A COMPARATIVE STUDY OF MANSHILADI DHUMA AND VASADI KWATH FOR MANAGEMENT OF ANURJATAJANYA TAMAK SWASA

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ABSTRACT

According to “State of World Allergy Report 2008: Allergy and Chronic Respiratory Diseases” of World Allergy Organization (WAO), 150 million patients suffering from allergic asthma are a big and dark reflection of the health statistics worldwide. In the last few years India being thickly populated and developing country has shown great enhancement in the allergic incidences. In the modern science anti-allergic drugs are prescribed for the management of allergy, but they are not safe and long lasting. Ayurveda can provide better replacement therapeutic measures to modern anti-allergic drugs in the light of eternal fundamental principles of management mentioned in Ayurveda. So that a safe and immuno-modulator formulation could be established as anurjata hara (Anti-allergic). The concept of Ayurveda is to good health and to cure the disease. To achieve this objective entire system can be divided into preventive medicine and curative medicine. Brief glimpse of preventive medicine can be over looked in svastha catuṣka and of curative medicine in bhesaṭa catuṣka although description of both is confined to the entire saṁhita. In Ayurveda śodhana, śamanā and rasāyaṇa therapies are described in different types of diseases.

KEYWORDS: Ayurveda, Anurjata, Bala, Dhuma, Tamaka Shvasa.

INTRODUCTION

Changing life style of 21st century has endangered quality life of mankind and brought into existence the kind of diseases never heard or remotely heard diseases earlier in Saṁhita. This stressful life style has brought degeneration in Bala and resulted in the immune system related diseases like Anurjata. There are many allergic diseases mounting in incidence every day, one of them is allergic asthma. The concept of Ayurveda is to good health and to cure the disease. To achieve this objective entire system can be divided into preventive medicine and curative medicine. For diseases different types of therapies described in Ayurveda like Shodhana, Shamana and Rasayana etc. and also described different routes of drug administration as antahparimarjan, Dhumapana is the type of antahparimarjanashadh. Oral route is the commonest route in Ayurveda that includes the intake of drugs in panchavidhakashayakalpanā and their modifications. The inhalation route has been used in Ayurveda since centuries back in certain diseases of pranavahasrotas and incorporates the direct administration of drug on the affected site i.e. pranavahasrotas in the form of smoke, the minutest form of substance that is gaseous state and results into immediate consequences like non-irritability of mucous membrane, antihistaminic properties, blockade of secretions, anti-inflammatory and broncho-dilatation without any hazardous effect. In Vasadi kwath Vasa is indicated in diseases such as Shwasa, Rajayakshma (tuberculosis), Rakta-pitta, Shotha (edema), and Jwara (fever). Vasicine and vasicinone, the bitter alkaloids available in the plant, has bronco-dilatory effect. Few studies have proven 6–10 times greater efficacy of vasicinone against aminophylline in cases of bronchial asthma. Most of the drugs in Vasadi kwath are Katu, Tikta, Kashaya in rasa and Raksha ,Laghu, Tikshna Guna, Katu Vipaka and Usna Virya. All these properties make them Agni-Dipaka, Ama Pacaka and Kapha- Vatahara. For this objective Manashiladi Dhuma has been selected for the study and Vasadi Kvatha was being administered for comparative study. This can prove more beneficial than modern inhalers and nebulizers and can be established as standard therapeutic measure to control the Shvasa Roga.

Aims ad objectives

To compare the efficacy of Manashiladi Dhuma and Vasadi Kvatha for the management of Anurjatajanya tamaka shvasa.
Methods Various subjective and objective parameters as per Ayurveda as well as modern science had been use for diagnosis of the patients.

Inclusion criteria
- Diagnosed and confirmed cases of Anurjatajanya Tamaka Shvasa (allergic asthma), on the basis of the clinical signs & symptoms mentioned in Ayurveda texts and laboratory investigations.
- Patients between the age group of 16-60 years.
- Patients suffering with mild to moderate Anurjatajanya Tamaka Shvasa (Allergic asthma).

Exclusion criteria
- Patient having age below 16 and above 60 years.
- Patient having any Cardiac complaint as - cardiac asthma.
- Patient having any other chronic and complicated respiratory disease as – COPD.
- Patient having allergic asthma with any other serious systemic disease.

