# International Journal of Research in AYUSH and Pharmaceutical Sciences

## **Research Article**

## MANAGEMENT OF VATAJA KASA W.S.R. TO TROPICAL PULMONARY EOSINOPHILIA BY SHRINGARABHRA RASA WITH MRIDU VIRECHANA

Sridevi. P. Kulkarni<sup>1\*</sup>, Sourabh Gupta<sup>3</sup>, P. G. Subbannagowda<sup>2</sup>

\*¹PG. Scholar, ³Professor, Department of Post Graduate Studies in Kayachikitsa, Ayurveda Mahavidyalaya, Hubli, India.

<sup>2</sup>Associate Professor, Department of Kumar bhritya, Guru Nanak Ayurvedic Medical College & Hospital, Sri Muktsar Sahib, Punjab, India.

## **ARTICLE INFO**

## Article history: Received: Feb 06, 2021 Revised: Feb 25, 2021 Accepted: March 18, 2021

**Keywords:** *Vataja kasa,* Tropical pulmonary eosinophilia, *Snehapana, Virechana, Shringarabhra rasa.* 

## ABSTRACT

The clinical features of *vataja kasa* are oftenly compared to TPE are, *Shushka kasa, Alpa kapha nishtivana, Swarabedha, shushka ura kantha vaktrata, Dourbalya* etc. TPE is an occult form of filariasis and is characterized by dry cough, dyspnoea, nocturnal wheezing etc, and marked peripheral blood eosinophilia. This affects males and females at a ratio of 4:1 often during the 3<sup>rd</sup> decade of life. Keeping in view about the adverse effects of the modern sciences, an attempt was made to find an effective Ayurvedic treatment modality.

**Methods:** 15 subjects with classical signs and symptoms of *Vataja kasa* and raised esinophil count >500cells/cumm were selected. After *Amapachana* by *Shunti churna* with hot water, subjects were given *Kantakari ghrita* for *Snehapana* prior to *Virechana* with *Eranda taila* followed by *Shringarabhra rasa* for 21 days with follow up of 1 month.

**Results:** *Shringarabhra Rasa* with *Mridu Virechana* provided highly significant results in all parameters of assessment.

**Conclusion:** It is found that the relief was highly significant after *Mridu Virechana*. It is found that the effect of therapy was highly significant on *Shushka kasa* and *Shushka urah kantha vaktra*.

## INTRODUCTION

The vitiated *Prana vata* along with *Udana vata* which further gets aggravated, takes an abnormal course through throat and mouth in association with other *Doshas* and expelled out abruptly with a 'coughing sound' malingering the broken-bronze vessel<sup>1</sup>.

The clinical features of *Vataja kasa* has been described in our classics as *Shushka kasa*, *Prasakta manta*, *Shushka alpa kapha nishtivana*, *Swarabedha*, *Shushka ura kantha vaktrata*, *Dourbalya* etc<sup>2</sup>.

Vataja kasa is often compared to Tropical Pulmonary Eosinophilia (TPE) because of similarities of signs and symptoms.

TPE is a syndrome resulting from immunological hyper responsiveness to human filarial parasites Wucheria bancrofti and Brugia malayi. The filariae are transmitted to humans by

mosquitoes and adult worms eventually reside in lymphatics. There they release microfilariae, which travel to the lungs and create an intense inflamantory reaction<sup>3</sup>.

## AIMS AND OBJECTIVES

- 1. To study in detail about *Vataja kasa*, according to Ayurveda and TPE according to modern science.
- 2. To assess the efficacy of *Shringarabhra Rasa* in the management of *Vataja Kasa* (TPE).

## MATERIALS AND METHODS

## **Materials**

The present study titled "A Clinical Study in the Management of *Vataja Kasa* w.s.r. to Tropical Pulmonary Eosinophilia by *Shringarabhra Rasa* Along

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With *Mridu Virechana*" was done with following materials.

