro solution of fibrous protein". *Zhong xi yijie he zazhi*, 6(8):pages.484
37. Gupta P, "Pharmacological investigation on *Saussurea lappa*, *Indian Journal of Medical Research*", 55:pages.1078-83.
38. S. Salil, "Antioxidant properties of *Inula racemosa*, a traditional Herbal medicine", *The Internet Journal Pharmacology*, volume10. number1.
39. Gun-heekim, "Antioxidant activity of *Saussurea lappa* C.B. Clarke", *Preventive nutrition and food science-December-2012*
40. Jaspreetsingh, "A review :An impact of *Inula racemosa* on dislipidemia and obesity", *World journal of pharmaceutical research*, 2016, vol 5, issue 7.
41. Upadhyay OP, "Studies on anti diabetic medicinal plants used in Indianfolkore". *Ayurvedian*, 9:pages.159-167
42. Anbu J, "Evaluation of antihyperlipidemic activity of ethanolic extract of *Saussurea lappa* in rats", *International Journal of Pharma and Bio sciences*, 2(4):551-556
43. Ponnar Arumugam, "Evaluation of anti-inflammatory and analgesic effects of aqueous extract obtained from root powder of *Inula racemosa* Hook", *Journal of Medicinal Plants Research* 16 April, 2012. vol.6(14): 2801-2806,
44. Damre AA, "Evaluation of Sesquiterpene lactose fraction of *S. lappa* on transudative, exudative, exudative and proliferative phase of inflammation". *Phytotherapy Research*, 17:722-725.
45. Gokhale AB, "Preliminary evolution of anti inflammation and anti arthritic activity of *s.lappa*". *Phytomedicine*, 9:433-437.
46. Lee MG, "ostunolide induced apoptosis by Ros-mediated mitochondrial permeability and cytochrome c release", *Biological Pharmaceutical buttetin*, 24:303-306.
47. <http://www.greentumble.com>

**“Clinical Evaluation of  
Markatbeej Choorna  
In Avegavastha of Tamakshwasa”**

Vd. Eknath G. Kulkarni, Vd. Sheetal S. Mandawkar,  
Vd. Shubhangi H. Harawane



Eknath G. Kulkarni



Sheetal Mandawkar



Shubhangi Harawane

Clinical :



## “Clinical Evaluation of Markatbeej Choorna In Avegavastha of Tamakshwasa”

Vd. Eknath G. Kulkarni, Associate Professor, Email - ekulkarni6@gmail.com

Vd. Sheetal S. Mandawkar, PG Scholar, Email - mandawkarSheetal07@gmail.com

Vd. Shubhangi H. Harawane, MD Kayachikitsa

### ABSTRACT :

Due to changing environment, changing lifestyle, increasing industrialisation and urbanization, numbers of asthma patients are increasing day by day. Bronchial asthma closely resembles with a *Tamakshwasa* which is a type of *shwasa*. It draws attention to find simple and easily accessible management to minimize severity of *Tamakshwasa*. That's why, a study is conducted on 60 patients of *Tamakshwasa*. 60 no. of patient of *Tamakshwasa* of mild to moderate grade of either sex were selected in single blinded randomized controlled study from IPD and OPD. The patients showing classical symptoms of *Tamakshwasa* such as *Shwaskruchrata* (Dyspnoea), *Kasa* (Cough), *Ghurghurka* (Wheezing), *Anidra* (Insomnia), *Nasastrava* (Rhinorrhoea) were included in this study. For the present study we were given *Markatbeej Choorna* and *Pippali Churna* in equally divided group. On the basis of statistical tests of significance, *MARKATBEEJ CHOORNA* has marked improvement than *Pippali Choorna* in reduction of Subjective criteria *Swaskruchrata* (Dyspnoea), *Kasa* (Cough), *Anidra* (Insomnia).

Objective criteria Pulse rate, Respiratory rate, Peak Expiratory Flow Rate did not show considerable changes in both groups. At end of study it was found that *MARKATBEEJ CHOORNA* is more effective than *PIPPALI CHOORNA* in *Avegavastha* of *Tamakshwasa*.

**Keywords :** Bronchial asthma, *Tamakshwasa*, *MARKATBEEJ CHOORNA*, *PIPPALI Choorna*.

### INTRODUCTION :

Medical science has made considerable progress in its various fields. In spite of profound changes taking place in medical thinking, today's conventional drug approach is unable to solve all problems of catastrophic increase in diseases such as cancer, diabetes, asthma, and so many.

From centuries ago the science of *Ayurveda* has given its full proof of existence. Also it has proved to overcome such disharmonies. There are many entities in this mechanical age such as growing environmental pollution, extensive Industrialization, increased population, smoking allergens like dust, fumes and pollen grains which leads to unhealthy environment causing allergic bronchitis, bronchial asthma etc. for which we do not have the perfect

solution yet. Bronchial asthma is one such disease to which an individual succumbs regardless of age & sex due to above mentioned factors.

While going through ancient compendiums, we found two diseases *Shwasa* and *Hikka* described together because of their life endangering effect. *Tamakshwasa* is an important disease affecting the *Pranvaha strotas* due to its higher & widespread incidence, chronicity and progression to grave condition in acute phase.

According to modern medicine, the management of Bronchial Asthma includes bronchodilators, mast cell stabilizers, leukotriene modifying agents, antihistaminic and corticosteroids. But these medicines are mostly associated with many adverse effects like tremors, tachycardia, sedation, weight gain etc. In spite of all these adverse effects, these drugs are used. Still they cannot cure asthma completely.

The fundamental treatment method of *Samshodhan*, *Samshamana* and *Nidan-parivarjana* mentioned in *Ayurvedic* classics, if administered judiciously, the desired results can be achieved. In present context, the revalidation of ancient *Ayurvedic* preparations which can optimize the functions of respiratory tract by reversing the inflammatory responses and imparting the strength of the system is important. The result of such preparation can be expected better in combination with appropriate *Shodhan* therapy.

According to *Acharya Charaka*, "The one is the right medicine, which works for health, and "he is the best physician who relieves people from the tentacles of the disease."

*Ayurveda* has described so many herbal formulations to treat *Tamakshwasa* effectively without any adverse effect. Now the time has come for the physician to come forward and contribute in finding some definite solution to this problem, hence we have decided to clinically evaluate *Markatbeej Choorna* in these patients so as to control the progress of the disease and to give them relief from the symptoms.

Hence trial was planned for this study two groups are made each group consists of 30 patients of *Tamakshwasa*. One of them is treated with *Markatbeej Choorna*. 2<sup>nd</sup> group is treated with *Pippali Choorna*. Diagnosis of patients as *Tamakshwasa* was done with the help of *Tamakshwasa Samanya Lakshanas* from *Charak Samhita 17*.

**AIM :** "Comparative study of *MARKATBEEJ CHOORNA* and *PIPPALI CHOORNA* in *Tamakshwasa* w.s.r. to Bronchial Asthma"

**OBJECTIVE :**

- To evaluate the effect of *Markatbeej Choorna* in the management of *Avegakalin Tamakshwasa*.
- To study the disease *Tamakshwasa* in details using *Ayurved* and modern aspects.

**MATERIALS OF STUDY :**

Patients of *Tamakshwasa*



**B) Ingredients****➤ For study group- MARKATBEEJ CHOORNA****➤ MARKATBEEJ CHOORNA:**

Drug Name	Latin Name	Family
Markati	<i>Mucuna pruriens</i> Linn.	Leguminosae

*Anupan* : Madhu & Ghit

**➤ For control group: PIPPALI CHOORNA****PIPPALI CHOORNA :**

Drug Name	Latin Name	Family
Pippali -	<i>Piper longum</i>	Piperaceae

*Anupan* : Madhu

**METHODOLOGY:****Method:****Preparation of Drug:**

- I) **Markatbeej Choorna:** Choorna was prepared as per *Sharangdhar Samhita* guidance of experts from the department of *Rasashastra Bhaishajya kalpana*. *Pippali Choorna* was standardized in research lab.
- II) **Pippali Choorna:** Choorna was prepared as per *Sharangdhar Samhita* guidance of experts from the department of *Rasashastra Bhaishajya kalpana* & standardized in research lab.

**Selection of Patients :**

Patients were selected for study from either in OPD or IPD of *Kayachikitsa* Dept.of *Arogyashala Rugnalaya*, Nashik.

- Written informed consent was taken from every patient.
- Proper case history was obtained and special case record form was prepared.
- Clinical findings were recorded as per case proforma.

**Inclusion Criteria :**

- 1) Patients having signs & symptoms of *Avegavastha* of *Tamakshwasa*.
- 2) Age- Patients between 30-60 yrs old.
- 3) Sex- Both male and female
- 4) Class- All socio-economic classes.

**Exclusion Criteria :**

- 1) Age – Below 30 yrs & above 60 yrs.
- 2) Patients in *Vegavastha* (Status asthmaticus) and having serious complication like cyanosis.
- 3) Patients having other disease such as Pulmonary hypertension, Cardiac asthma, Pulmonary Koch's, Carcinoma of lung etc.
- 4) Pregnant women

Criteria for baseline screening was routine laboratory investigations to exclude any other pathology. Cardinal signs and symptoms of the disease were noted and were used for assessment of the effect of treatment.

**Following are the signs:**

- i) Dyspnoea ( *Sakashta shwasan* )
- ii) Coughing ( *Kasa* )
- iii) *Sakashta Shleshma Nissaranam*  
(difficult / stressful expectoration )
- iv) *Ghurguraka Dhvani* ( wheezing sound in chest )
- v) *Parshwapida* ( Pain in axillary as well as back region )
- vi) *Griva / Sira Sangrahanam* ( pain / stiffness in neck and head )
- vii) Increased respiratory rate
- viii) Increased pulse rate
- ix) Decreased expiratory flow rate ( Peakflowmetry)

Other assessment of associated symptoms like *Pinasa, Kshudha, Aruchi, Anidra, Talushosh*, Blood pressure, weight were also noted.

**Method of administration of drug :**

The patients selected were divided in Trial group and Control group randomly.

**Trial Group :**

30 patients of this group were given *Markatbeej Choorna* along with *Madhu* and *Ghrit* for a period of 15 days.

- 1) Route of administration – Oral
- 2) Dose – 2gm/day
- 3) *Anupan – madhu (5gm)+ghrit(2.5gm)*
- 4) *Sevan Kala – Abhakta kal*
- 5) Duration – 15 days

**Control Group :**

On other hand, patients of this group received 'Pippali Choorna' along with Honey for 15 days.

- 1) Route of administration – Oral
- 2) Dose – 500mg
- 3) Anupan – Honey
- 4) Sevan kal – Abhakta kal
- 5) Duration – 15 days

**CRITERIA FOR ASESSMENT OF RESULT :****SUBJECTIVE:****1) Shwasakrucchata (dyspnoea) -**

Grade	Signs / Symptoms
+++	Inability to carry on any physical activity without discomfort . ( Dyspnoea on stepping less than 10 steps )
++	Marked limitations of physical activity , Although pts. are comfortable at rest. Less than ordinary activity will cause dyspnoea. (Dyspnoea on stepping 10-20 steps )
+	Slight limitation of physical activity. Such pts. are comfortable at rest. Ordinary physical activity results in dyspnoea. (dyspnoea on stepping more than 20 steps)
0	No limitation of physical activity does not cause undue dyspnoea.

**2) Kasa with Sakpha Nishthivan (cough with expectoration)**

Grade	Signs / Symptoms
+++	Through out the day (>20 episode)
++	Through out the day (approx. 10 to 20 episodes)
+	Peak at morning hours only (approx. 10 episodes)
0	Absent

**3) Ghurghurak dhvani (wheezing sound)**

Grade	Signs / Symptoms
+++	Present all over chest 75% area occupied
++	Present over < 50 % of chest area more at bases
+	Occasionally present, may be during inspiration or expiration

**4) Pinasa (Thick rhinorea)**

Grade	Signs / Symptoms
+++	Through out the day with choking Sensation of nose
++	Through out the day without choking sensation of nose
+	Peak at morning hours only
0	Absent

**5) Anidra (sleeplessness)**

Grade	Signs / Symptoms
+++	Disturbance in whole night
++	3 hours with disturbance
+	3 hours without disturbance
0	Sound sleep

**OBJECTIVE CRITERIA :****PULSE RATE, RESPIRATORY RATE, PEAK FLOW METRY**

and **RESPIROMETRY** were assessed before and after follow up –

**Investigation:**

- 1) **CBC** – This test was performed before treatment
- 2) **CXR**
- 3) **ECG**

**OBSERVATION AND RESULTS :**

Majority of patients were Vatakapha (38.33%) or Kaphavata (18.33%) prakruti. Maximum numbers of patient i.e., 56.67% were in the age group of 51-60 years and 71.68% patients were male where as 93.33% were married. Maximum addiction smoking was found in 30% and for tobacco 18.33% of patients. Family history of Tamakashwasa was present in 25% of the patients and 61.67% of the patients were middle class.

