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

Sridevi. P. Kulkarni1*, Sourabh Gupta3, P. G. Subbannagowda2

*1PG. Scholar, 3Professor, Department of Post Graduate Studies in Kayachikitsa, Ayurveda Mahavidyalaya, Hubli, India.
2Associate 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 3rd 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 vessel1.

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 etc2.

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 reaction3.

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
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 laksanas* 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 – 250 mg. 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.

b. 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 *Mridu virechana* followed by *Shringarabhras 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 5years.
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)**
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 - Absent
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 _Usnhodaka 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>
<thead>
<tr>
<th>Symptoms</th>
<th>No. of Patients</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Shushka kasa</em></td>
<td>15</td>
<td>100%</td>
</tr>
<tr>
<td><em>Alpa kapha nishtivana</em></td>
<td>09</td>
<td>60%</td>
</tr>
<tr>
<td><em>Shushka urah kantha and Vaktra</em></td>
<td>13</td>
<td>86.6%</td>
</tr>
<tr>
<td><em>Swarabhedha</em></td>
<td>06</td>
<td>40%</td>
</tr>
<tr>
<td><em>Shoola in Ura/Udara/Parshwa/Shira/Shanka and Hrit pradesha</em></td>
<td>06</td>
<td>40%</td>
</tr>
<tr>
<td><em>Dourbalya</em></td>
<td>05</td>
<td>33.3%</td>
</tr>
<tr>
<td><em>Nirghosha</em></td>
<td>03</td>
<td>20%</td>
</tr>
</tbody>
</table>

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 _Swarabhedha_, 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>
<thead>
<tr>
<th>Vibandha</th>
<th>No. of Patients</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present</td>
<td>10</td>
<td>66.6</td>
</tr>
<tr>
<td>Absent</td>
<td>5</td>
<td>33.3</td>
</tr>
</tbody>
</table>

**RESULTS**

**Table 3: Showing the effect of Snehapana on Shushka kasa**

<table>
<thead>
<tr>
<th>Snehapana on Shushka kasa</th>
<th>BT mean</th>
<th>AT mean</th>
<th>% of Relief</th>
<th>SD</th>
<th>SE</th>
<th>‘t’</th>
<th>P</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.3</td>
<td>1.6</td>
<td>31.42%</td>
<td>0.59</td>
<td>0.15</td>
<td>4.78</td>
<td>&lt;0.0010</td>
<td>H.S</td>
</tr>
</tbody>
</table>

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**

<table>
<thead>
<tr>
<th>Virechan on Shushka kasa</th>
<th>BT mean</th>
<th>AT mean</th>
<th>% of Relief</th>
<th>SD</th>
<th>SE</th>
<th>‘t’</th>
<th>P</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.3</td>
<td>1.2</td>
<td>48.57%</td>
<td>0.35</td>
<td>0.09</td>
<td>12.47</td>
<td>&lt;0.001</td>
<td>H.S</td>
</tr>
</tbody>
</table>
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 Shamanoushi on Shushka kasa

<table>
<thead>
<tr>
<th>Treatment</th>
<th>BT mean</th>
<th>AT mean</th>
<th>% of Relief</th>
<th>SD</th>
<th>SE</th>
<th>$t'$</th>
<th>$P$</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shamanoushi on Shushka kasa</td>
<td>2.3</td>
<td>0.4</td>
<td>80%</td>
<td>0.74</td>
<td>0.19</td>
<td>9.72</td>
<td>&lt;0.001</td>
<td>H.S</td>
</tr>
</tbody>
</table>

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

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

<table>
<thead>
<tr>
<th>Treatment</th>
<th>BT mean</th>
<th>AT mean</th>
<th>% of Relief</th>
<th>SD</th>
<th>SE</th>
<th>$t'$</th>
<th>$P$</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sneha on Alpa kapha nishtivana (n=9)</td>
<td>0.8</td>
<td>0.73</td>
<td>15.38%</td>
<td>0.35</td>
<td>0.09</td>
<td>1.46</td>
<td>&gt;0.10</td>
<td>N.S</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Treatment</th>
<th>BT mean</th>
<th>AT mean</th>
<th>% of Relief</th>
<th>SD</th>
<th>SE</th>
<th>$t'$</th>
<th>$P$</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virechan on Alpa kapha nishtivana (n=9)</td>
<td>0.8</td>
<td>0.6</td>
<td>30.76%</td>
<td>0.45</td>
<td>0.11</td>
<td>2.25</td>
<td>&gt;0.05</td>
<td>N.S</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Treatment</th>
<th>BT mean</th>
<th>AT mean</th>
<th>% of Relief</th>
<th>SD</th>
<th>SE</th>
<th>$t'$</th>
<th>$P$</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpa kapha nishtivana (n=9)</td>
<td>0.8</td>
<td>0.33</td>
<td>61.53%</td>
<td>0.51</td>
<td>0.13</td>
<td>4</td>
<td>&lt;0.01</td>
<td>H.S</td>
</tr>
</tbody>
</table>