Criteria for diagnosis: Patients having signs and symptoms of Anurjatajanya Tamaka Shvasa as mentioned in the modern medicine and relevant classical references were selected for present study. The patients suffering with chiefly triad of cardinals dyspnoea, cough and wheezes along with other associated symptoms were selected for the study mentioned as below:

- Ghurghurukam (Wheezing)
- Attivatravega Shvasa (Dyspnea of deep velocity)
- Kasa (Cough)
- Pratamavyayati (Fainting)
- Trt (Thirst)
- Sannirudhyate (Breathlessness)
- Uddhamsatekaanthah (Chocked throat)
- Krictakchaknotibhasitam (Difficulty in speech)
- Uchritaksha (Projected eyeballs)
- Lalatenasvidyata (Profuse sweating of fore head)
- Vishushkasyam (Dryness of mouth)

Laboratory Investigations
- IgE estimation
- Other Laboratory investigations- T.E.C., E.S.R.
- Spirometry
- Peak Expiratory flow

Clinical Study
30 clinically diagnosed patients were randomly divided into 2 Groups of 15 each as below: The study was done in two groups of Manashiladi Dhuma and Vasadi Kwatha each comprising of 15 patients.
- Group A - Patients will be administered “Manashiladi Dhumavarti” Twice a day.
- Group B - Patients will be administered “Vasadi Kwatha” in 40ml dose BD.

RESULT

Table 1: Showing the percentage of improvement in subjective parameters in 30 registered patients in two groups.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Subjective Parameter</th>
<th>Group A (%)</th>
<th>Group B (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Ghurghurukam (Wheezing)</td>
<td>70.37</td>
<td>68.18</td>
</tr>
<tr>
<td>2.</td>
<td>Attivatravega Shvasa</td>
<td>50.00</td>
<td>44.82</td>
</tr>
<tr>
<td>3.</td>
<td>Kasa (Cough)</td>
<td>71.42</td>
<td>68.00</td>
</tr>
<tr>
<td>4.</td>
<td>Pratamavyayati</td>
<td>66.67</td>
<td>50.00</td>
</tr>
<tr>
<td>5.</td>
<td>Trt (Thirst)</td>
<td>78.57</td>
<td>68.35</td>
</tr>
<tr>
<td>6.</td>
<td>Sannirudhyate</td>
<td>46.67</td>
<td>37.50</td>
</tr>
<tr>
<td>7.</td>
<td>Uddhamsatekaanthah</td>
<td>66.67</td>
<td>52.94</td>
</tr>
<tr>
<td>8.</td>
<td>Krictakchaknotibhasitam</td>
<td>87.50</td>
<td>57.43</td>
</tr>
<tr>
<td>9.</td>
<td>Uchritaksha</td>
<td>66.67</td>
<td>50.00</td>
</tr>
<tr>
<td>10.</td>
<td>Lalatenasvidyata</td>
<td>71.42</td>
<td>54.54</td>
</tr>
<tr>
<td>11.</td>
<td>Vishushkasyam</td>
<td>42.85</td>
<td>22.72</td>
</tr>
</tbody>
</table>

Table 2: Comparative symptomatic improvement in the patients.

<table>
<thead>
<tr>
<th>Group</th>
<th>% Age of Relief</th>
<th>Improvement</th>
<th>P</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>62.50</td>
<td>Moderate</td>
<td>&lt;0.001</td>
<td>H.S.</td>
</tr>
<tr>
<td>B</td>
<td>48.83</td>
<td>Mild</td>
<td>&lt;0.001</td>
<td>H.S.</td>
</tr>
</tbody>
</table>
Table 3: Percentage improvement of objective parameters.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Objective Parameter</th>
<th>Group A %</th>
<th>Group B %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Serum IgE</td>
<td>20.04%</td>
<td>19.98%</td>
</tr>
<tr>
<td>2.</td>
<td>ESR</td>
<td>55.11%</td>
<td>36.26%</td>
</tr>
<tr>
<td>3.</td>
<td>TEC</td>
<td>39.51%</td>
<td>34.02%</td>
</tr>
<tr>
<td>4.</td>
<td>FVC (%)</td>
<td>44.50%</td>
<td>21.00%</td>
</tr>
<tr>
<td>5.</td>
<td>FEV₁ (%)</td>
<td>72.00%</td>
<td>54.31%</td>
</tr>
<tr>
<td>6.</td>
<td>FEV₁/FVC (%)</td>
<td>22.43%</td>
<td>16.80%</td>
</tr>
<tr>
<td>7.</td>
<td>PEFR (%)</td>
<td>68.00%</td>
<td>49.11%</td>
</tr>
<tr>
<td>8.</td>
<td>Peak Expiratory Flow (L/m)</td>
<td>13.94%</td>
<td>6.68%</td>
</tr>
</tbody>
</table>