**Total Effect Of Therapy :**

% of relief	UpashayAnupshay	Group A	Group B
75 & >75%	Uttam	8	3
50 to <75%	Madhyam	16	12
25 to < 50%	Heena	6	15
< 25%	Anupshay	0	0

**Swaskrucchata :****Gr.A vs Gr.B at 5% level of significance**

Day	$X^2_{cal}$	Df	Table value of $x^2$	Relation	Result
D5	5.68	3	7.82	$X^2_{cal} < X^2_{table}$	Not significant
D10	2.418	2	5.99	$X^2_{cal} < X^2_{table}$	Not significant
D15	0.682	2	5.99	$X^2_{cal} > X^2_{table}$	Significant

**Ghurghuraka :**

Day	$X^2_{cal}$	Df	Table value of $x^2$	Relation	Result
D5	5.94	3	7.82	$X^2_{cal} < X^2_{table}$	Not significant
D10	8.78	2	5.99	$X^2_{cal} > X^2_{table}$	Significant
D15	1.64	2	5.99	$X^2_{cal} < X^2_{table}$	Not Significant

**Gr.A vs Gr.B at 5% level of significance****Kasa :****Gr.A vs Gr.B at 5% level of significance**

Day	$X^2_{cal}$	Df	Table value of $x^2$	Relation	Result
D5	12	2	5.99	$X^2_{cal} > X^2_{table}$	Significant
D10	12.446	2	5.99	$X^2_{cal} > X^2_{table}$	Significant
D15	2.11	2	5.99	$X^2_{cal} < X^2_{table}$	Not Significant

**Anidra:****Gr.A vs Gr.B at 5% level of significance**

Day	$X^2_{cal}$	Df	Table value of $x^2$	Relation	Result
D5	5.608	2	5.99	$X^2_{cal} < X^2_{table}$	Not Significant
D10	12.374	2	5.99	$X^2_{cal} > X^2_{table}$	Significant
D15	6.844	2	5.99	$X^2_{cal} > X^2_{table}$	Significant

**Pinasa:****Gr.A vs Gr.B at 5% level of significance**

Day	$X^2_{cal}$	Df	Table value of $x^2$	Relation	Result
D5	12.73	2	5.99	$X^2_{cal} > X^2_{table}$	Significant
D10	10.34	2	5.99	$X^2_{cal} > X^2_{table}$	Significant
D15	1.3	2	5.99	$X^2_{cal} < X^2_{table}$	Not Significant

**Paired 't' test:**

	Pulse Rate		Respiratory Rate		Peak flow metry	
	Group A	Group B	Group A	Group B	Group A	Group B
Mean	6.63	4.97	1.96	1.93	32	26.3
SD	4.55	3.13	1.29	1.36	22.35	19.03
SE	0.83	0.57	0.237	0.248	4.07	3.47
t <sub>29</sub>	7.99	8.72	8.270	7.78	7.86	7.58
t table	2.05	2.05	2.05	2.05	2.05	2.05
P	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

**Unpaired 't' test :**

	PR	RR	PFM
SE	1.01	0.35	5.395
t <sub>58</sub>	1.64	0.08	1.06
t table	2.02	2.02	2.02
P	>0.05	>0.05	>0.05

**DISCUSSION :**

During trial of "Clinical evaluation of Markatbeej Choorna in Avegavastha of Tamakashwasa" we have come across to findings which we are discussing now.

There is significant difference between 2 groups under study in shwaskrucchata (Dyspnoea). From 5<sup>th</sup> day, Markatbeej acts more efficiently than Pippali.

Improvement in Shwaskruchhata can be attributed to pacification of Kapha and Vata dosha and removal of obstructing Kapha from Pranvaha Strotas due to Ushna guna and anti asthmatic property of Yogwahi Guna.

The Asian Pacific Journal of Tropical biomedicine has established the antihistaminic activity of seeds of Mucuna pruriens by inhibiting mast cell degranulation and thus reducing dyspnoea. In this way, our study is supportive to above research.

There was significant difference in Ghurghuraka (Wheezing) from D10, better in trial group. Madhu possesses Lekhan property which may be helpful to relieve the obstruction caused by Sama Kapha along with Snigdha guna of Ghrit and normalises the Pranvayu-gati. This results in reduction of Ghurghuraka.

There was significant difference observed in Kasa (cough) from D5 in trial group. Improvement in Kasa can be attributed to pacification of Kapha and Vata dosha, removal of obstructive Kapha from the pranvaha strotas due to mucolytic property of Madhu and anti-inflammatory action of Markatbeej.

There was significant improvement observed in Anidra (Insomnia) in both the groups on 15<sup>th</sup> day. The relief in symptoms is a consequence to the relief in Shwaskrucchata, Cough and wheezing.

There was significant improvement in Pinasa (Rhinorrhea) from D5 in trial group. Both groups were effective. Improvement in pinasa can be attributed to pacification of Kapha and Vata dosha, removal of excessive Kapha from the Pranvaha strotas by Ushna Guna of Markatbeej.

There was significant relief in pulse rate before and after in group A as well as in group B. Statistically, there was no difference in effectiveness of both the drugs on pulse rate.

There was no significant change in respiratory rate before and after treatment in both groups.

In the parameter Peak flowmetry, the peak expiratory flow rate (PEFR) showed slight more difference in study group. Markati has proved slight more effective than Pippali.

After studying the data, it was observed that, out of 30 patients of study group 8(26.67%) received Uttam Upashay, 16 (53.33%) received Madhyam Upashay, 6(20.00%) received Heena Upashay and 0 (0%) received Anupashay.

Where as in control group, 3(10%) received Uttam Upashay, 12(40%) received Madhyam Upashay, 15(50%) received Heena Upashay, 0(0%) received Anupashay.

While considering Samprapti of Shwasa, Agnidushti leads to the production of Samakapha which then gets dried and obstructs the normal movement of Pranvayu leading to difficulty in breathing.

Markatbeej by its Ushna Veerya and Snigdha guna, liquefies the dried and Styan Kapha and gives Mardavata to the Pranvaha Strotas.

Beej of Markati is Vata-Kapha Shamak due to its Snigdha and Ushna Guna which ultimately helps to break the Samprapti of this disease.

Madhu, due to its Katu Vipaka and Laghu, Ruksha, Vishad Guna helps in reducing Styan Kapha.

Ghrit due to its Snigdha guna, softens the pranvaha Strotas and helps in removing the Kapha dosha. Ghrit also increases the Jatharagni and thereby minimizes one of the basic causes of Samprati, i.e. Agnimandya.

Markati is Vajikarana dravya, Balya and hence also acts as Uttam Rasayana. It strengthens the Pranvaha Strotas and reduces Kha-Vaigunya Samprapti.

The L-dopa isolated from methanol extract of seed possesses antihistaminic activity by inhibiting clonidine induced catalepsy and mast cell degranulation. (Asian Pacific Journal of Tropical Biomedicine, Vol 6-18, 19 Sept 2007).



Indolic bases derived from *Mucuna pruriens* shows antispasmodic action on smooth muscles. Thus both of these factors may be taking part in antiasthmatic action.

These findings based on the research in modern science are supportive to our study. Thus, considering the limitation as well as strength of this study the Markatbeej Choorna is significantly effective in Avegavastha of Tamakshwasa.

#### **CONCLUSION :**

From the clinical trials conducted “ Clinical evaluation of Markatbeej Choorna in Avegavastha of Tamakshwasa” following conclusion can be drawn:-

Subjective criteria ( Dyspnoea, Wheezing, Insomnia and Rhinorrhoea ) have shown results in the trial group than control group, whereas objective criteria ( Pulse rate, Respiratory rate, PEFR ) did not show considerable changes in both groups.

Thus there was symptomatic relief in the patients of Markatbeej Choorna more than Pippali.

So, it can be concluded that Markatbeej Choorna is effective in the management of Avegavastha of Tamakshwasa.

#### **REFERENCE :**

- 1) Charaka Samhita of Agnivesa of Vaidyamanorama Hindi commentary by Acharya Vidyadhar Shukla and Prof. Ravi Dutt Tripathi; Chaukhamba Sanskrit Pratishthan, Page no.422, 424
- 2) Sushrut Samhita by Kaviraj Ambikadatta Shastri published Chaukhambha Sanskrit Sansthan, 17<sup>th</sup> edition.
- 3) Bhava Prakash Nighantu by V.N. Kurtadkar, published by Dhanvantari Prakashan, Pune 3<sup>rd</sup> edition 1983.
- 4) Sharangdhar Samhita by Ram Acharya, published by C.B.A. Varanasi, 1<sup>st</sup> edition 2003.
- 5) Dravyaguna Vidnyan by Priyvrata Sharma, Chaukhmba Sanskrit Sansthan.
- 6) Harrison's principles of internal medicine By Kasper, Braunwald, Fauci published by McGraw Hill publication 16<sup>th</sup> edition.
- 7) API Textbook of Medicine By G.S. Sainani, published by API Publication, 16<sup>th</sup> edition.
- 8) Chemistry and Pharmacology of Indian Ayurved Medicinal Plants By Vd. Mukund Sabnis, Published by Chaukhmba Amarbharati Prakashan, 1<sup>st</sup> edition.
- 9) Methods of Biostatistics sixth edition By B.K. Mahajan.

## **Efficacy of Aampramathini Vati In The Management of Aamvata**

**Bhavana V. Ankalkote Patil, Sunanda Pedhekar (Ghare)**



Bhavana V. Ankalkote



Sunanda Pedhekar

## Efficacy of Aampramathini Vati In The Management of Aamvata

1. Dr Bhavana V. Ankalkote Patil, 2. Dr Sunanda Pedhekar (Ghare)

1. PG Scholar, Dept. of Kayachikitsa, B.V.D.U. College of Ayurved, Katraj, Pune - 411043  
Contact No. : 9011010941, Email : bvankalkote90@gmail.com

2. Asso. Prof. Dept. of Kayachikitsa, B.V.D.U. College of Ayurved, Katraj, Pune- 411043  
Contact No. : 9423241800, Email : drsunandapedhekar@gmail.com

### ABSTRACT :

This study was conducted to evaluate the Efficacy of *Aampramathini vati* in the patients suffering from *Aamvata*. 40 patients were selected as per the inclusive criteria with presenting symptoms like *Sandhivedana*, *Jwara*, *Aruchi*, *Sandhistabdhata*, *Sandhikriya alpata* etc. The study was single open clinical trial. All the patients administered *Aampramathini vati* with dosage 1gm *Vyanodan* with *Trivrut Kwath* as *anupan*. The special investigation such as Haemogram with ESR, RA factor was carried out before and after the treatment. The assessment of treatment was done on 7th, 15th, 30th day. The *aampramathini vati* showed significant relief in *lakshanas* like *Sandhivedana*, *Jwara*, *Aruchi*, *Sandhistabdhata*, *Sandhikriya alpata* etc. during / after the treatment. Statistical analysis revealed that there was significant relief of symptoms ( $P<0.05$ ) at 5% level of significance. During the study period there was no any adverse and toxic effect of drug notice by patients. The *Aampramathini vati* is effective and safe in *Aamvata*.

**Keyword :** *Aampramathini vati*, *Aamvata*.

### Introduction :

We Indian being a part of this developing world are paying our everything for competing this development of india which is one of the fastest developing nation and future super power.

The changes in life style and food habits etc. has kept on contributing a number of new diseases which have become a challenge for the human race. Similarly diseases which were not that common have become the burning problem of society as well as the medical community.

युगपत्कु पितावन्तस्त्रिकसन्धिप्रवेशकौ ।

स्तब्धं च गुरुतो गात्रमामवातः स उच्यते ।। (मा. नि. २५/५)

When aam and vata simultaneously get vitiated and enters the trika and sandhi finally leading to stabdhata(stiffness) of the body, the condition is known as Aamvata.

- A man with weak digestion i.e. mandagni if he passes a sedentary lifestyle or if he indulges into viruddha ahar and vihar e.g. excessive exercise after taking heavy and

fatty food, aam is produced and vata gets provoked by vata which circulates in the body specially towards shleshma sthana i.e. the seats of kapha. Some of the hetu can be correlated with RA.

- Rheumatoid arthritis can be defined as a chronic progressive disease with bilateral asymmetrical involvement of initially the small joints of the hands and later of the extremities. In rheumatoid arthritis various joints are inflamed leading to swelling, pain, stiffness and the possible loss of function. The inflammatory process can also occur in other parts of the body.
- Rheumatoid arthritis is common chronic disease in developed countries(1,2). The prevalence of RA in adults has been reported to vary 0.5% to 3.8% in women and from 0.15% to 1.37% in men, with peak incidence in the fourth decade of life(1,3).

#### **Need for Study**

- With this fast and exertional life style one can have a lot of physical ,mental and social problem and amavata is the disease faced by fair count of people in the society.
- Considering symptoms described in ayurvedic texts, modern science may call it as a rheumatoid arthritis and rheumatoid arthritis deals with unsatisfactory symptomatic treatment like steroids, NSAID'S, Cytotoxic drugs and surgical management so patient may have hazardous effects and complications such as severe to resolve this disease and disability completely. It is much needed to establish an effective drug acting against it.
- The drug Aampramathini vati has been selected for the study because the properties of aampramathini vati are considered as Guna-guru, Rasa-katu,tikta Veerya-ushna, Vipak- katu and vatakapha shamak which is appropriate for disease of aamvata.
- It contains the ingredients like Soral,Churna of Aak, Shuddha Gandhak, Loha bhasma, Abhrak bhasma and Swaras of aragvadh.

