

## CLINICAL STUDY ON VIRECHANA KARMA ALONG WITH BHARANGI NAGAR YOG IN THE MANAGEMENT OF TAMAKA SHVASA W.S.R TO BRONCHIAL ASTHMA

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### ABSTRACT

Ayurveda, the Indian system of medicine uses drugs from three main sources i.e. plant, animal and mineral. The *Tamaka Shvasa* is equated with the Bronchial Asthma due to similarity in etiology, pathology, symptoms and prognosis but different in the treatment. In the present study we planned to get effective and safe treatment for “*Tamaka Shvasa*” with the help of clinical principles of Ayurveda. In the present study, 40 patients having *Tamaka Shvasa* were selected from O.P.D. & I.P.D. of Jammu Institute of Ayurveda & Research College and Hospital, Jammu and C.H.C, R.S. Pura. These patients were divided into four groups and were subjected to the following therapeutic regimen namely Kalka Group, Virechana Group, Virechana Kalka Group and S.A.D. Group. Then assessment of each therapy on sign and symptom was done by adopting suitable scoring methods and repeating laboratory investigations and critically analyzed. The results thus obtained finally were subjected for statistical analysis for a good comparison of all the therapies. The end results thus obtained were interpreted and graded as complete remission, marked improvement, moderate improvement and mild improvement and presented in details.

**Keywords:** *Tamaka Shvasa*, Virechana, Kalka, Ayurveda

### INTRODUCTION

The knowledge of *Ayurveda* dates back to the epoch of *Rigveda*. This knowledge is said to have been transferred down the generation by sages and wise men. *Charaka* and *Sushruta* are the primary men who are responsible in shaping the present scenario of *Ayurveda* who treat the human body as a part and parcel of nature. *Ayurveda* is an ancient science of indigenous medicine which is special in respect that it is not only a medical science but is an art of living in human beings. Pages of history reveal that man has been constantly accompanied by diseases even before the

dawn of civilization. This company of disease is attributed to his ignorance, idleness, inclination towards sensual enjoyments and sedentary life. Lots of branches like Ayurveda, Allopathy, Homeopathy, are present in society with different means to achieve the same goal i.e. health or feeling of well being. But *Ayurveda* is primordial one amongst other<sup>1,2</sup>.

The very basic *Tridosha* theory of *Ayurveda*, explains about the physiological traits *Vata*, *Pitta* and *Kapha*. The normal functions of the body are carried out by these three principles co-operating with each other to maintain the

positive health. However, when they are vitiated by any mean resulting in functional imbalance and lead to many diseases. Among the diseases, *Tamaka Shvasa* which is increasing day by day is mentioned here<sup>3</sup>.

*Tamaka Shvasa* is mentioned as one of the variety among five types of *Shvasa*. Out of these, *Kshudra Shvasa* is present as symptom in most of the diseases and does not require any medication where as *Maha Shvasa*, *Urdhva Shvasa* and *Chinna Shvasa* were present in the terminal stages of various diseases. *Tamaka Shvasa* is a 'Swantantra' vyadhi and has its own etiology, pathology and management. It is mentioned as *Yapyaa Vyadhi* i.e. chronic in nature. This disease is manifested by Strotorodha in *Pranavahastrotas* and increased *Kapha Dosh*<sup>4</sup>.

According to *Ayurveda* increased *Kapha Dosh* in the stomach is the underlying cause of Asthma. Imbalance of which is due to various reasons such as improper diet regimen, improper viharas and psychic factors. The pathogenic substances for the manifestation of the diseases are carried through *Rasvaha Srotas* to the weakest point in the body which has an affinity to the type of morbidity already created in stomach. So if the tissues of the lungs, musculature of bronchial tube and mucous membrane lining these tubes are weak, then they get affected. Thus *Ayurveda* states site of origin of *Shvasa-Amashya*, channels of circulation- *Rasavaha*, Strotorodha- *Pranavaha*, site of Manifestation – lungs. Due to vitiation of Vata, dryness is increased and natural lubrication is disturbed hence causes difficulty in breathing. Breathing becomes stressful<sup>5</sup>.

The *Tamaka Shvasa* is equated with the Bronchial Asthma due to similarity in etiol-

ogy, pathology, symptoms and prognosis but different in the treatment. Present study aimed to get effective and safe treatment for "*Tamaka Shvasa*" with the help of clinical principles of Ayurveda. *Tamaka Shvasa* is a *Yapya Vyadhi* which means as a long as medicine is going on, disease is in control. When there is cessation of medicine, Vyadli again recurs. So such type of treatment is required which can treat the disease radically<sup>6,7</sup>. Virechana (shodhana therapy) is a type of therapy, where there are no chances to provoke the disease again. Secondly, line of treatment of *Tamaka Shvasa* is also given, shodhana therapy (Virechana therapy).

In Shamana therapy, a *binomial* compound drug was planned, keeping the view in mind the properties, like Shvasahara, Antiallegic and Bronchochilator.

## MATERIAL AND METHODS

The present study was carried out in two parts: Literary and clinical. The disease was keenly analyzed on the basis of descriptions of the great scriptures through their authentic Ayurvedic texts and for Modern aspects; text books of respiratory disorders were referred.

For conducting clinical study, 40 patients having *Tamaka Shvasa* were selected from O.P.D. & I.P.D. of Jammu Institute of Ayurveda & Research College and Hospital, Jammu and C.H.C, R.S. Pura.

