



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

¹Dr. Priyanka Firoda and ²Dr. Sudesh Kumar Bhambu

¹Assistant Professor, Dept. of Basic Principle, MJF College of Ayurveda Chomu Jaipur. (303702).

²Assistant Professor, Dept. of Swasthavritta and Yoga MJF College of Ayurveda Chomu Jaipur. (303702).

Corresponding Author: Dr. Priyanka Firoda

Assistant Professor, Dept. of Basic Principle, MJF College of Ayurveda Chomu Jaipur. (303702).

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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 worldwide¹. 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 *bheshaja catuṣka* although description of both is confined to the entire *samhita*. In *Ayurveda śodhana*, *samana* and *rasāyana* 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 *Samhita*. 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 *antahparimarjanaushadh*. 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*, *Rajyakshma* (tuberculosis), *Raktapitta*, *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 *Ruksha*, *Laghu*, *Tikshna Guṇa*, *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 Kwatha* 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 Kwatha* 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)
- *Ativativravega Shvasa* (Dyspnea of deep velocity)
- *Kasa* (Cough)
- *Pratamyatyati* (Fainting)
- *Tr̥t̥* (Thirst)
- *Sannirudhyate* (Breathlessness)
- *Uddhvamsatekanthah* (Choked throat)
- *Kricchracchaknotibhasitum* (Difficulty in speech)
- *Ucchritaksha* (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.

S. No.	Subjective Parameter	Group A	Group B
1.	<i>Ghurghurukam</i> (Wheezing)	70.37%	68.18%
2.	<i>Ativativravegashvasa</i> (Dyspnea of deep velocity)	50.00%	44.82%
3.	<i>Kasa</i> (Cough)	71.42%	68.00%
4.	<i>Pratamyatyati</i> (Fainting)	66.67%	50.00%
5.	<i>Tr̥t̥</i> (Thirst)	78.57%	68.35%
6.	<i>Sannirudhyate</i> (Breathlessness)	46.67%	37.50%
7.	<i>Uddhvamsatekanthah</i> (Choked throat)	66.67%	52.94%
8.	<i>Kricchracchaknotibhasitum</i> (Difficulty in speech)	87.50%	57.43%
9.	<i>Ucchritakshah</i> (Projected eyeballs)	66.67%	50.00%
10.	<i>Lalatenasvidyata</i> (Profuse sweating of fore head)	71.42%	54.54%
11.	<i>Vishushkasyam</i> (Dryness of mouth)	42.85%	22.72%

Table 2: Comparative symptomatic improvement in the patients.

Group	% age of Relief	Improvement	P	Result
A	62.50	Moderate	<0.001	H.S.
B	48.83	Mild	<0.001	H.S.

Table 3: Percentage improvement of objective parameters.

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

Table 4: Overall effect of therapy.

S. No.	Effect of therapy	Group A		Group B	
		No.	% age	No.	% age
1.	Complete relief	00	0.00	00	0.00
2.	Marked relief	05	33.33	01	06.67
3.	Moderate relief	04	26.67	06	40.00
4.	Mild relief	05	33.33	07	46.66
5.	No relief	01	06.67	01	06.67
	Total	15	100.00	15	100.00

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 *Kapha-vatahara*, *Dipana-Pacana*, *Rasayana*, *Sroto-Shodhaka*, *Shvasahara*, and *Kasahara*.

Their mechanism of action in *anurjata* is as following:- Most of the drugs are *Katu*, *Tikta*, *Kashya* in *Rasa* and *Ruksha*, *Laghu*, *Tikshna* *Guna*, *Katu* *Vipaka* and *Uṣṇa* *Virya*. All these properties make them *Agni-Dipaka*, *Ama Pachaka* and *Kapha- Vatahara*.

Katu rasa has following properties

Agni-Dipyati, *Pachana*, *Shothahara*, *Shodhana*, *Margana* *vivrunoti* (*Prasaryati* *srotansi-* *Arundatta*), *Shleshmasamyanti*, *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 *Pacana Karma* it help in *sampraptivighatana*.
- *Prasaryatisrotanasi* 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 *Sampraptivighatana* of *tamakashvasa*.