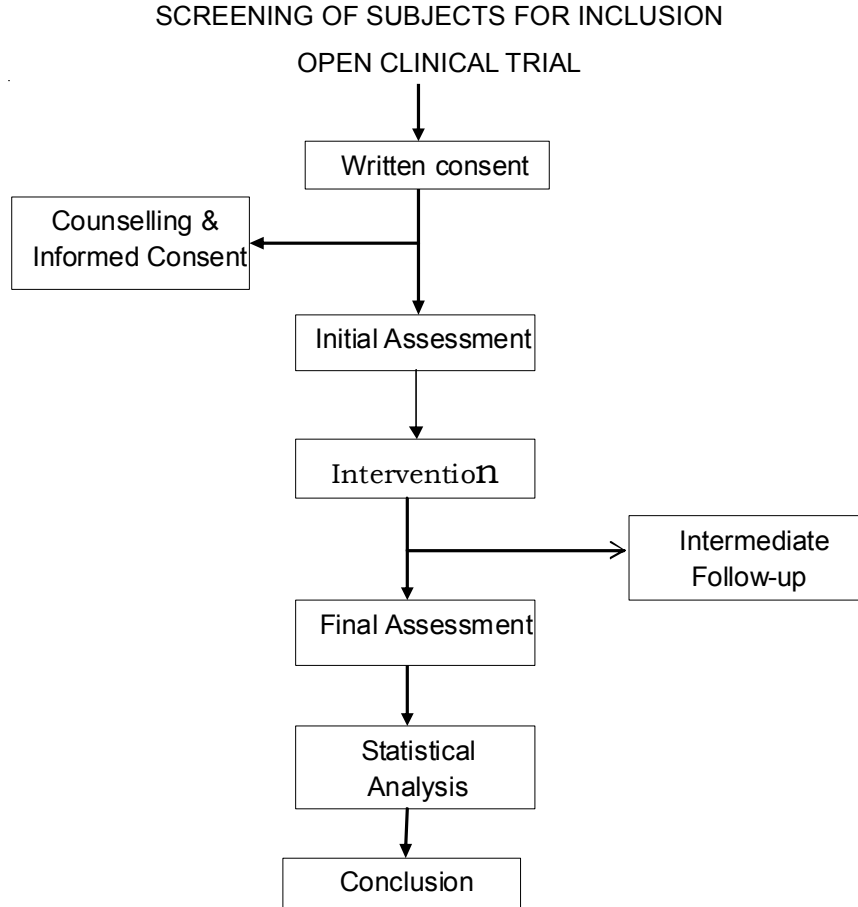
**Hypothesis** Aampramathini Vati is effective in the management of Aamvata. **Null Hypothesis** Aampramathini Vati is not effective in the management of Aamvata.

1. **Aim** - Efficacy of Aampramathini Vati in Amavata by taking clinical trials.

#### **Objectives -**

- 1) Conceptual study of Amavata.
- 2) Conceptual study of Amapramathini vati
- 3) To study adverse effect of aampramathini vati, if any.

**Study flow chart :** A clinical study.



## Disease Review

### AMAVATA

The various pattern has been adopted regarding the nomenclature of the disease in Ayurveda. Things often taken into consideration for naming the disease by and large are vitiated Doshas, involved Dushyas, Vedana, Adhithana, Avayava, Gati Marga and specific symptomsetc. Similarly Amavata has been named keeping view two predominant pathological factors viz. Ama and Vata.

आमेन सहितः वात आमवातः ।

आमश्च सहितः वात आमवातः ॥ (मा. नि. २५/४)

**Etymology of Amavata :-**

i. आमनेन सहितः वात आमवातः ।

आमश्च सहितः वात आमवातः ॥ (मा. नि. २५/४)

According to above derivation the words Ama and Vata combine to form Amavata. This brings into prominence of these two factors in the causation of Amavata.

ii. युगपत्कु पितावन्तस्त्रिकसन्धिप्रवेशकौ ।

स्तब्धं च गुरुतो गात्रमामवातः स उच्यते ॥ (मा. नि. २५/५)

It means, Vata Dosha along with Ama is termed as Amavata. It indicates the propulsion of Ama by vitiated Vata in the entire body and get lodged in Sandhithana producing Amavata.

The word Rheumatism is derived from rheumatismos (Greek) designating mucus as an evil humor which flows from brain to the joints and other portions of the body producing pain (Hollander 1967).

**Definition of Amavata :-**

When Ama and Vata simultaneously get vitiated and enters the Trika and Sandhi finally leading to stabdhata (stiffness) of the body, the condition is known as Amavata. While commenting on the word Yugpada Madhukosha and Atanka Darpana has expressed separate thoughts. According to Madhukosha Vata and Kapha vitiate Simultaneously during the pathological process of Amavata.

Hetu Aharatmaja	Viharatmaja	Manasika
		During meal intake if person is affected by
1. Abhojana	1. Viruddha cheshta	1. Kama
2. Atibhojana	2. Nishchalata	2. Krodha
3. Adhyashana	3. Diwaswapa	3. Lobha
4. Vishamashana	4. Ratrijagarana	4. Moha
5. Virudhashana	5. Vega vidharana	5. Irshya
	6. Ativyayaam	6. Bhaya
	7. Ativyavaya	7. Shoka
	8. Snigdha, Bhojnottara vyayama	8. Chinta
	9. Visham shayya shayana	9. Deenata

**PURVARUPA OF AMAVATA**

Purvarupa of Amavata is not distinctly mentioned in Ayurvedic classics, but some Avyakta Lakshana can be taken as a Purvarupa (Ch. Chi. 28/19). Hence, the following Lakshana could be considered as Purvarupa of Amavata.

**Agnimandya** : It is a result of hampered function of Agni due to consumption of Nidana.

**Apaka** : It is a due to Agnimandya because proper digestion and metabolism does not take place.

**Daurbalya** : It is a result of improper digestion of Dhatu and deprived of sufficient nourishment.

**Angamarda** : All type of nourishment of Dhatu presence a form of Ama, so body feeling ache, that is called Angamarda.

**Aruchi** : When the function of Rasanendriya is impaired by vitiated Rasa Dhatu and Bodhaka Kapha, they produced Aruchi.

**Gaurava** : It is result of vitiated Kapha and Ama which produce heaviness in the body.

**Gatestabdhata** : Guna of Ama like Picchila, Guru and Sheeta circulate in the body with the help of Vyana Vayu, it gives rise to Gatestabdhata.

### **ROOPA (Signs and symptoms)**

The nature of this substance Ama is described to be of mucoid type, which obstructs the normal passage of the tissues and vessels, leading to congestion and inflammation. Among the organs involved are all the joints (small and big), synovial or asynovial, central or peripheral.

अंगमर्दो रुचिस्तृष्णा हयालस्य गौरवं ज्वरः ।

अपाकः शूनतां गानामामवातस्य लक्षणम् ।।

मा. नि. आमवात ६ ते १०

### **The symptoms are :**

1. Sandhi stabdhata (Joint stiffness)
2. Shool (Pain)
3. Sandhishoth (Swelling)

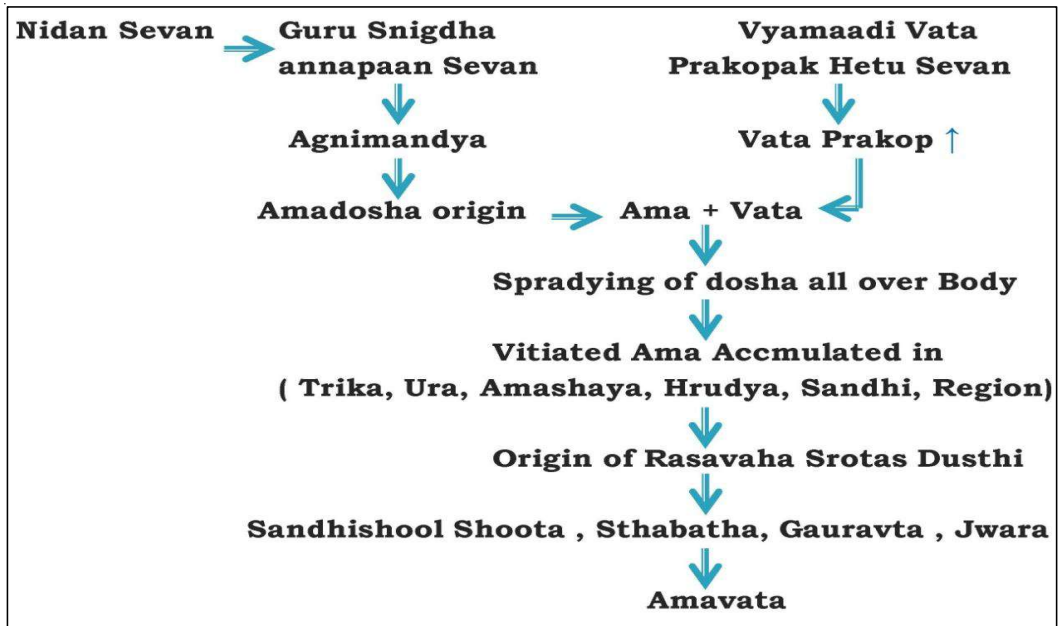
In addition, there are other systemic manifestations like

1. Kshudhamandya (Loss of appetite)
2. Praseka (Excessive salivation)
3. Trishna (Thirst)
4. Chhardi (Vomiting)
5. Malavastambha (Constipation)
6. Aadhman (Distension of abdomen)
7. Bhrama (Giddiness)
8. Hridaroga (Cardiac irregularities)



9. Lassitude
10. Daha (Burning sensation in the body)
11. Aruchi (Loss of taste)
12. Nausea
13. Antrakunjan (Gurgling)
14. Udarshool (Pain in abdomen)
15. Bahumutrata (Polyuria)
16. Murchha (Syncope)
17. Nidravipararya (Disturbed sleep)
18. Gaurav (Heaviness in body)

### SAMPRAPTI OF AMAVATA



### SAMPRAPTI GHATAKA

**Dosha** : Tridosha, mainly Vata (Vyana, Shamana, Apana) and Kapha (Kledaka, Bodhaka, Sleshmaka)

**Dhatu** : Rasa, Mansa, Asthi, Majja

**Upadhatu** : Snayu, Kandara

**Srotasa** : Annavaha, Rasavaha, Asthivaha, Majjavaha

**Srotodushti** : Sanga, Vimargagamana

**Udbhava Sthana** : Amashaya - chiefly production of Ama, Pakvashaya - Mula Sthana of Vata

**Adhithana** : Whole body

**Vyakti Sthana** : Whole body (Sandhi)

**Roga Marga** : Madhyama Roga Marga

**Avayava** : Sandhi

**Vyadhi Svabhava** : Mainly Chirakari

**Materials:**

No.	DRUGS	LATIN NAME/ ENGLISH NAME	FAMILY	PART USED
1.	SORAL	Potassium Nitrate	-	Parpati
2.	AAK	Calotropis Gigantea	Apocynaceae	Moola
3.	GANDHAK	Brimstone	-	Bhasma
4.	LOHA	Haematite	-	Bhasma
5.	ABHRAK	Mica	-	Bhasma
6.	ARAGVADH	Cassia fistula	Fabeceae	Patra

सोरकम रविमुलश्च गन्धकं लोहमभ्रक ।

पिष्ट्वा रग्वधतोयेन कुर्यान्माशामिता वटीम् ।।

त्रिवृत्क्वाथे च सा सेव्या कफामयनिदुषनी ।

आमवातप्रशनी वटिका मप्रमाथीनी ।।

भै. र. २९/९०-९९

DRUGS	RASA	VIRYA	VIPAKA	GUNA	KARMA
SORAL	Katu	Ushna	Katu	Ushna, tikshna	Deepan pachan
AAK	Katu, Tikta	Ushna	Katu	Laghu, Tikshna kaphahara	Vatahara,
GANDHAK	Madhur, Katu, Tikta, Kashaya	Ushna	Katu	Ushna, Snigdha, Sara	Dipana, Pachana, Vatahara
LOHA	Tikta, Madhur, Kashaya	Ushna	Katu	Sara, Guru, Ushna	Lekhana, Balkarak
ABHRAK	Kashaya, Madhur	Sheeta	Madhur	Snigdha	Dipan, Balya, Rasayana
ARAGVADH	Madhur	Sheeta	Madhura	Mrudu, Snigdha, Guru	Vatahara

**OVERALL PROPERTIES OF AAMPARAMATHINI VATI**

Drug	Rasa	Virya	Vipak	Guna	Karma
Aampramathini Vati	Katu Tikta	Ushna	Katu	Ushna Tikshna Guru	Vata Kapha Shamak

**PREPARATION OF DRUG :**

The trial drug i.e Aampramathini vati was prepared as per the procedure mentioned in Bhaisajya ratnavali (29/90-91) at Rasa shastra Bhaishjya kalpana Dept. (Pharmacy) of College of Ayurveda.