- **1.** *Shunti choorna*: 5gm/ day in 3 divided doses, half an hour before food with *Ushnodaka* as *Anupana* for *Amapachana* till *Nirama lakshanas* are seen.
- **2.** *Kantakari ghrita*: The duration taken for *Ghrita paka* was 5 days. *Anupana: Ushnodaka*
- 3. Karpooradya taila
- 4. Eranda taila
- **5.** *Shringarabhra rasa*: Dose– 250mg. 1 tid before food, *Anupana Ushna jala*.

## Source and Methods of Collection of Data

- a. A clinical survey of subjects attending OPD and IPD of Post Graduate Department of Kayachikitsa, Ayurveda Mahavidyalaya Hospital, Hubli was made, and subjects fulfilling the criteria of diagnosis as per the proforma were registered for the study.
- Special clinical Proforma based on criteria of selection and parameters were prepared for assessment.
- c. Informed consent of all the subjects registered was duly taken before starting the interventions.
- d. Clinical evaluation was done by collection of data through information obtained by history, physical examination and laboratory investigations wherever necessary.
- e. Literature pertaining to the study was collected from Post Graduate Library, Department of Kayachikitsa, Ayurveda Mahavidyalaya, Hubli, and from Authentic Research Journals, Websites and Digital Publications.
- f. The data, which was obtained by the clinical trial were statistically analyzed by applying student's 't' test.

## Sample

The subjects were selected incidentally and randomly placed.

#### Sample Size

15 subjects were placed *Mrudu virechana* followed by *Shringarabhra Rasa* internally for 21 days.

## **Inclusion Criteria**

- 1. Subjects presenting with classical clinical features of *Vataja kasa* (Tropical Pulmonary Eosinophilia).
- 2. Subjects of either sex between the age of 20-50 years.
- 3. Subjects with chronicity of more than 6 months and less than 5 years.
- 4. Subjects having increased AEC in the peripheral blood smear.
- 5. Subjects fit for *Virechana*.

## **Exclusion Criteria**

- 1. Subjects with other systemic disorders like CHD, diabetes, hepatorenal complication etc.
- 2. Subjects with bronchial asthma, pneumonia, bronchitis, pulmonary tuberculosis.

## Diagnostic Criteria

After detailed examination, the diagnosis was made based on the signs and symptoms of *Vataja kasa* explained in Ayurvedic classics along with AEC and ESR

## Method of examination of the subjects

In this study the data was collected from the subjects with the help of interview. The detailed data related to general history, history of past illness, present illness, family history, food habits, history of treatment taken so far and other relevant details were recorded in the proforma. The systemic examination of the subject was also done and findings were recorded as per the proforma.

## **Investigations**

Blood: Hb%

TC, DC

**ESR** 

AEC

RBS

Urine: Albumin

Sugar

Micro

**Radiological investigation:** Chest X-Ray PA-view if required.

## **Parameters of Study**

Parameters of assessment were totally based on the subsidence in the clinical features of *Vataja Kasa* (TPE).

Parameters of study is categorised as Subjective and Objective parameters.

### Shushka kasa

Grade 0- No cough

Grade 1- Mild irritant dry cough but does not disturb the night sleep.

Grade 2- Moderate irritant dry cough which disturbs the night sleep but subside after medication.

Grade 3- Severe irritant dry cough not releaved by any measures and keeps patient awake.

## Alpha Kapha Nishtivana (Expectoration)

Grade 0 - Absence

Grade 1 - Occasional expectoration

Grade 2 - Expectoration with peristance of dry cough.

Shushka Urakanthavaktrata (Dryness)

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Grade 0 - Absence

Grade 1 - Mild

Grade 2- Moderate which releaved by home remedies

Grade 3 - Severe is constant dryness of oral cavity

## Shoola Hrita/Ura/Parshwa/Udara/Shira/Shakha

Grade 0- Absent

Grade 1- Mild and occasional pain during cough

Grade 2- Moderate pain during cough

Grade 3- Constant pain

## Dourbalya (General weakness)

Grade 0- Absence

Grade 1- Mild weakness but doesn't hamper day to day activities.