Table 4: Overall effect of therapy.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Effect of therapy</th>
<th>Group A %</th>
<th>Group B %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Complete relief</td>
<td>00 0.00%</td>
<td>00 0.00%</td>
</tr>
<tr>
<td>2.</td>
<td>Marked relief</td>
<td>05 33.33%</td>
<td>01 06.67%</td>
</tr>
<tr>
<td>3.</td>
<td>Moderate relief</td>
<td>04 26.67%</td>
<td>06 40.00%</td>
</tr>
<tr>
<td>4.</td>
<td>Mild relief</td>
<td>05 33.33%</td>
<td>07 46.66%</td>
</tr>
<tr>
<td>5.</td>
<td>No relief</td>
<td>01 06.67%</td>
<td>01 06.67%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>15 100.00%</td>
<td>15 100.00%</td>
</tr>
</tbody>
</table>

Overall Effect of Therapy
It is shown in the table that in Group A 33.33% patients got marked relief from the therapy followed by mild relief in 33.33 patients. Moderate relief was found in 26.67% patients whereas 06.67% patients got no relief. In Group B 46.66% patients showed the mild relief followed by 40.00% patients with moderate relief. Marked relief was found in 06.67% patients whereas 06.67% patients showed no relief.

Probable Mode of Action Of drug
Anti-allergic drugs must carry the properties of KapHAVatavahara, Dipana-Pacana, Rasayana, Srot-Shodhaka, Shvasahara, and Kasahara.

Their mechanism of action in anurjata is as following:-
Most of the drugs are Katu, Tikta, Kashya in Rasa and Raksha ,Laṅgu, Tikshna Gaṇa, Katu Viṣpaka and Uṣṇa Virya. All these properties make them Agni-Dipaka, Ama Pachaka and Kapha- Vatavahara.

Katu rasa has following properties
Agni-Dipyati, Pachana, Shothahara, Shodhana, Margana vivrunoti (Prasaryati srotanś- Arundatta), Shleshasamamanti, abhisyanda-klada-anupahanti.
• With Dipana Karma, it helped in Jatharagni Dipana and also Dhatvagnidipana.
• With Pachana Karma it helped in Amapachana which is main cause in the Samprapti hence with Dipana and Paccana Karma it help in sampraptivighataṇa.
• Prasaryatisrotaṇasi means Katu Raasa helps in bronchodilation. Also it is Kaphaghna, Kapha is one of the main Dosha in Samprapti of Tamakashvasa and so with Kaphaghna property it might have help in Sampraptivighataṇa of tamakashvasa.

Tikta rasa–Shleshnopshoshana, Dipana–Pachana, Lekhana, Shoshana, Vishaghnakantha-vishodhana, Shrotasamkharatwam-upapadayati, etc.

The medicated Ahara Rasa with Ama-Pachana properties is carried to the Samarasa Dhatu. This alleviates Dhatvagni Mandya of Rasa Dhatu and successively of all dhatus. On alleviation of Dhatvagni Mandya, Sarva Dhatusarata is achieved thereby resulting in Ojovriḍhi. This further enhances Bala or Vyadhikshamatva of patient in general.

By Ama-Pachana in Rasa Dhatu, Malarupa Kapha or Amanvisha is decreased. This results in saṅga removal or srotosodhana. So normal functioning of srotas is retained and normal immune strength is recovered and tolerance to various anūrjasakara factors is exhibited by specific srotas.

It is also Kaphaghna, Kapha is one of the main do in the Samprapti of Tamakashvasa, and so with Kaphaghna properties it again helped in Sampraptivighataṇa of Tamakasvasva. Acharya Arundatta explained the meaning of Kāṁthavishodhana as Kāṁṭharodhahara, that means it help to remove the obstruction in Kāṁṭhapradeshatikāta rasa may have helped in wheezing, Kāntēghurghur, Kāntēghudwamsa, Kričchacchnotiḥhashtum, Kāsa etc.

With Shoshana property it may have helped to reduce the quantity of expectoration, which may further lead to help in chest tightness.

Uṣṇa Virya may act with following properties:-
Dipana, pachana, Vata-Kaphaghna, Anulomana, Kaphashoshana.
Most of the drugs were Uṣṇa Virya. Upadhyay et al in 1979 at BHU, Varanasi has proved that the substance having Uṣṇa Virya are accountable for increasing the basal metabolic rate, oxygen consumption and accelerate the breakdown of fat at mitochondrial level. According to Ayurveda, Uṣṇa Virya helps in pacifying Kapha and Vata. Raised metabolic rate helps in fast destruction of cell debris and clearing the micro channels. As the micro channels are cleared the Vata become Anuloma that is the Saṁpraptivighaṭana occurs. Dipana, Pachana helps in Saṁpraptivighaṭana as mentioned above.

Vipaka
80% of the Dravya have Kaṭu Vipaka and 20% Dravya have Madhura Vipaka. Kaṭu Vipaka will help in Saṁpraptivighaṭana as described in Kaṭu Rasa. Madhura Vipaka may have helped in Saṁpraptivighaṭana as – Vatanulomana, Vataṅgha, Brīṁhana.