1. Equal parts of soral, powder of arka's plant root, shuddha gandhak, loha bhasma and abhrak bhasma were taken.
2. All these materials were pulverized into a fine powder and then resultant compound was mortar with the swaras of leaves of aragvadh for 12 hours.
3. Hence the pills were prepared and dried.

**1] TYPE OF STUDY:** a) Clinical study b) Open trial study c) Patient was observed before and after

**2] PLACE OF STUDY:** OPD/IPD of Kayachikitsa department, Bharati Vidyapeeth (Deemed TO BE) University College of Ayurveda and Hospital, Pune.

**Sample Size** - Total: 40 Patients

**Follow Up:-** Treatment is given for 30 Days duration and follow up is taken on every 7TH day, 15th day and 30th day from the commencement of treatment.

**DOSE AND SCHEDULE SCHEDULE**

	<b>DOSE</b>
NO. OF PATIENTS	40
DRUG	AAMPARAMATHINI VATI
DOSE	500mg – 2 times a day
KALA	Vyanodana
ANUPAN	Trivrit Kwath (30ml)
ROUTE OF ADMINISTRATION	Oral
TREATMENT PERIOD	30 days
FOLLOW UP	0, 7th, 15th, & 30th Days

**INCLUSION CRITERIA :-**

- Age group :- 18 to 70 years.
- Patients will be diagnosed according to Amavata lakshan.
- Patients of Either gender are included.

**EXCLUSION CRITERIA :-**

- Patient of following upadravas of arthritis,RHD,IHD,major vertebral deformity,any other arthritis,congenital abnormality
- Pregnancy, TB,Heart disease,HIV, life threatening conditions.
- Recent known case of Fracture, ligamentum tear, dislocation, osteomyelitis, tumours of bones of any joints.
- Lactating mother.
- Patients on steroid therapy.
- Patients undergone major surgery.

**WITHDRAWAL CRITERIA :-**

The Patient Will Be Withdrawn From The Trial If,

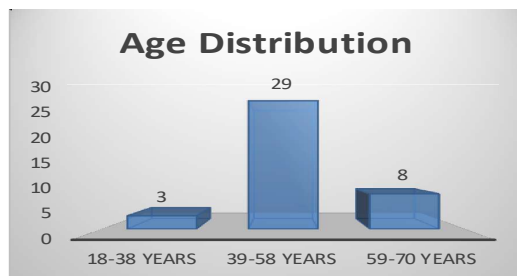
- A) Patients not obeying and not taking proper dose.
- B) Patients not coming for follow up regularly.
- C) Having any major illness while undertaking treatment. Having modern medicine with present treatment which will hamper the present treatment.

**OBSERVATIONS :**

Particulars	No of Patients
No Of Patients Enrolled	44
No Of Patients (taken complete Rx)	40
No Of Patients (Dropped Out)	04
No Of Patients (On Going)	00

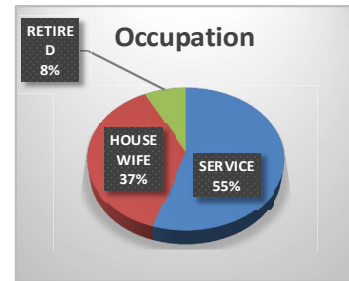
**AGE**

AGE GROUP	GROUP	
	FREQUENCY	PERCENTAGE
18-38 Years	3	7.5
39-58 Years	29	72.5
59-70 Years	8	20
<b>Total</b>	40	100



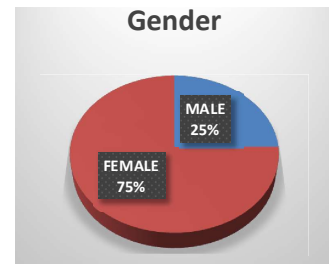
**OCCUPATION**

OCCUPATION	GROUP	
	FREQUENCY	PERCENTAGE
SERVICE	22	55
HOUSEWIFE	15	37.5
RETIRED	3	7.5
Total	40	100



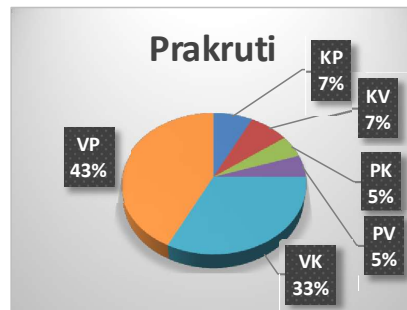
**GENDER**

GENDER	GROUP	
	FREQUENCY	PERCENTAGE
MALE	10	25
FEMALE	30	75
Total	40	100

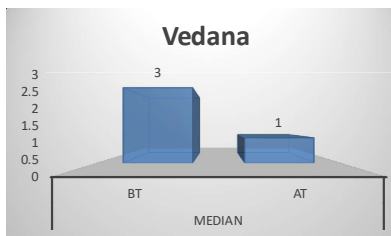


**PRAKRUTI**

Prakruti	Frequency	Percentage
KP	3	7.5
KV	3	7.5
PK	2	5
PV	2	5
VK	13	32.5
VP	17	42.5
Total	40	100



**VEDANA**

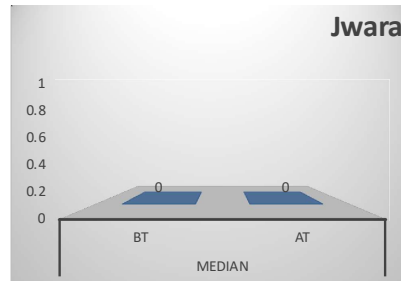


Since observations are on ordinal scale (gradation), we have used Wilcoxon Signed Rank test to test the efficacy. From above table we can observe that P-Value is less than 0.05. Hence we conclude that effect observed is significant.

Vedana	Median		Wilcoxon Signed Rank W	P-Value	% Effect	Result
	BT	AT				
	3	1	-5.684a	0.000	58.3	Significant

**JWARA**

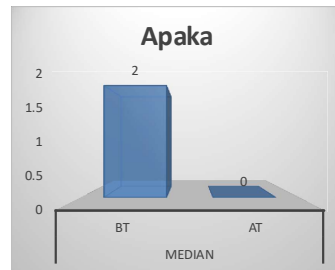
Since observations are on ordinal scale (gradation), we have used Wilcoxon Signed Rank test to test the efficacy. From above table we can observe that P-Value is less than 0.05. Hence we conclude that effect observed is significant.



jwara	Median		Wilcoxon Signed Rank W	P-Value	% Effect	Result
	BT	AT				
	0	0	-2.640a	0.008	100.0	Significant

**APAKA**

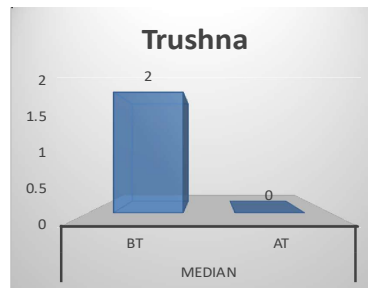
Since observations are on ordinal scale (gradation), we have used Wilcoxon Signed Rank test to test the efficacy. From above table we can observe that P-Value is less than 0.05. Hence we conclude that effect observed is significant.



Apaka	Median		Wilcoxon Signed Rank W	P-Value	% Effect	Result
	BT	AT				
	2	0	-5.421a	0.000	100.0	Significant

**TRUSHNA**

Since observations are on ordinal scale (gradation), we have used Wilcoxon Signed Rank test to test the efficacy. From above table we can observe that P-Value is less than 0.05. Hence we conclude that effect observed is significant.



Trushna	Median		Wilcoxon Signed Rank W	P-Value	% Effect	Result
	BT	AT				
	2	0	-5.930a	0.000	94.8	Significant

**ALASYA**

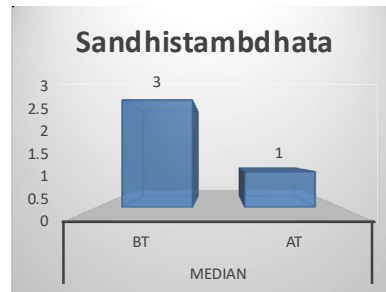
Since observations are on ordinal scale (gradation), we have used Wilcoxon Signed Rank test to test the efficacy. From above table we can observe that P-Value is less than 0.05. Hence we conclude that effect observed is significant.



Alasya	Median		Wilcoxon Signed Rank W	P-Value	% Effect	Result
	BT	AT				
	2	0	-5.609a	0.000	94.7	Significant

**SANDHISTABHDHATA**

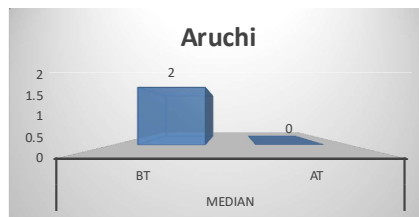
Since observations are on ordinal scale (gradation), we have used Wilcoxon Signed Rank test to test the efficacy. From above table we can observe that P-Value is less than 0.05. Hence we conclude that effect observed is significant.



Sandhistambdhata	Median		Wilcoxon Signed Rank W	P-Value	% Effect	Result
	BT	AT				
	3	1	-5.622a	0.000	58.1	Significant

**ARUCHI**

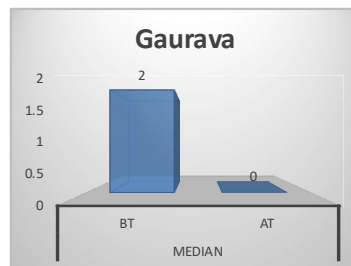
Since observations are on ordinal scale (gradation), we have used Wilcoxon Signed Rank test to test the efficacy. From above table we can observe that P-Value is less than 0.05. Hence we conclude that effect observed is significant.



Aruchi	Median		Wilcoxon Signed Rank W	P-Value	% Effect	Result
	BT	AT				
	2	0	-6.070a	0.000	98.7	Significant

**GAURAVA**

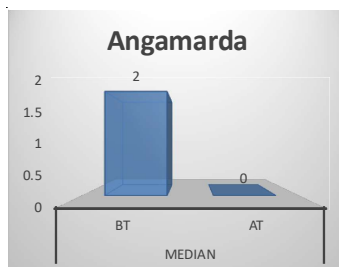
Since observations are on ordinal scale (gradation), we have used Wilcoxon Signed Rank test to test the efficacy. From above table we can observe that P-Value is less than 0.05. Hence we conclude that effect observed is significant.



Gaurava	Median		Wilcoxon Signed Rank W	P-Value	% Effect	Result
	BT	AT				
	2	0	-6.070a	0.000	98.7	Significant

**ANGAMARDA**

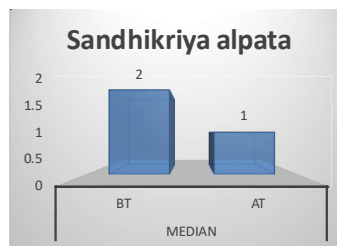
Since observations are on ordinal scale (gradation), we have used Wilcoxon Signed Rank test to test the efficacy. From above table we can observe that P-Value is less than 0.05. Hence we conclude that effect observed is significant.



Angamarda	Median		Wilcoxon Signed Rank W	P-Value	% Effect	Result
	BT	AT				
	2	0	-5.988a	0.000	98.7	Significant

**SANDHIKRIYA ALPATA**

Since observations are on ordinal scale (gradation), we have used Wilcoxon Signed Rank test to test the efficacy. From above table we can observe that P-Value is less than 0.05. Hence we conclude that effect observed is significant.

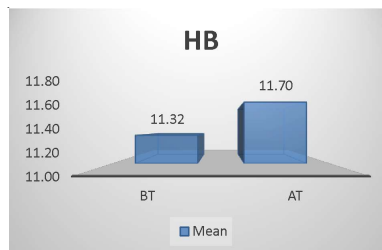


Sandhikriya alpata	Median		Wilcoxon Signed Rank W	P-Value	% Effect	Result
	BT	AT				
	2	1	-5.706a	0.000	59.6	Significant



**HB%**

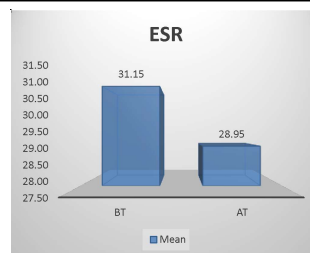
Since observations are quantitative and sample size is greater than 30. We have used Z-test to test efficacy. From above table we can observe that P-Value is less than 0.05. Hence we conclude that effect observed is significant.



HB	Mean	N	SD	SE	Z-Value	P-Value	% Change	Result
BT	11.32	40	1.99	0.31	-7.819	0.000	3.4	Sig
AT	11.70	40	1.90	0.30				

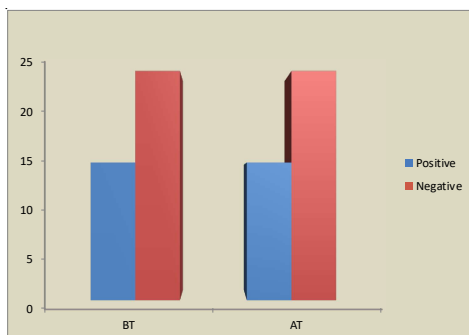
**ESR**

Since observations are quantitative and sample size is greater than 30. We have used Z-test to test efficacy. From above table we can observe that P-Value is less than 0.05. Hence we conclude that effect observed is significant.