Grade 2- Moderate weakness which alters the routine, but subside by rest.

Grade 3- Severe weakness

## Swarabedha (Change in Voice)

Grade 0- Absent

Grade 1- Present

## Nirghosha

Grade 0- Absent

Grade 1- Present

Amapachana: The subjects were given Shunti Churna 5gm/day in 3 divided doses half an hour before food with Ushnodaka as Anupana for Amapachana till Nirama lakshanas were seen.

Snehana: Sadya snehapana by Kantakari ghrita.

On the first day patients were given *Hrisiyasi matra* of *Sneha* i.e., 30ml and based on the duration taken for digestion, the dose was calculated for 24hrs and given on second day as *Sadya snehapana*.

Table 1: Showing major symptoms (subjective parameters) wise distribution

Symptoms	No. of Patients	%
Shushka kasa	15	100%
Alpa kapha nishtivana	09	60%
Shushka urah kantha and Vaktra	13	86.6%
Swarabheda	06	40%
Shoola in Ura/ Udara/ Parshwa/ Shira/ Shanka and Hrit pradesha	06	40%
Dourbalya	05	33.3%
Nirghosha	03	20%

In 15 subjects (100%) had *Shushka kasa*, 09 subjects (60%) had *Alpa kapha nishtivana*, 13 subjects (86.6%) had *Shushkata* of *Urah kantha & vaktra*, 06 subjects (40%) had *Swarabheda*, 06 subjects (40%) had *Shoola* in *Ura/Udara/Parshwa/Shira/Shanka & Hrit pradesha*, 05 subjects (33.3%) had *Dourbalya* and 03 subjects (20%) had *Nirghosha*.

Table 2: Vibandha

Vibandha	No. of Patients	Percentage
Present	10	66.6
Absent	5	33.3

## **RESULTS**

Table 3: Showing the effect of Snehapana on Shushka kasa

	BT mean	AT mean	% of Relief	SD	SE	't'	P	Remarks
Snehapana on Shushka kasa	2.3	1.6	31.42%	0.59	0.15	4.78	<0.0010	H.S

Showed 31.42% relief which was statistically highly significant at the level of P < 0.001 ('t' = 4.78).

Table 4: Showing the effect of Virechan on Shushka kasa

	BT mean	AT mean	% of Relief	SD	SE	't'	P	Remarks
Virechan on Shushka kasa	2.3	1.2	48.57%	0.35	0.09	12.47	<0.001	H.S

Showed 48.57% relief which was statistically highly significant at the level of P < 0.001 ('t' = 12.47).

Table 5: Showing the effect of therapy after Shamanoushadi on Shushka kasa

	BT mean	AT mean	% of Relief	SD	SE	't'	P	Remarks
Shamanoushadi on Shushka kasa	2.3	0.4	80%	0.74	0.19	9.72	<0.001	H.S

Showed 80% relief which was statistically highly significant at the level of P < 0.001 ('t'=9.72).

Table 6: Showing the effect of Snehapana on Alpa kapha nishtivana

	BT mean	AT mean	% of Relief	SD	SE	't'	P	Remarks
Snehapana on Alpa kapha nishtivana (n=9)	0.8	0.73	15.38%	0.35	0.09	1.46	>0.10	N.S

Showed 15.38% relief which was statistically insignificant at the level of P > 0.10 ('t'=1.46).

Table 7: Showing the effect of Virechan on Alpa kapha nishtivana

	BT mean	AT mean	% of Relief	SD	SE	't'	P	Remarks
Virechan on Alpa kapha nishtivana (n=9)	0.8	0.6	30.76%	0.45	0.11	2.25	>0.05	N.S

Showed 30.76% relief which was statistically not significant at the level of P > 0.05 ('t'=2.25).