Tiktarasa–Shleshmopshoshano, *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 *dhatu*s. On alleviation of *Dhatvagni Mandya*, *Sarva Dhatu* *sarata* is achieved thereby resulting in *Ojovridhi*. This further enhances *Bala* or *Vyadhikshamatva* of patient in general.

By *Ama-Pachana* in *Rasa Dhatu*, *Malarupa Kapha* or *Amavisha* is decreased. This results in *saṅga* removal or *srotośodhana*. So normal functioning of *srotas* is retained and normal immune strength is recovered and tolerance to various *anūrjaskara* 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 *Sampraptivighatana* of *Tamakashvasa*. *Acharya Arundatta* explained the meaning of *Kanṭhaviśhodhana* as *Kanṭharodhahara*, that means it help to remove the obstruction in *Kanṭhapradeshatikta* *rasa* may have helped in wheezing, *Kanṭhaghurghur*, *Kanṭhodhwamsa*, *Kricchacchknottibhashitum*, *Kasa* etc.

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

Ushna Virya may act with following properties:-

Dipana, *pachana*, *Vata-Kaphaghna*, *Anulomana*, *Kaphashoshana*.

Most of the drugs were *Ushna Virya*. Upadhyaeta.al in 1979 at BHU, Varanasi has proved that the substance having *Usna Virya* are accountable for increasing the basal metabolic rate, oxygen consumption and accelerate the breakdown of fat at mitochondrial level. According to *Ayurveda*, *Ushna 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 *Sampraptivighatana* occurs. *Dipana*, *Pachana* helps in *Sampraptivighatana* as mentioned above.

Vipaka

80% of the *Dravya* have *Katu Vipaka* and 20% *Dravya* have *Madhura Vipaka*. *Katu Vipaka* will help in *Sampraptivighatana* as described in *Katu Rasa*. *Madhura Vipaka* may have helped in *Sampraptivighatana* as – *Vatanulomana*, *Vataghna*, *Brinhana*.

Vata is one of the important *Dosha* in the *Samprapti* of *Tamakashvasa*, so with *Vataghna Karma* it may have help in *Sampraptivighatana*. *Madhura Vipaka* not only pacifies the *Vata Dosha* but also helps in the *Prakritikagati* of *Vata Dosha* that is leads to *Anulomana* of *Vata Dosha*.

Acharaya Charaka has stated that there should always be *Brimhana Chikitsa* in *Shvasa* and *Madhura Vipaka* is having the property of *Brimhana* it must be helpful in *Tamakashvasa*.

Guna

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

Tikshna Guna due to predominance of *Agni Mahabhuta* acts on the channels immediately and remove the obstruction by pacifying the *Kapha*, help in *Chedana* of *Kapha* situated in the lungs.

Ruksha Guna helps in the absorption of excessive secretion and thereby helps in removing obstruction caused by thick mucus plug. *Laghu* and *Ruksha Guna* are mainly *Kaphahara*.

The conclusions drawn from the clinical study are as follows:

- *Anurjatajanya Tamakashvasa* (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 *Agnimandya* conditions in *Jaṭhara* as well as *Dhatu*.

- 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 Ahara*, adverse environmental conditions etc. and that person are captured by the *Sannikrishṭa Anurjaskara* factors like dust and smoke etc. results in *Anurjatajanya Shvasa*.
- *Anurjatajanya Tamaka Shvasa* is a *Vatolvana 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 *Brhatrayi*. 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 *Ghurghurukam*, and *Kasa*; significant results in *Ativativravegashvasa*, *Sannirudhyate*, and *Lalaṭenasvidyata* and non-significant results in *Pratamyatyati*, *Ucchritakṣah*, *Uddhvaṃsatekaṅṭhah*, *Tr̥ṭ*, *Kṛcchracchaknotibhaṣitum*, and *Vishuṣkasyam*. On the other hand patients of Group B. i.e. *Vasadi Kwatha* showed statistically highly significant results in the symptoms like like *Ghurghurukam*, and *Kasa*; significant results in *Ativativravegashvasa*, *Tr̥ṭ*, *Sannirudhyate*, and *Lalaṭenasvidyata* and non-significant results in *Pratamyatyati*, *Kṛcchracchaknotibhaṣitum*, *Ucchritakṣah*, *Uddhvaṃsatekaṅṭhah* and *Vishuṣkasyam*. 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.

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