ESR	Mean	N	SD	SE	Z-Value	P-Value	% Change	Result
BT	31.15	40	4.29	0.68	-9.452	0.000	7.1	Sig
AT	28.95	40	4.11	0.65				

**RA FACTOR**



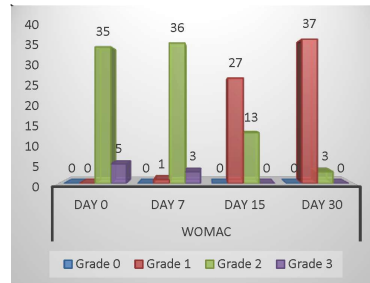
RA Factor	BT	AT
Positive	15	15
Negative	25	25
Total	40	40

Since observations are on nominal scale with binary outcome (Positive/Negative). We have used McNemar's test to test the significance. From above table we can observe that P-Value is greater than 0.05. Hence we conclude that there is no significant change observed.

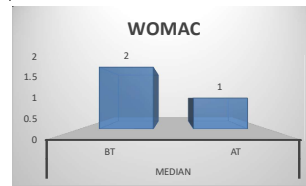
	Value	P-Value
McNemar Test	0.000	1.000a
N	40	

**WOMAC SCALE**

	WOMAC			
	Day 0	Day 7	Day 15	Day 30
Grade 0	0	0	0	0
Grade 1	0	1	27	37
Grade 2	35	36	13	3
Grade 3	5	3	0	0
TOTAL	40	40	40	40



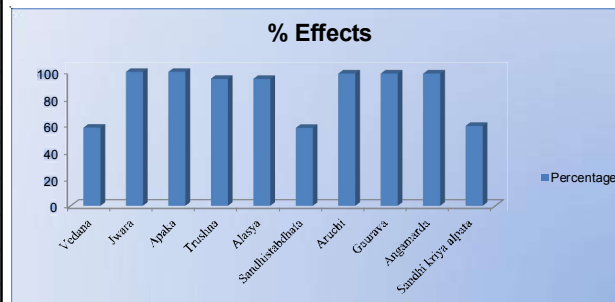
Since observations are on ordinal scale (gradation), we have used Wilcoxon Signed Rank test to test the efficacy. From above table we can observe that P-Value is less than 0.05. Hence we conclude that effect observed is significant.



WOMAC	Median		Wilcoxon Signed Rank W	P-Value	% Effect	Result
	BT	AT				
	2	1	-6.044a	0.000	49.4	Significant

**PERCENTAGE EFFECTS OF ALL SYMPTOMS**

Symptoms	Percentage
Vedana	58.3
Jwara	100.0
Apaka	100.0
Trushna	94.8
Alasya	94.7
Sandhistabdhatata	58.1
Aruchi	98.7
Gaurava	98.7
Angamarda	98.7
Sandhi kriya alpata	59.6



**DISCUSSION :****❖ On the basis of demographic data****1) Age :-**

Most of the people belong to the age group 39-58yrs(72.5%) and rest belong to 59-70yrs (20%) and 18-38yrs (7.5%) .The cause for the age group 39-58yrs is due to aamotpadak hetu.

**2) Gender :-**

Out of 40 patients, 10 (25%) are males and 30 (70%) are females. Reason behind females more in no. is due to viruddha ahar sevan , abhishyandi ahar which ultimately turns into aam production.

**3) Occupation :-**

Out of 40 patients 22(55%) are employed, 15(37.5%) and 3(7.5%) are retired.

**4) Prakruti :-**

76% patients have vata kapha pradhan prakruti.

**❖ On the basis of subjective criteria:-****1. Vedana :**

❖ According to Wilcoxon's sign rank test Aampramathini vati is statistically significant (58.3%) in Vedana.

❖ The lakshana is reduced due to Ushna, snigdha, Vataghna properties of Aampramathini vati.

**2. Jwara :**

❖ According to Wilcoxon's sign rank test Aampramathini vati is statistically significant (100%) in Jwara.

❖ The jwara lakshana is reduced due to deepan, pachan properties of Soral, Gandhak bhasma and Abhrak bhasma which does the pachan of aam which ultimately reduces the Jwara.

**3. Apaka :**

❖ On observation the effect observed is 100% which is significant.

❖ The symptom decreased due to deepan, pachan properties of Aampramathini vati.

**4. Trushna :**

❖ On observation the effect observed is 94.8 % which is significant.

- ❖ The symptom reduced as Aampramathini vati has snigdha and guru guna, Madhur vipak and vatakaphaghna properties.

**5. Alasya :**

- ❖ According to Wilcoxon's sign rank test Aampramathini vati is statistically significant (94.7 %) in Alasya.
- ❖ The symptom reduced due to ushna guna and deepan, pachan karma of Aampramathini vati.

**6. Sandhisathabdhatta :**

- ❖ According to Wilcoxon's sign rank test Aampramathini vati is statistically significant (58.1%) in Sandhisathabdhatta.
- ❖ The symptom decreased due to Ushna Tikshna, snigdha guna and mainly shothahara property of gandhak which reduces the shotha which ultimately reduces the sathabdhatta of sandhi, ushna virya and deepan pachan karma of Aampramathini vati.

**7. Aruchi:**

- ❖ According to Wilcoxon's sign rank test Aampramathini vati is statistically significant (98.7%) in Aruchi.
- ❖ The symptoms reduced due to Katu, tikta rasa, pachan karma and tridoshahara properties of Aampramathini vati.

**8. Gaurav :**

- ❖ On observation the effect observed is 98.7% which is significant.
- ❖ The symptom reduced as Aampramathini vati has ushna tikshna guna, deepan pachan karma and vatkapha shamak properties.

**9. Angamarda:**

- ❖ According to Wilcoxon's sign rank test Aampramathini vati is statistically significant (98.7%) in Angamarda.
- ❖ The symptom decreased due to Ushna Tikshna guna, ushna virya and vatakaphaghna properties of Aampramathini vati.

**10. Sandhikriya alpata:**

- ❖ According to Wilcoxon's sign rank test Aampramathini vati is statistically significant (59.6%) in Sandhikriya alpata.
- ❖ The symptom decreased due to Ushna Tikshna guna, deepan pachan karma and vatakaphahara properties of Aampramathini vati.

**On the basis of objective criteria:-****1) Haemogram :**

- ❖ According to the Z-test the effect observed is significant, specifically significant in Hb. There is increase in Hb level of patients as the drug contains the loha bhasma which has rakta vardhan and balakarak properties.

**2) ESR :**

- ❖ According to Z-test the effect observed is significant. The ESR shows reduction in its values as the drug consists of ghandhak bhasma which acts as anti-inflammatory i.e shothahara which reduces the shotha on sandhis which ultimately shows the reduction in ESR and loha bhasma which is balakarak which provide bala to sandhis and abhrak bhasma which consists the properties like deepan pachan and rasayan.

**3) RA Factor :**

- ❖ According to McNemar's test there is no significant change observed in RA Factor.

**RESULT :**

- ❖ The symptoms like Jwara, Apaka, Trushna, Aruchi, Alasya. Angamarda, Gaurav are highly significantly reduced.
- ❖ The rest symptoms like Vedana, Sandhishabdhatata and Sandhi kriya alpata are significantly reduced.
- ❖ The objective criteria i.e Haemogram specifically Hb is increased and ESR shows significant reduction and there is no significant change observed in RA factor.
- ❖ In all symptoms the P value is less than 0.05.
- ❖ The efficacy of Aampramathini vati is found to be effective in reducing the symptoms of Aamvata.
- ❖ No any adverse and toxic effect of the drug was observed.

**Mode of action of drug :**

- ❖ The drug Aampramathini vati selected for the trial mainly consists of katu-tikta-kashaya rasa, ruksha ushna tikshna guna, ushna virya and madhura vipak. this katu rasa, ruksha guna, ushna virya helps to normalize the function of agni and, that in turn helps in aampachan. This pradipta agni normalize the vitiated shleshmak kapha at the sandhi sthana, which in turn normalize the vitiated doshas and dushyas.
- ❖ In this study, it is clear that the ingredients of aampramathini vati are chosen in such a way that, they have in common vatashamak and aampachak properties katu-tikta-kashaya rasa and ushna virya (aampachan & vatashamak) and madhura vipak.

- ❖ With this explanation , it is clear that samprapti bhanga of aamvata is achieved by a sum total effect of all the ingredients of Aampramathini vati. Now it is said that Aampramathini vati is useful in samprapti bhanga in Aamvata by maintaining normal state of involved doshas and dushyas in Aamvata.

**CONCLUSION :**

- ❖ Hence, it can be concluded that the Efficacy of Aampramathini vati with Trivrut kwath as anupan is significantly effective in the management of Aamvata.
- ❖ Hence the drug can be used for primarily reducing the lakshanas of Aamvata.
- ❖ In this study, no any adverse effect and toxicity of the drug occurred during the treatment.

## **Efficacy of Rasayan Choorna in Chronic Renal Failure with special reference to Mootraghat**

Dr. E. G. Kulkarni Dr. Deodatt Chafekar Dr. Supriya Vetkoli



Ek Nath G. Kulkarni



Deodatta Chafekar



Supriya Vetkoli

## **Efficacy of Rasayan Choorna in Chronic Renal Failure with Wpecial Reference to Mootraghat**

Dr. E. G. Kulkarni, Associate Professor

Ayurved Seva Sangha's Ayurved Mahavidyalaya, Ganeshwadi Panchavati, Nashik

Dr. Deodatt Chafekar, Hon. Nephrologist. Aarogyashala Hospital, Nashik

Dr. Supriya Vetkoli, Medical officer

Corresponding author email : ekulkarni6@gmail.com

### **ABSTRACT :**

Clinical study was done in Arogyashala Hospital, A.S.S. Ayurved mahavidyalaya, Nashik to study the the efficacy of Rasayan Churna in Chronic Renal failure with special reference to Mootraghat. Total 120 patients were studied deviding in 4 groups . Rasayan Choorna a mixture of Guduchi (*Tinospora cordifolia*), Gokshur(*Tribulus terrestris*), & Amalaki (*Emblica officinalis*), when given to the patients of Chronic Renal Failure showed significant results in treating the symptoms of uraemia like shwas (dyspnoea), hrullas (nausea) , Daurbalya (weakness) & shofa (oedema) when verified by Chi square test at P = 0.05. It has significantly increased urine output in the study group when verified by paired t test at P = 0.05.

**Key words:** Chronic Renal Failure, Mootraghat, Rasayan choorna

### **Introduction ;**

Rasayan therapy of Ayurveda essentially refers to the process of tissue nourishment & rejuvenation . The Rasayana retards ageing & prolongs life . The Rasayana remedies encompass a range of drugs , diets & lifestyle interventions which promote nutritional status of the body & results into formation of good qualities of dhatu.

According to the way of consumption , Rasayana is of two types , 'Kutipravesika' (which is consumed away from society by entering into a specialized hut called 'kuti') & 'Vatatapika' which can be consumed while doing day to day activities.

Chakrapani has defined Mootrghata . By this definition we have considered chronic renal failure (CRF) as one of the types of mootraghata .

In this study Rasayan Choorna , was given to the patients of CRF in 'Vatatapika' way for 90 days & the effects were observed.

### **Materials & Methods :**

Rasayan Choorna i.e. a homogeneous mixture of Guduchi kanda choorna ( fine powder of dried stem of *Tinospora cordifolia* ) , Gokshura fala choorna ( fine powder of dried fruit of *Tribulus terrestris* ) & Amalaki fala choorna (fine powder of dried fruit of *Emblica officinalis*) was selected as a study drug.



60 patients CRF who do not require haemodialysis (CKD stages 2, 3, 4) & 60 patients of CRF who are on maintenance haemodialysis were selected randomly according to inclusive & exclusion criteria.

**Inclusive criteria :**

- 1) Age : 16-70 yrs
- 2) Patients with signs and symptoms of CRF.

**Exclusion criteria :**

- 1) Acute renal failure
- 2) Known patients of renal artery stenosis, urinary tract carcinoma.
- 3) Urinary tract obstruction due to any cause requiring surgical intervention.
- 4) Uraemic coma

**The 60 patients in each category were divided in two groups.**

Therefore the 4 study groups were -

- Group A : 30 patients only on allopathic conservative treatment.
- Group B : 30 patients on allopathic conservative treatment + Rasayan Choorna.
- Group C : 30 patients on maintenance haemodialysis.
- Group D : 30 patients on maintenance haemodialysis+Rasayan Choorna.
- For the clinical study a special case record proforma was prepared.
- Case details including complete clinical examination & follow up visits were documented.
- The patients were informed about the clinical study & written consent of every patient was taken who participated in this study.

**ADMINISTRATION OF RASAYAN CHOORNA :**

3 gm of Rasayan choorna was advised to take orally with potable water(12 ml) just before lunch & dinner for 90 days.

Follow up – After every 15 days

Dietary restriction – Advised renal diet

Place of study : Department of Kayachikitsa, A. S. S. Ayurved Mahavidyalaya, Nashik.