Table 8: Showing the effect of therapy on Alpa kapha nishtivana

	BT mean	AT mean	% of Relief	SD	SE	't'	P	Remarks
Alpa kapha nishtivana (n=9)	0.8	0.33	61.53%	0.51	0.13	4	<0.01	H.S

Showed 61.53% relief which was statistically highly significant at the level of P < 0.01 ('t'=4).

Table 9: Showing the effect of Snehapana on Shushka urah kantha and Vaktra

	BT mean	AT mean	% of Relief	SD	SE	ʻť	P	Remarks
Snehapana on Shushka urah kantha and Vaktra (n=13)	1.4	0.53	61.90%	0.51	0.13	6.5	<0.001	H.S

Showed 61.90% relief which was statistically highly significant at the level of P < 0.001 ('t'=6.5).

Table 10: Showing the effect of Virechan on Shushka urah kantha and Vaktra

	BT mean	AT mean	% of Relief	SD	SE	't'	P	Remarks
Virechan on Shushka urah kantha and Vaktra (n=13)	1.4	0.4	66.66	0.45	0.11	7.89	<0.001	H.S

Showed 66.66% relief which was statistically highly significant at the level of P < 0.001 ('t'=7.89).

Table 11: Showing the effect of therapy on Shushka urah kantha and Vaktra

	BT mean	AT mean	% of Relief	SD	SE	't'	P	Remarks
Shushka urah kantha and Vaktra (n=13)	1.4	0.26	80.95	0.63	0.16	6.85	<0.001	H.S

Showed 80.95% relief which was statistically highly significant at the level of P < 0.001 ('t'=6.85).

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Table 12: Effect of Therapy on other subjective parameters w.r.t. no. of subjects before and after treatment

General Symptoms	Before Treatment	After Treatment	% Relief
Shoola	6	2	66.6%
Dourbalya	5	4	20%
Swarabheda	6	1	83.3%
Nirghosha	3	0	100%

There was 66.6% relief in *Shoola* of *Ura/ Udara/ Parshwa/ Shira/ Shanka* & *Hrit pradesha*, effect of therapy in *Dourbalya* 20% relief, *Swarabheda* was 83.3% relief, 100% relief was seen in *Nirhosha*.

## **Objective Parameter**

- 1. A E C
- 2. E S R

Table 13: Showing the effect of therapy on A E C.

	BT mean	AT mean	% of Relief	SD	SE	't'	P	Remarks
A E C.	623.33	373.3	40.1%	179.28	46.29	5.40	< 0.001	H.S

Showed 40.1% relief which was statistically highly significant at the level of P < 0.001 ('t'=5.40).

## Effect of therapy on ESR

There were not much significant changes observed in E S R values.

Table 14: Showing overall effect of therapy on Subjective Parameters

Assessment criteria	No. of Patients			
0- 25% no relief	2			
26 -50% mild relief	4			
51- 75% moderate relief	2			
Above 75% marked relief	7			

Table 15: Showing overall effect of therapy on Objective Parameters (A.E.C)

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Assessment criteria	No. of Patients
0- 25% no relief	2
26 -50% mild relief	12
51- 75% moderate relief	1
Above 75% marked relief	0

## DISCUSSION

## Shunti Churna

Shunti churna was used for the purpose of Amapachana. Even though Ama lakshanas are not seen in Vataja kasa, Shunti churna was given for Srotoshodhana and Vatanulomana before Sadya snehapana. Shunti possess Katu rasa, Teekshna guna and Madhura vipaka. It is Kaphaghna and Kasahara because of Katu rasa and Snigdha guna. The Teekshna guna does the action of Srotoshodhana, Amapachana, etc which checks the disease pathogenesis.

## Kantakari Ghrita

The Sneha dravya has Guna of Pruthvi Mahabhuta along with Snigdha, Guru, Sukshma properties. Snigdha Guna is Vatahara, Guru Guna hence pacifies *Vata*, *Sukshma Guna* enables the *Sneha Dravya* to reach to the minutest part of the body and thus bring about *Dosha Vilayana*.