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

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

<table>
<thead>
<tr>
<th>Treatment</th>
<th>BT mean</th>
<th>AT mean</th>
<th>% of Relief</th>
<th>SD</th>
<th>SE</th>
<th>$t'$</th>
<th>$P$</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sneha on Shushka urah kantha and Vaktra (n=13)</td>
<td>1.4</td>
<td>0.53</td>
<td>61.90%</td>
<td>0.51</td>
<td>0.13</td>
<td>6.5</td>
<td>&lt;0.001</td>
<td>H.S</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Treatment</th>
<th>BT mean</th>
<th>AT mean</th>
<th>% of Relief</th>
<th>SD</th>
<th>SE</th>
<th>$t'$</th>
<th>$P$</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virechan on Shushka urah kantha and Vaktra (n=13)</td>
<td>1.4</td>
<td>0.4</td>
<td>66.66%</td>
<td>0.45</td>
<td>0.11</td>
<td>7.89</td>
<td>&lt;0.001</td>
<td>H.S</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Treatment</th>
<th>BT mean</th>
<th>AT mean</th>
<th>% of Relief</th>
<th>SD</th>
<th>SE</th>
<th>$t'$</th>
<th>$P$</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shushka urah kantha and Vaktra (n=13)</td>
<td>1.4</td>
<td>0.26</td>
<td>80.95%</td>
<td>0.63</td>
<td>0.16</td>
<td>6.85</td>
<td>&lt;0.001</td>
<td>H.S</td>
</tr>
</tbody>
</table>

Showed 80.95% relief which was statistically highly significant at the level of $P < 0.001$ ($t'=6.85$).
Table 12: Effect of Therapy on other subjective parameters w.r.t. no. of subjects before and after treatment

<table>
<thead>
<tr>
<th>General Symptoms</th>
<th>Before Treatment</th>
<th>After Treatment</th>
<th>% Relief</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shoola</td>
<td>6</td>
<td>2</td>
<td>66.6%</td>
</tr>
<tr>
<td>Dourbalya</td>
<td>5</td>
<td>4</td>
<td>20%</td>
</tr>
<tr>
<td>Swarabheda</td>
<td>6</td>
<td>1</td>
<td>83.3%</td>
</tr>
<tr>
<td>Nirghosha</td>
<td>3</td>
<td>0</td>
<td>100%</td>
</tr>
</tbody>
</table>

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 Nirghosha.

Objective Parameter

1. AEC
2. ESR

Table 13: Showing the effect of therapy on AEC.

<table>
<thead>
<tr>
<th>AEC</th>
<th>BT mean</th>
<th>AT mean</th>
<th>% of Relief</th>
<th>SD</th>
<th>SE</th>
<th>'t'</th>
<th>P</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEC</td>
<td>623.33</td>
<td>373.3</td>
<td>40.1%</td>
<td>179.28</td>
<td>46.29</td>
<td>5.40</td>
<td>&lt;0.001</td>
<td>H.S</td>
</tr>
</tbody>
</table>

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 ESR values.

Table 14: Showing overall effect of therapy on Subjective Parameters

<table>
<thead>
<tr>
<th>Assessment criteria</th>
<th>No. of Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-25% no relief</td>
<td>2</td>
</tr>
<tr>
<td>26-50% mild relief</td>
<td>4</td>
</tr>
<tr>
<td>51-75% moderate relief</td>
<td>2</td>
</tr>
<tr>
<td>Above 75% marked relief</td>
<td>7</td>
</tr>
</tbody>
</table>

Table 15: Showing overall effect of therapy on Objective Parameters (AEC)

<table>
<thead>
<tr>
<th>Assessment criteria</th>
<th>No. of Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-25% no relief</td>
<td>2</td>
</tr>
<tr>
<td>26-50% mild relief</td>
<td>12</td>
</tr>
<tr>
<td>51-75% moderate relief</td>
<td>1</td>
</tr>
<tr>
<td>Above 75% marked relief</td>
<td>0</td>
</tr>
</tbody>
</table>

**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, which checks the disease pathogenesis.

**Kantakari Ghrita**

The *Sneha dravya* has *Guna* of Pruthvi Mahabhuta along with *Snigdha, Guru, Sukshma properties*. *Snigdha Gun* is *Vatahara, Guru* hence pacifies *Vata, Sukshma Gun* 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 ghritya* 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
Tikta rasa, Ushna veerya and Katu vipaka because of which are Kapha and Vatahara. So Karpooradaya 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 Vatajasa kasa is Snigdha virechana, hence Eranda taila was used to induce Virechana.

Shringarabhra rasa

In Shringarabhra rasa, most of the drugs in this preparation possess Katu and Madhura Rasa, Laghu, Snigdha Guna, Ushna veeya and Katu vipaka. The Katu rasa, Ushna guna and Veerya help to reduce Kapha and pacify Vata dosha. The Madhura rasa and Snigdha guna also does Vata shamanam 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. Kaijali 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 Yoga vahi hence it enhances the Gunas of all the other Dravyas 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), Talisapatta, Twak, Ela, Shunti etc are Kapha vata hara, Kanthaya 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 kanta 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.

REFERENCES

4. Harrisons principle of internal medicine, A.P.I text book of medicine

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

Cite this article as:

*Address for correspondence
Dr. Sridevi. P. Kulkarni
PG. Scholar,
Department of Post Graduate Studies in Kayachikitsa, Ayurveda Mahavidyalaya, Hubli, India.
Email: drsridevi85@gmail.com

Disclaimer: IJRAPS is solely owned by Mahadev Publications - A non-profit publications, dedicated to publish quality research, while every effort has been taken to verify the accuracy of the content published in our Journal. IJRAPS cannot accept any responsibility or liability for the articles content which are published. The views expressed in articles by our contributing authors are not necessarily those of IJRAPS editor or editorial board members.