**Criteria for assessment of results :****A) Subjective criteria :**

Subjective criteria	Symptom	Score
1. Shwas (Dyspnoea)	- Absence of breathlessness	0
	- Breathlessness after heavy work	1
	- Breathlessness after routine work	2
	Always breathless	3
2. Hrullas (Nausea)	Absent	0
	Mild / Occasional	1
	Nausea after food	2
	Severe / Constant	3
3. Shofa (Oedema)	No edema at all	0
	Mild edema of face	1
	Moderate edema on face & legs	2
	Severe all over body	3
4. Chhardi (Vomitting)	Absent	0
	Occasional	1
	Vomitting after food	2
	Severe / Constant	3
5. Panduta (Pallor)	No pallor	0
	Mild pallor	1
	Moderate pallor	2
	Severe pallor	3
6. Kandu (Pruritus)	No itching at all	0
	Occasional itching	1
	Itching in day time only	2
	Itching at day and night both	3
7. Daurbalya (Weakness)	Absence of weakness	0
	Weakness after heavy work	1
	Tired after routine work	2
	Always tired	3

**B) Objective criteria :**

- 1) Hb%                              4) Sr.Electrolytes  
 2) Sr.Creatinine                5) Urine output  
 3) BUL

Comparison of rating scale results of this therapeutic study were considered as follows :

- 1) Complete cure : Grade 3 to Grade 0  
 2) Moderate cure : Grade 3 to Grade 1 , Grade 2 to Grade 0  
 3) Mild cure : Grade 3 to Grade 2 , Grade 2 to Grade 1 ,  
                                 Grade1 to Grade 0.  
 4) Uncured : No change.

**Drop out :** Those patients who left the treatment before advised duration or who did not follow the instructions were considered as Drop out.

**Observations & Results :**

In this clinical study, total population is divided in two categories

- 1) Those not on haemodialysis, 2) On haemodialysis

For Qualitative data, comparison within each category is done statistically i.e. Group A is compared to Group B & Group C is compared with Group D , by applying Chi-square test for P= 0.05

**Distribution according to cure of symptoms :****1) Shwas (Dyspnoea) :**

Group	Uncured	Mild cure	Moderatecure	Completecure	Chi –square	P	Significance
A	14	5	0	0	22.16	0.05	significant
B	0	10	9	0			
C	16	6	5	0	10.514	0.05	significant
D	5	13	8	3			

**2) Hrullas (Nausea) :**

Group	Uncured	Mild cure	Moderatecure	Completecure	Chi –square	P	significance
A	12	5	3	0	17.14	0.05	significant
B	0	13	5	2			
C	4	7	4	1	8.569	0.05	significant
D	5	15	10	0			

**3) Panduta (Pallor) :**

Group	Uncured	Mild cure	Moderatecure	Completecure	Chi –square	P	Significance
A	20	4	2	0	1.208	0.05	Not significant
B	17	9	1	0			
C	23	5	1	0	0.289	0.05	Not significant
D	22	5	3	0			

**4) Daurbalya (Weakness) :**

Group	Uncured	Mild cure	Moderatecure	Completecure	Chi –square	P	Significance
A	16	10	0	0	20.35	0.05	significant
B	1	16	10	0			
C	18	11	1	0	11.32	0.05	significant
D	5	13	11	0			

**5) Shofa (oedema) :**

Group	Uncured	Mild cure	Moderatecure	Completecure	Chi –square	P	Significance
A	5	3	1	0	7.43	0.05	significant
B	0	8	6	1			
C	13	7	5	0	6.41	0.05	significant
D	5	13	7	2			

**6) Chhardi (Vomitting) :**

Group	Uncured	Mild cure	Moderatecure	Completecure	Chi –square	P	Significance
A	3	4	4	0	1.95	0.05	Not significant
B	0	9	4	0			
C	12	8	3	1	2.49	0.05	Not significant
D	8	17	3	0			

**7) Kandui (Itching) :**

Group	Uncured	Mild cure	Moderatecure	Completecure	Chi –square	P	Significance
A	3	3	0	0	0.291	0.05	Not significant
B	4	3	1	0			
C	6	9	2	0	0.16	0.05	Not significant
D	8	8	3	0			

Among the objective criteria Rasayan choorna has shown significant rise in the urine output of the study group when tested by paired t test.

#### Urine output :

Gr.	N	"x	Mean Diff	"(x-mean x) <sup>2</sup>	S.D.	S.E.	t cal	t <sub>29</sub>	P	Significance
A	30	99.99	3.33	959657.21	181.91	33.25	0.1	2.05	0.05	Not significant
B	30	3099.9	103.33	319666.67	104.99	19.193	5.38	2.05	0.05	significant
C	30	870	29	704420	155.85	28.49	1.017	2.05	0.05	Not significant
D	30	1555	51.83	145324.17	70.78	12.94	4.005	2.05	0.05	significant

#### Discussion :

- On applying Chi-square test to cure for each symptom , it was observed that Rasayan choorna shows significant result in treating shwas (dyspnoea) , hrullas (nausea), daurbalya (weakness), shofa (oedema) in both groups i.e. on maintenance haemodialysis & those only on allopathic conservative management as compared with the two groups without Rasayan choorna.
- On applying paired t test to objective criteria ,it was observed that Hb% , BUL, Sr. Creatinine, Sr. electrolytes showed insignificant change ; while urine output in patients with & without haemodialysis showed significant change. The urine output increased significantly by administration of Rasayan Choorna.
- The results might be improved when Rasayan choorna is used after appropriate shodhana by panchakarma & used for longer time with anupana like honey & cow ghee.

#### Probable Mode of Action of Rasayan Choorna :

Among the three constituents of Rasayan Choorna , Gokshura is Snigdha, Madhur, Guru, Vatashamak, Shothhara, Mootra-virechana, Basti shodhana & balya to Prana Vayu ; so is responsible for increased urine output, decrease in shofa (oedema), decrease in shwas (Dyspnoea), & Balavardhana (increased body strength).

Guduchi is Tikta, Ushna, Rasayana, Dhatu shodhana ; Amalaki is having 5 Rasa except lavana, it is Ruchikar , Pittashamaka & Rasayana. Together they are responsible for Agni deepan & aam pachan which decrease hrullas & chhardi, improve appetite & decrease daurbalya (weakness).

#### Conclusion :

Rasayan choorna is significantly effective in treating the symptoms of uraemia like shwas (dyspnea) , hrullas (nausea), daurbalya (weakness), & shofa (oedema). It also increases the urine output as compared with the previous urine output before starting the treatment.

So, Rasayan choorna is effective as a supportive medicine in the patients of chronic renal failure with & without haemodialysis within the limitations of this study.

**Acknowledgement :**

We are sincerely thankful to

Prof. Dr. R. B. Kulkarni, H.O.D. Dept. of Kayachikitsa  
& Principal, A.S.S. Ayurved Mahavidyalaya , Nashik.

for their kind help, guidance & support.

**References:**

- 1) Charak Samhita with Savimarsh Vidyotini commentary; Pt.Kashinath Pandeya, Dr. Gorakhnath Chaturvedi; Chaukhambha Bharati Academy; 9th; 2001.
- 2) Sarth Vagbhat; Dr.Ganesh Krushna Garde;Anmol Prakashan; 1st; 2008.
- 3) Sharangdhar Samhita with Dipika & Gudhartha Dipika Commentary Pt.Parsuram Shastri Vidyasagar; Krishnadas Academy; 1st; 1983.
- 4) Dravyaguna Vidnyan; V.M.Gogate; Pimpalpure & Publishers; 2nd; 1997.
- 5) Bhavprakash; Shri Harihar Prasad Pande; Chaukhambha Sanskrit Sansthan; 5th; 1993.
- 6) Astanga Hridayam with commentaries(sarvanga- sundara) of Arunadatta & (Ayurved Rasayana) of Hemadri; Dr. Anna Moreshwar kunte, Krsna Ramchandra Sastri Navare; Chaukhamba Orientalia; 8th; 1998.
- 7) Davidson's Principles & Practice of medicine; Edited by Nicholas A Boon, Nick R.College, Brian R.Walker, John A.A. Hunter, Churchill, Livingstone; Elsevier; 20th;2006.
- 8) Ayurvediya Aushadhi; Vd.P.Y.Khadiwale;Vaidyak Grantha Bhandar.
- 9) Methods in Biostatistics; Dr.B.K.Mahajan;Jaypee Brothers Medical Publisher;7th; 2010.
- 10) Harrison's Principles of Internal Medicine; Edited by Kasper, Braunwald, Fauci, Hauser, Longo, Jameson; McGraw Hill Publication; 16<sup>th</sup>; 2005.
- 11) API Textbook of Medicine; Dr.Siddharth N.Shah;The Association of Physicians of India;8<sup>th</sup>;2009.
- 12) Dravyagun Vidnyan ; Dr.A.P.Deshpande, Dr.R.R.Javalgekar, Dr.Subhash Ranade; Anmol Prakashan; 5<sup>th</sup>; 2000.
- 13) Dravyagun Vidnyan; P.V.Sharma;chaukhambha Bharati Academy; Reprint 2006.
- 14) The Charakasamhita of Agnivesha, Revised by Charaka & Dridhabala with the Ayurved Dipika Commentary of Charakapanidatta, Edited by vaidya Jadavaji Trikamaji Acharya, Munshiram Manoharlal publishers Pvt. Ltd,4<sup>th</sup>,1981.

## **Review Of Samsrishta Dosha Lakshanas**



Sameer Joshi

## Review Of Samsrishta Dosha Lakshanas

**Dr. Sameer Joshi**

Asst. Professor, Dept. of Sanskrit Samhita Siddhant,  
Gomantak Ayurveda Mahavidyalaya & Research Centre, Shiroda,  
Goa - 403103

E-mail : dr.sameerjoshi@hotmail.com

Contact : 9923111910

**Abstract** : Lakshanas manifested in a disease plays a crucial role in the Diagnosis of the disease. In Samsrishta Avastha of Doshas sometimes Doshas manifests their Lakshanas individually, but in some cases the combined Lakshanas or peculiar Lakshanas are manifested. Also, as a result of the combination of the etiological factors of the two Doshas, the signs & symptoms of two Doshas each are manifested.

**Keywords** : Samsrishta Dosha, Samsrishta Dosha Lakshanas

**Introduction** : Lakshanas manifested in a disease plays a crucial role in the Diagnosis of the disease. In Samsrishta Avastha of Doshas sometimes Doshas manifests their Lakshanas individually, but in some cases the combined Lakshanas or peculiar Lakshanas are manifested.

Also, as a result of the combination of the etiological factors of the two Doshas, the signs & symptoms of two Doshas each are manifested.

Samsrishta Dosha Lakshana are studied in four aspects.

- 1) Lakshanas of Vata – Pittaj Samsrishta
- 2) Lakshanas of Vata – Kaphaj Samsrishta
- 3) Lakshanas of Pitta - Kaphaj Samsrishta
- 4) Dvulbana Sannipata – Subdivided into...
  - i) Lakshanas of Vata – Pittaj Dvulbana Sannipata
  - ii) Lakshanas of Vata – Kaphaj Dvulbana Sannipata
  - iii) Lakshanas of Pittaj – Kaphaj Dvulbana Sannipata

### **VATA – PITTA LAKSHANA -**

Vata-Pittaj Jvara is characterized by various signs and symptoms like headache, stabbing pain in fingers & toes, burning sensation, horripilation, dryness in throat and mouth, thirst, fainting, Giddiness, anorexia, sleeplessness, talkativeness and Yawning. (1)

In the above verse, the signs and symptoms of Raktapitta which are manifested due to



association of Vata dosha are described. When it is associated with Vata it become Shyava, Aruna, foamy, thin and ununctuous. **(2)**

Kaksa is the disease caused by Pitta & Vata. It is characterized by large number of eruptions appearing linearly, mimicking of Yajnopavita. **(3)**

Aggravated Vata & Pitta causes Vrana in nasa by vitiating Nasal skin. This gets suppured later producing Nasarunsi. **(4)**

During an intercourse, if a Pitta Prakruti women suppresses the urges of sneezing and eructation, then the Vata mingled with Pitta leads to the vitiation of Yoni. This causes Oedema, tenderness, and pain in Yoin, along with that bluish &

Yellowish blood discharge through Yoni. Along with these symptoms, the associated symptoms are Pain in the waist, groin & back. **(5)**

In this verse the manifestation of Vamini Yoni Vyapada is explained. If the deposited Sukra is excreted out of the Yoni with or without pain after six days or seven nights, hen the ailment is termed as Vamini. **(6)**

Vata, in association with Pitta, dries up the Urine which results in painful voiding of red and yellow coloured urine. It is also associated with Pain & burning sensation in the bladder & phallus. This ailment is termed as "Ushna-Vata". **(7)**

When either Vata, Pitta or Kapha or both Pitta & Kapha in the bladder get condensed, then the patient voids urine which is either red or yellow, thick in consistency associated with burning sensation. **(8)**

A patient may void white & dense urine & may be associated with all the signs related to Tridoshas. The ailment is termed as Mutraukasada.

Mutrauksada is of three types cause by Vata & Kapha or by Vata & Pitta or by all three Doshas.