These reasons may be attributed to the result observed that maximum subjects had notable relief in *Shushka kasa, Shushka urah, Kantha* and *Vaktra,* after *Sadya snehapana*. The qualities of *Ghrita* is antagonistic to the qualities of *Vata Dosha,* hence *Kantakari ghrita* with *Katu rasa* and *Ushna veerya pradhana dravyas* plays a major role on *Vataja kasa.* 

## Karpooradya Taila

Karpooradya taila was used for the purpose of Abhyanga. This contains Karpoora, Ajamoda and Narikela taila. Karpoora and Ajamoda have Katu and

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Tikta rasa, Ushna veerya and Katu vipaka because of which are Kapha and Vatahara. So Karpooradya taila was selected for Abhyanga which is Vata shamaka and reduces congestion in the Urah pradesha.

## Eranda Taila

Eranda taila is Teekshna, Ushna, Guru and does Deepana. It has Madhura rasa and Ushna veerya. Eranda taila was used for Virechana in the present study. Eranda taila is best known for its Vatahara property. The Chikitsa told by our Acharyas to treat Vataja kasa is Snigdha virechana, hence Eranda taila was used to induce Virechana.

## Shrigarabhra rasa

In Shrigarabhra rasa, most of the drugs in this preparation possess Katu and Madhura Rasa, Laghu, Snigdha Guna, Ushna veeva and Katu vipaka. The Katu rasa, Ushna guna and Veerva help to reduce Kapha and pacify Vata dosha. The Madhura rasa and Snigdha guna also does Vata shamana without increasing *Kapha*. If we see the *Doshaghnata* of the ingredients it is mainly Kapha and Vata hara. The Parada being the Yogavahi it might carry the drug to its target tissue. *Kajjali* may acts as the catalytic promoter to the drug. Parada and Gandhaka being the Rasayana drugs these may act at the level of autoimmune antibodies as immuno-modulators, helping in alleviating the free radicals produced during the disease process. Triphala is also an antioxidant acts at the level of free radicals and corrects the constipation, improves digestion and assimilation. Abhraka is also Yogavahi hence it enhances the Gunas of all the other Dravvas when combined with it. The Tankana and Abhraka bhasma also acts as autoimmune enhancers and act on respiratory system. *Pippali* is a powerful stimulant for the digestive and respiratory systems. It is strongly heating and removes cold, congestion and

ama and revives the weakened organic functions. It is also a rejuvenative to lungs and *Kapha dosha*. The other ingredients like *Karpoora, Javitri, Lavanga, Tejpatra* (leaves), *Talisapatra, Twak, Ela, Shunti* etc are *Kapha vata hara, Kanthya* and are soothing to the respiratory tract. *Shringarabhra rasa* is a *Rasayana,* hence it acts at the immune level and checks the disease further.

#### CONCLUSION

- 1) *Vataja kasa* can be compared to Tropical Pulmonary Eosinophilia of modern science purely based on similarities in *Nidana panchaka* and *Chikitsa*.
- 2) It is found that the relief was highly significant after *Mridu Virechana*.
- 3) It is found that the effect of therapy was highly significant on *Shushka kasa* and *Shushka urah kantha vaktra*.
- 4) It is found that the effect of therapy on A.E.C is highly significant, but however it was found non significant in ESR values.

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## Cite this article as:

Sridevi. P. Kulkarni, Sourabh Gupta, P. G. Subbannagowda, Management of Vataja Kasa w.s.r. to Tropical Pulmonary Eosinophilia by Shringarabhra Rasa with Mridu Virechana. International Journal of Research in AYUSH and Pharmaceutical Sciences, 2021;5(1):508-513.

https://doi.org/10.47070/ijraps.v5i1.103

Source of support: Nil, Conflict of interest: None Declared

## \*Address for correspondence Dr. Sridevi. P. Kulkarni

PG. Scholar,

Department of Post Graduate Studies in Kayachikitsa, Ayurveda Mahavidyalaya, Hubli, India.

Email: drsridevi85@gmail.com

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