Vata is one of the important Dosha in the Saṁprapti of Tamakasvaṣa, so with Vataśṛṅga Karna it may have help in Saṁpraptivighaṭana. Madhura Vipaka not only pacifies the Vata Dosha but also helps in the Prakṛtikagati of Vata Dosha that is leads to Anulomana of Vata Dosha.

Acharaya Charaka has stated that there should always be Brīṁhana Chikisa in Shvasa and Madhura Vipaka is having the property of Brīṁhana it must be helpful in Tamakasvāṇa.

Guna
Most of the Dravya having Laghu, Raksha and Tikṣṇa Guna. All these Guna helps in increasing Dhatsavāgni, by enhancing the basal metabolic rate. These also help in digestion of undigested matter and their removal.

Tikṣṇa Guna due to predominance of Agni Mahabhuta acts on the channels immediately and remove the obstruction by pacifying the Kaptha, help in Chedana of Kapha situated in the lungs. Raksha Guna helps in the absorption of excessive secretion and thereby helps in removing obstruction caused by thick mucus plug. Laghu and Raksha Guna are mainly Kapahāra.

The conclusions drawn from the clinical study are as follows:

- Anurjatajanya Tamakasvāṇa (allergic asthma) is one of the most prevalent life style disorder diseases in the current era of modernization and urbanization.
- Its non-mention in Ayurveda classics by any specific name but parallel description of relevant disorders indicate about non or very remote occurrences of this disorder because of exogenous factors.
- Unlike allergy in modern literature Anurjatajanya shvasa is not entirely allergen based disorder, but malpractices in dietary intake predispose a person to susceptibility of Anurjata by increase in Ama Dosha due to Agnimanḍya conditions in Jathara as well as Dhatus.
- In a person previously afflicted by some poison (Visha) or some toxic effects of a drug, the poison is retained by body in an inactive or latent stage. This latent stage is provoked by intake of Viruddha Āhara, adverse environmental conditions etc. and that person are captured by the Sannīkrīṣṭa Anurjaskara factors like dust and smoke etc. results in Anurjatajanya Shvasa.
- Anurjatajanya Tamaka Shvasa is a Vatovarna Sannipataja disease
- Anurjatajanya Tamaka shvasa may be a hereditary (Sahaja) disease or can develop later in life because of other factors.
- Relating about the symptoms of allergic asthma, these are very strongly comparable to the Tamaka shvasa. All these are described broadly in Ayurveda.
- Although un-precedential by name in Ayurveda, all the clinical parameters were screened in abundance in three treatises of Bhātratṛayī. The highly significant results of trial drug in present study clearly indicate that Ayurveda is well efficient for the management of all kinds of asthma by its multi-dimensional approach.
- The patients of Anurjatajanya Shvasa (allergic asthma) need continuous and long duration treatment. As the treatment is withdrawn the symptoms may show recurrence.
- Manashiladi Dhuma is efficacious in alleviating and reducing the morbidity of Anurjata in the comparison of Vasadi Kwatha.
- Manashiladi Dhuma, drug of Kapha-vatahara effect is clinically established as an anti-allergic and a safe alternative medicine.
- No adverse effect was observed during the study period of trial drug.
- Patients of Group A (Manashiladi Dhuma) showed statistically highly significant results in the symptoms like Ghurghurakam, and Kasa.; significant results in Ativativravegavasvāṇa, Sannirudhyate, and Lalatenasvidyata and non-significant results in Pratamasyatiyati, Ucchrittakṣa, Uddhvansatekāṇṭhaḥ, Trīṭ, Kṛcchrachaknotībhāṣītum, and Vιshuṣkasvaṃ. On the other hand patients of Group B. i.e. Vasadi Kwatha showed statistically highly significant results in the symptoms like like Ghurghurakam, and Kasa.; significant results in Ativativravegavasvāṇa, Trīṭ, Sannirudhyate, and Lalatenasvidyata and non-significant results in Pratamasyatiyati, Kṛcchrachaknotībhāṣītum, Ucchrittakṣa, Uddhvansatekāṇṭhaḥ and Vιshuṣkasvaṃ. Statistically significant reduction in Serum IgE, Eosinophils (TEC) and ESR was observed in patients of both groups, but % of change is more in Group A in the comparison of Group B showed Manashiladi Dhuma immunomodulatory activity in the body.
• Statistically significant improvement in FVC (%) and peak expiratory flow was observed in patients of both groups, but % of change is more in Group A in the comparison of Group B.
• Almost statistically equal efficacy was observed in both the groups but % of relief is more in Group A in the comparison of Group B.

REFERENCE