#### **DVULBANA SANNIPATA : VATA – PITTA**

Tritiyaka Jvara is of three types. When this Tritiyaka Jvara is manifested by the aggravation of Vata & Pitta dosha it afflicts the head. **(9)**

Rhrushyajihvha type is Kushtha is characterised by following signs & symptoms. It is rough & painful. It has red margins or edges & it is brown inside. It resembles to the tongue of rasya. **(10)**

In this verse the signs & symptoms of Agni Visarpa are explained. It is caused due to vitiation of Vata & Pitta Doshas. **(11)**

In Vata – Pittaj conditions some times the involved dosha manifest their independent Lakshanas like;

- Shula due to Vata Dosha
- Murcha due to Pitta Dosha etc.

But with the combined action of these two Doshas some Peculiar Lakshanas are manifested, some of them are mentioned below –

1) Trushna –

It is one peculiar Lakshana observed in Vata-Pittaja conditions while explaining the Samprapti of Trushna Vyadhi Carakacarya mentions that Vata & Pitta are the inevitable cause for the Utpatii of Trushna.

The excessively aggravated Vata & Pitta causes Shoshana of Apyansha which result is Trushna.

Vata with its Ruksha, Khara & Vishad Guna, Pitta with its Ushna, Tikshna guna participates in the Samprapti.

Trushna is observed in the Vata-Pittaj conditions of diseases like Jvara, Visarpa, Ushna-Vata etc.

2) Shosha is another peculiar Lakshana observed in Vata-Pittaj conditions. It is caused due to Ruksha, Khara Guna of Vata & Ushna Guna of Pitta.

Sosha is mentioned as Karma 8 Vata by Vagbhatacarya Sosha is observed in Jvara, Visarpa, Ushna – Vata etc.

3) One specific condition has been observed in Nasarun.i Vyadhi, where Vranotpatti occurs in Nasa damaging Nasal mucosa & skin. Vata Dosha with its Khara, Ruksha guna & Pitta with its Tikshna Guna participates in the pathogenesis.

4) Bhrama –

Bhrama is also one of the peculiar Lakshana observed in Vata-Pittaj Samsrishta.

### **VATA – KAPHA LAKSHANAS**

Whenever Vata-Kapha are involved in the production of the disease, the individual, excessively desires to have warm things because both the involed Doshas have common Sita attributes. **(12)**

In Vata Kaphaj Jvara various Lakshanas are presented. The individual experiences cold, heaviness, drowsiness, Staimitya – which is explained by Acarya Cakrapani as, the feeling as if wrapped in or with a wet cloth. Pain in fingers & toes, Sirograha, coryza, Kasa, moderate rise in the body temperature. **(13)**

Svedapravartanam – which means absence of sweating according to Acarya Cakrapani but it has been explained as Vik.tivi.amsamavaya by Acarya Gangadhara & adhukosakara by mentioning it as – “Excessive Sweating”.

A patient presents with a painless, hard, elongated swelling in the inguinal & axillary regions associated with fever. This condition is termed as Vidarika, & it is manifested due to the vitiation of Kapha & Vata Doshas. **(14)**

The disease Nasa Sosha occurs when the aggravated Vata causes Sosha of Nasagata Kapha & also causes Sosha of Shringataka marma which is responsible for the loss of smell senses. **(15)**

The aggravated Kapha and Vata causes obstruction in the channel through which expiration occurs. **(16)**

The Apinasa disease is presented with different symptoms & signs like obstruction, dryness, glueyness & fuming sensation in the nose, also patient develops inability to recognize the taste as well as smell. It is caused by aggravated Vata and Kapha. It also shares the signs & symptoms of Pratishyaya. **(17)**

The disease Grudhrasi is of two types, Vataj & Vata-Kaphaj. If the Grudhrasi is caused by aggravated Vata, the afflictions starts from hip causing stiffness, pain, pricking sensation in the waist, back, thigh, knee and calf region. Along with that these organs get twitching sensation frequently. But if the ailment is caused by the aggravation of Vata & Kapha together then the patient suffers from drowsiness, heaviness & anorexia along with other symptoms. **(18)**

In this verse the ailment termed as Upapluta has been explained. If a pregnant woman indulges in Kapha aggravating regimens & suppresses the manifested urges for vomiting & deep breathing, aggravates the Vata. This aggravated Vata motivates Kapha dosha to reach Yoni, which causes white and Yellowish discharge along with the pain through the Yoni. This ailment in which genital tract of women is pervaded with the morbidities is caused by aggravated Vata & Kapha. **(19)**

In these above verses, the ailment termed as Ardhavabhedaka has been explained. The aggravated Vata in an individual due to excessive intake of Ruksha, Ati and Adhyashana Ahara, if exposed to Purvavata, fog, indulges in excessive sex, suppresses manifested natural urges, fatigue and physical work causes aggravation of Vata alone or in association with Kapha causes seizure of half of the head there by causing excruciating pain in the sternomastoid region, eye-brows, temples, ear, eyes & forehead of the half side. The patient experiences excruciating pain as if caused by the injury of a weapon or Ara. i.e. by the fire itself. **(20)**

Premature straining of a pregnant woman to expel the foetus leads to the obstruction of Vata in the Yoni by foetus. Being afflicted with Kapha & rakta, this aggravated Vata gives rise to nodular growths in the Yoni, which causes obstruction to the course of blood flow. This ailment is termed as KARNINI. **(21)**

**SANNIPATA: VATA – KAPHA**

Here DVULBANA Sannipata of “Vata-Kaphaj” conditions are compiled.

Tritiyaka Jvara is of three types. When the manifested Tritiyaka Jvara is due to the aggravation of Vata & Kapha, it afflicts the back of the individual. **(22)**

Sidhma Kushtha has been explained in the above verse. It is characterized by the following signs and symptoms, the affected part appears white and coppery in colour, it is flimsy, it emits dusty particles when rubbed. It resembles to the flower of Alabu and it is generally located in chest. **(23)**

Acarya Cakrapani explains it as –

Sidhma Kushtha is located in chest because of the predominance of Kapha in the pathogenesis of this ailment. But also may occur in other parts of the body.

The Peculiar Lakshanas observed in Vata-kaphaj conditions are –

- Gaurav
- Stambha & Graha
- Kathinya

Stambha & Graha are caused due to the Sita guna of Vata along with that Guru, Sthira & Manda guna of Kapha.

It is observed in Vata-Kaphaj condition of Jvara, Grudhrasi, Visarpa etc.

Kathinya – caused due to Ruksha & Sita guna of Vata, and Guru, Manda Sita guna & Sthira guna of Kapha.

Kapha causes srotorodha, & as a result of that aggravated Vata causes Rukshata & Parushata in ma.sa which becomes Kathina.

Tandra –

Tandra is one of the peculiar Lakshna observed in Vata-kaphaj Samsrishta.

Tandra is due to Vata and Kapha Pradhanya along with Tamasa Bhava.

**PITTA KAPHA LAKSHANAS**

A patient suffering from Kapha – Pittaj Jvara presents different signs & symptoms like fluctuation in the feeling of burning sensation & cold, swedastambha i.e. sweating of patient is completely arrested. Also, a patient presents frequent unconsciousness, bronchitis, Anorexia & thirst, eliminates phlegm & bile, drowsiness, bitterness in the mouth are other associated symptoms. **(24)**

Here, the signs & symptoms of Raktapitta which are manifested due to the association of Kapha dosha are described. When it is associated with Kapha it becomes dense, Pandu, Unctuous & slime. **(25)**

Romantika Vyadhi is caused due to aggravated Pitta & Kapha dosha. It is characterized by the appearance of small eruptions all over the body & associated with fever, burning sensation, anorexia & excessive salivation. **(26)**

Masurika is the ailment caused by aggravated Pitta & Kapha. It is characterized by the appearance of eruptions which resembles to the shape & size of Masura. **(27)**

For these ailments the treatment prescribed for Visarpa & Kushtha are advisable.

DVULBANA SANNIPATA : PITTA – KAPHA

Tritiyaka Jvara when manifested by the aggravation of Kapha and Pitta, it afflicts the t.ka (Lumbo – Sacral Joint). **(28)**

Pundarika type of Kushtha is characterized by following signs and symptoms.

It is white in colour with red edges, it resembles the leaf of lotus & it is elevated & accompanied with burning sensation. It has predominant vitiation of Pitta & Kapha Doshas. **(29)**

The Kardama Visarpa is slow spreading, mainly in the amasaya region. The space in which it spreads, becomes as if studded with eruptions of red, yellow, pale yellow colour. These eruptions are free from any exudation & becomes sloughy very quickly. The skin & muscle tissues over these eruptions are shrivelled, sticky & suppurated, when rubbed these eruptions get cracked, & when pressed sticky & putrified muscle tissue comes out of these eruptions. One can visualize vessels & ligaments at the base of these eruptions, & it smells like that of a dead body. The peculiar Lakshanas observed in Pitta - Kaphaj conditions are

- Pitika
- Srava
- Kandu **(30)**

Pitika are caused due to Ushna guna, Drava & Sara Guna of Pitta & Snigdha Guna of Kapha. It is observed in Visarpa, Kushtha, Masurika etc.

Srava is caused due to ushna, drava and sara guna of Pitta and snigdha guna of Kapha. It is observed in diseases like Visarpa, Kushtha, Masurika etc.

**Conclusion** - 1) Peculiar Lakshanas are observed in specific Samsrishta Dosha Avastha.

2) Particular and specific treatment is advised depending on Samsrishta Dosha lakshans and Samsrishta Dosha avastha.

#### **Bibliography -**

- 1) Pt. Kashinath Shastri, Dr. Gorakhnath Chaturvedi, "Charaksamhita Savimarsh – Vidyotini Hindivyakhyopeta Dvitiy Bhag", Chaukhamba Bharati Akadami – Reprint 2001 edition, Pg. 117 Ca.Ci. 3/85

- 2) Pt. Kashinath Shastri, Dr. Gorakhnath Chaturvedi, "Charaksamhita Savimarsh – Vidyotini Hindivyakhyopeta Dvitiy Bhag", Chaukhamba Bharati Akadami – Reprint 2001 edition, Pg. 180 Ca.Ci. 4/11
- 3) Pt. Kashinath Shastri, Dr. Gorakhnath Chaturvedi, "Charaksamhita Savimarsh – Vidyotini Hindivyakhyopeta Dvitiy Bhag", Chaukhamba Bharati Akadami – Reprint 2001 edition, Pg. 375 Ca.Ci. 12/91
- 4) Pt. Kashinath Shastri, Dr. Gorakhnath Chaturvedi, "Charaksamhita Savimarsh – Vidyotini Hindivyakhyopeta Dvitiy Bhag", Chaukhamba Bharati Akadami – Reprint 2001 edition, Pg. 740 Ca.Ci. 26/117
- 5) Pt. Kashinath Shastri, Dr. Gorakhnath Chaturvedi, "Charaksamhita Savimarsh – Vidyotini Hindivyakhyopeta Dvitiy Bhag", Chaukhamba Bharati Akadami – Reprint 2001 edition, Pg. 843 Ca.Ci. 30/23-24
- 6) Pt. Kashinath Shastri, Dr. Gorakhnath Chaturvedi, "Charaksamhita Savimarsh – Vidyotini Hindivyakhyopeta Dvitiy Bhag", Chaukhamba Bharati Akadami – Reprint 2001 edition, Pg. 845 Ca.Ci. 30/33
- 7) Pt. Kashinath Shastri, Dr. Gorakhnath Chaturvedi, "Charaksamhita Savimarsh – Vidyotini Hindivyakhyopeta Dvitiy Bhag", Chaukhamba Bharati Akadami – Reprint 2001 edition, Pg. 317 Ca.Ci. 9/31
- 8) Pt. Kashinath Shastri, Dr. Gorakhnath Chaturvedi, "Charaksamhita Savimarsh – Vidyotini Hindivyakhyopeta Dvitiy Bhag", Chaukhamba Bharati Akadami – Reprint 2001 edition, Pg. 316 Ca.Ci. 9/27-28
- 9) Pt. Kashinath Shastri, Dr. Gorakhnath Chaturvedi, "Charaksamhita Savimarsh – Vidyotini Hindivyakhyopeta Dvitiy Bhag", Chaukhamba Bharati Akadami – Reprint 2001 edition, Pg. 111 Ca.Ci. 3/71
- 10) Pt. Kashinath Shastri, Dr. Gorakhnath Chaturvedi, "Charaksamhita Savimarsh – Vidyotini Hindivyakhyopeta Dvitiy Bhag", Chaukhamba Bharati Akadami – Reprint 2001 edition, Pg. 246 Ca.Ci. 7/17
- 11) Pt. Kashinath Shastri, Dr. Gorakhnath Chaturvedi, "Charaksamhita Savimarsh – Vidyotini Hindivyakhyopeta Dvitiy Bhag", Chaukhamba Bharati Akadami – Reprint 2001 edition, Pg. 564 Ca.Ci. 21/36
- 12) Pt. Kashinath Shastri, Dr. Gorakhnath Chaturvedi, "Charaksamhita Savimarsh – Vidyotini Hindivyakhyopeta Dvitiy Bhag", Chaukhamba Bharati Akadami – Reprint 2001 edition, Pg. 100 Ca.Ci.Ca.Ti. 3/37
- 13) Pt. Kashinath Shastri, Dr. Gorakhnath Chaturvedi, "Charaksamhita Savimarsh – Vidyotini Hindivyakhyopeta Dvitiy Bhag", Chaukhamba Bharati Akadami – Reprint 2001 edition, Pg. 117 Ca.Ci. 3/86-88

- 14) Pt. Kashinath Shastri, Dr. Gorakhnath Chaturvedi, "Charaksamhita Savimarsh – Vidyotini Hindiviyakhyopeta Dvitiy Bhag", Chaukhamba Bharati Akadami – Reprint 2001 edition, Pg.373 Ca.Ci. 12/84
- 15) Pt. Kashinath Shastri, Dr. Gorakhnath Chaturvedi, "Charaksamhita Savimarsh – Vidyotini Hindiviyakhyopeta Dvitiy Bhag", Chaukhamba Bharati Akadami – Reprint 2001 edition, Pg. 738 Ca.Ci. 26/111
- 16) Pt. Kashinath Shastri, Dr. Gorakhnath Chaturvedi, "Charaksamhita Savimarsh – Vidyotini Hindiviyakhyopeta Dvitiy Bhag", Chaukhamba Bharati Akadami – Reprint 2001 edition, Pg. 738 Ca.Ci. 26/112
- 17) Pt. Kashinath Shastri, Dr. Gorakhnath Chaturvedi, "Charaksamhita Savimarsh – Vidyotini Hindiviyakhyopeta Dvitiy Bhag", Chaukhamba Bharati Akadami – Reprint 2001 edition, Pg. 739 Ca.Ci. 26/113-114
- 18) Pt. Kashinath Shastri, Dr. Gorakhnath Chaturvedi, "Charaksamhita Savimarsh – Vidyotini Hindiviyakhyopeta Dvitiy Bhag", Chaukhamba Bharati Akadami – Reprint 2001 edition, Pg. 783 Ca.Ci. 28/56
- 19) Pt. Kashinath Shastri, Dr. Gorakhnath Chaturvedi, "Charaksamhita Savimarsh – Vidyotini Hindiviyakhyopeta Dvitiy Bhag", Chaukhamba Bharati Akadami – Reprint 2001 edition, Pg. 843 Ca.Ci. 30/21-22
- 20) Pt. Kashinath Shastri, Dr. Gorakhnath Chaturvedi, "Charaksamhita Savimarsh – Vidyotini Hindiviyakhyopeta Dvitiy Bhag", Chaukhamba Bharati Akadami – Reprint 2001 edition, Pg. 1067 Ca.Si. 9/74
- 21) Pt. Kashinath Shastri, Dr. Gorakhnath Chaturvedi, "Charaksamhita Savimarsh – Vidyotini Hindiviyakhyopeta Dvitiy Bhag", Chaukhamba Bharati Akadami – Reprint 2001 edition, Pg. 844 Ca.Ci. 30/27
- 22) Pt. Kashinath Shastri, Dr. Gorakhnath Chaturvedi, "Charaksamhita Savimarsh – Vidyotini Hindiviyakhyopeta Dvitiy Bhag", Chaukhamba Bharati Akadami – Reprint 2001 edition, Pg. 111 Ca.Ci. 3/71
- 23) Pt. Kashinath Shastri, Dr. Gorakhnath Chaturvedi, "Charaksamhita Savimarsh – Vidyotini Hindiviyakhyopeta Dvitiy Bhag", Chaukhamba Bharati Akadami – Reprint 2001 edition, Pg. 252 Ca.Ci. 7/19
- 24) Pt. Kashinath Shastri, Dr. Gorakhnath Chaturvedi, "Charaksamhita Savimarsh – Vidyotini Hindiviyakhyopeta Dvitiy Bhag", Chaukhamba Bharati Akadami – Reprint 2001 edition, Pg. 117 Ca.Ci. 3/88
- 25) Pt. Kashinath Shastri, Dr. Gorakhnath Chaturvedi, "Charaksamhita Savimarsh – Vidyotini Hindiviyakhyopeta Dvitiy Bhag", Chaukhamba Bharati Akadami – Reprint 2001 edition, Pg. 180 Ca.Ci. 4/11

- 26) Pt. Kashinath Shastri, Dr. Gorakhnath Chaturvedi, "Charaksamhita Savimarsh – Vidyotini Hindivvyakhyopeta Dvitiy Bhag", Chaukhamba Bharati Akadami – Reprint 2001 edition, Pg. 375 Ca.Ci. 12/92
- 27) Pt. Kashinath Shastri, Dr. Gorakhnath Chaturvedi, "Charaksamhita Savimarsh – Vidyotini Hindivvyakhyopeta Dvitiy Bhag", Chaukhamba Bharati Akadami – Reprint 2001 edition, Pg. 375 Ca.Ci. 12/93
- 28) Pt. Kashinath Shastri, Dr. Gorakhnath Chaturvedi, "Charaksamhita Savimarsh – Vidyotini Hindivvyakhyopeta Dvitiy Bhag", Chaukhamba Bharati Akadami – Reprint 2001 edition, Pg. 111 Ca.Ci. 3/71
- 29) Pt. Kashinath Shastri, Dr. Gorakhnath Chaturvedi, "Charaksamhita Savimarsh – Vidyotini Hindivvyakhyopeta Dvitiy Bhag", Chaukhamba Bharati Akadami – Reprint 2001 edition, Pg. 251 Ca.Ci. 7/18
- 30) Pt. Kashinath Shastri, Dr. Gorakhnath Chaturvedi, "Charaksamhita Savimarsh – Vidyotini Hindivvyakhyopeta Dvitiy Bhag", Chaukhamba Bharati Akadami – Reprint 2001 edition, Pg. 565 Ca.Ci. 21/38



### Guidelines for submission of articles.

- 1) Left top corner of article write one of following :
  - a) Research, b) Case Study ,c) Review, d) Experiment, e) Short communication, f) Research method ,g) Standardization, h) Proceedings paper, i) Opinion paper, j) Patent etc.
- 2) Title , 3) Authors' name, e mail id, phone no. college/institute, university,
- 3) Abstract not more than 200 words.
- 4) Mention no.of references for the article in the bracket.
- 5) Keywords in alphabetical order.
- 6) Introduction, aims, objects, methodology, observations, discussion, conclusion, etc. as per requirements.
- 7) References with details such as section, chapter, page no.etc.
- 8) Add graphics if any at the end.
- 9) References be written as follows e. g.
  - 1) Journal : Bhoir Uday B./Kamble Pushpalata, "Evaluation of 'Sama Aayam - vistor' in Unhealthy individuals with congenital/ Development Physical Deformity". Deerghayu International, 2015, Vol. 31-01, issue no. 121, Jan.-Mar. Pgs. 52-60
  - 2) Book : Kulkarni P.H., Hosurkar Geetanjali, 'Obesity & Holistic Medicine', Publisher - Deerghayu Intenational Pune, 1st edition, 2014, pages 42-44
  - 3) Patents : Patent owner, title of patent. Patent number, date.
- 10) Send article via e mail with biography, photo to :
  - a) kavitaandapurkar@gmail.com
  - b) deerghayuinternational@gmail.com .
- 11) Send Bank Demand Draft OR cheque payable at par for Rs. 1500/- to - Editor, Deerghayu international, 36 Kothrud Gaonthan, opp.Mhatoba Mandir, Pune 411 038.
- 12) Author can deposit money in the following Bank account. Send receipt of amount deposited.  
Deerghayu International, UCO Bank ,Kothrud Branch, Pune 411 038,  
A/c no. 14690200000611, IFSC code : UCBA 0001469, MICR code : 411028011.

### DEERGHAYU INTERNATIONAL



- 1) The peer reviewed quarterly journal for Ayurveda and Health Sciences since 1984.
- 2) International Standard Serial Number is ISSN 0970 - 3381 since 1986.
- 3) Included in Indian Citation Index.
- 4) Impact factor published from time to time.
- 5) Articles published in Deerghayu Interantional is being uploaded to AYUSH portal by National Institute for Indian Medical Heritage, Hyderabad.

**E-Books & Print-Books by Prof. Dr. P. H. Kulkarni**

Publisher: Deerghayu International, Pune, India,

1) Abhyanga Tantra - Ayurveda Massage	400/-
2) Anna - Ayurvedic Healthy Diet	600/-
3) Ayurveda for You	400/-
4) Ayurveda Herbs for Health	400/-
5) Ayurveda Jidnyasa	375/-
6) Breathless - Shwas kasa Chikitsa	375/-
7) Cancer and Ayurveda	400/-
8) Clinical Ayurveda Practice - The Hand Book	300/-
9) Diabetes - Ayurveda Care	400/-
10) Disease Treatment - An integrated approach	400/-
11) English Charak Samhita, Poorvardha	1200/-
12) English Charak Samhita, Uttarardha	1200/-
13) Five Cleansing Procedures - Panchakarma in Ayurveda	400/-
14) Heart Care - Hrudayam	400/-
15) Home Remedies in Ayurveda	400/-
16) Joint Disorders and Ayurveda	400/-
17) Kidney Disorders, Care & Cure	
18) Liver Care & Cure in Ayurveda	400/-
19) Mahasrotas -The digestive system - Ayurveda care cure	300/-
20) Mastishka - Neurology in Ayurveda	450/-
21) Naadee Pareeksha - Pulse Examination in Ayurveda	200/-
22) Obesity - Holistic Medicine	222/-
23) Prasuti Tantra - Obstetrics in Ayurveda	300/-
24) Shishu Health, Care in Ayurveda	300/-
25) Skin Care & Cosmetology in Ayurveda	200/-
26) Stree Roga - Gynaecology in Ayurveda	400/-
27) Swastha - The Eternal Life	400/-
28) Vajikarana - Sexology in Ayurveda	475/-
29) Yoga with Ayurveda	400/-

**Contact** : 1) [www.bookganga.com](http://www.bookganga.com), Telephone 91 20 24 52 52 52.

2) Shri Swami Samarth Agency, Pune. Tele. :91 20 2538 2130.

# Ayurvedic Books of Dr. P. H. Kulkarni



Contact for books & Ayurveda Products : **Shri Swami Samarth Agency**

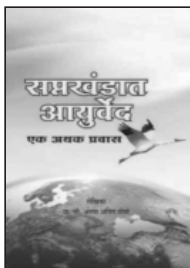
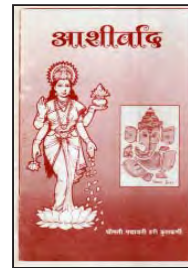
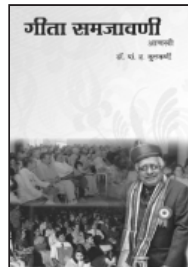
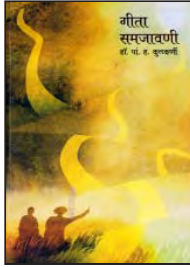
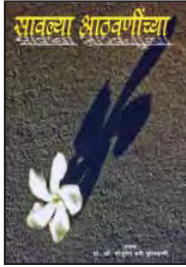
36 Kothrud Gaonthan, Opposite Mhatoba Temple, Pune 411038.

Telefax : 20 - 25382130. email: pavanoriental25@gmail.com.

For e-books - 1) www.bookganga.com 2) deerghayuinternational@gmail.com

## साहित्य आनंद माला (१९८४ पासून)

संपादक : प्रा. डॉ. पां. ह. कुलकर्णी



Contact :

**Shri Swami Samarth Agency,**

36 Kothrud Gaonthan,  
Opposite Mhatoba Temple,  
Pune 411038. Telefax : 20 - 25382130.  
E-mail: pavanoriental@gmail.com.





Dr. Vikas Chothe spoke about the importance of the Voluntary Yoga certification initiative of AYUSH ministry.

Dr. Vikas chothe represented IAA at the International Ayurveda Congress 2018- Leiden , Netherlands on 1st and 2nd September 2018. The conference was organised by Indian Embassy, The Hague The Netherlands; Ministry of AYUSH and The International Maharshi Ayurveda Foundation and The Netherlands at Holiday Inn, Leiden. Here, he had discussions with various delegates and speakers of the conference on propagation of Yoga and Ayurveda. The conference was inaugurated by the AYUSH minister of India Hon. Shripad Naik. (In the picture: Meeting of Dr. Vikas Chothe with Swami Momaya of The International Maharshi Ayurveda Foundation.)

Dr. Vikas was invited by the Indian embassy of Austria for a speech about Ayurveda and Yoga.



The month of October was celebrated as Yoga Research month by Swasti Yoga Centre and IAA. Under this initiative, two research seminars were organised where experts like Dr. Manmath Gharote shed light on literary research in Yoga. Dr. Gharote is a legendary yoga researcher who is renowned internationally for his work on yoga manuscript .

The first seminar was held on 14<sup>th</sup> October at Shivaji nagar, Pune where more than 30 delegates participated to unravel the Patanjali yogasutra mystics. Second seminar was held on 28<sup>th</sup> October at Baner where manuscript study on ancient Hatha Yoga texts was focused.



**Seminar conducted in Mumbai** where we had Bowen Practitioners from Mumbai, Pune (including our Ayurveda Dr Sai Kolte from Pune who is 3rd from right standing), Delhi, Nagpur, Navsari. They were very interested in the ayurveda philosophy.