### Inclusion criteria

- Belonging to age group 18-60 years
- Chronicity < 10 years
- Uncomplicated Cases of Bronchial Asthma

### Exclusion criteria

- Pulmonary Tuberculosis
- COPD
- Status Asthmaticus
- Pulmonary Eosinophillia

- Pulmonary Odema
- Cardiac Disorders
- Anatomical defects in airways.
- Sub. Stantial abnormalities in Hematological, CVS, Renal, Hepatic metabolic function.
- Pneumonia
- Emphysema.

#### **Diagnostic criteria**

- Patients having signs and symptoms of *Tamaka Shvasa* as described in Ayurvedic classics were included in study.
- Detailed history was taken and physical examination was done on the basis of a special performa incorporating all signs and symptoms of the disease.
- The routine hematological investigations and urine analysis were carried out in selected patients to exclude any other pathology as well as to assess the present condition of the patient.
- The specific tests like AEC and PEFr were also performed.

These patients were divided into four groups and were subjected to the following thereuptic regimen.

#### **Group I (Kalka Group)**

In this group, Bharangi Nagar Yog was given to the patient in a dosage of 3-6 gm T.D.S. with plain water as Anupana. The total duration of this therapy was 1 month.

#### **Group II (Virechana Group)**

The patients of this group were administered Virechana Karma with Gandhravahasta Taila in the dose of 50-60ml after going through Purvakarma i.e. Snehana & Swedana.

#### **Group III (Virechana Kalka Group)**

In this group, Virechana was given to patient at first. After the completion of Virechana Karma, Kalka Yog was given in the dose of 3-6gm T.D.S. for 15 days.

#### **Group IV (S.A.D. Group)**

The patients of this group were administered standard Allopathic Drug – Deriphyllin in the dose of 1-2 tabs (100-200 mg) T.D.S. for 1 month with successive decline in dose according to the condition of patient.

#### **Regime**

All the patients were strictly instructed to avoid the *Aaharas* and *Viharas* which make the kopa of Vata and Kapha dosha by making them understand about the regimen to be followed during the treatment period.

Prior to the treatment, a detailed Performa was duly filled for each patient and necessary laboratory investigations were carried out. Then assessment of each therapy on sign and symptom was done by adopting suitable scoring methods and repeating laboratory investigations and critically analyzed. The results thus obtained finally were subjected for statistical analysis for a good comparison of all the therapies. The end results thus obtained were interpreted and graded as complete remission, marked improvement, moderate improvement and mild improvement and presented in details<sup>8-14</sup>.

#### **RESULTS AND DISCUSSIONS**

The observations made on 40 patients have showed that maximum number of patients i.e. 32.5% were belonged to 31-40 years of age group, 60% were of Hindu religion, 75% were married and 40% were labourers. Majority of the patients were uneducated. Only 17.5% were educated upto graduate level, 40% people were poor and 62.5% were belonging to urban area. In this study, 47.5% patients were having constipation, 52.5% were taking vegetarian diet, 40% patients were having Samashana diet habit and 45% were habitual of taking madhura rasa. Among the 40 patients, majority i.e. 32.5% patients were

suffering from depression, 57.5% had disturbed sleep and 40% were addict of smoking. 52.5% patients were having KaphaVataprakriti and 60% were of Rajasika Prakriti.

Sara, Samahanan, Satmya, Pramana wise distribution has shown that most of the patients were having Madhyama Sara, Madhyama Samahanan, Madhyama Satmya and Madhyama Pramana i.e 47.5%, 52.5%, 40% and 57.5% respectively. Abhyaharan Shakti, Jarna Shakti and Vyayama Shakti showed 50% Madhyama Abhyaharan Shakti, 42.5% MadhyamaJarna Shakti and 40% MadhyamaVyayama Shakti. Only in Satva, maximum number of patients i.e. 50% showed Avara type of Satva. Looking at Kostha wise, nature of work wise and Agni wise distribution, it shows that maximum no. of patients had KruraKostha (50%), 42.5% patients were leading sedentary life and 57.5% were having Mandagni. Srotodusti wise distribution shows that 62.5% patients has Sashabda Pranavahasrotodushti, 42.5% had Arochaka type Annavaha Srotodusti and 42.5% had KanthaShosha , symptom of Udakavaha Srotodusti. Upashaya–Anupashaya wise distribution shows that 85% patients got relief in lying position. (Asino Labhate Saukhyam) and 65% reported Raja/ Dhuma as Anupashaya.

Hours of day sleep study shows that 42.5% people were taking >1 hr sleep which plays a major role in Kaphadusti. History wise distribution shows that 60% of patients had no family history of allergic disorders, 45% of patients gave history of frequent cold/cough and 55% gave pet keeping history. Chronicity wise distribution suggests that 25% each were with chronicity below 1 year and more than 7 years. In Aaharjanya Nidana maximum ie:

70% patients were taking Dadhi,among Viharaya Nidana 62.5% patients reported shittasthana and in Nidanarthakara Roga 70% patients complained Pinasa as eitiological factors.

In the present study, it was observed that in 97.5% patients Shvasakrichhrata symptom was found followed by 90% of patients complaining Pinasa symptom. Kasa, Ghurghurukam and Kaphasthevan were observed in 85%, 82.5% and 75% while Urahshula, Parshavashula and Bhrama was found in 40%, 37.5% and 50%. In this study Kanthodhvasanam, SVM, Vishuskasyata, Anidra, Kricchratbhsitam and Lalatasweda was reported in 87.5%, 85%, 75%, 70%, 55% and 40% patients respectively as associated symptom.

#### **Clinical study**

In Group I<sup>st</sup>, 9 patients were treated with Kalka Therapy of Bharangi Nagar Yoga in a dose of 3-6 gm bd for 1 month. This therapy has provided significant relief in all cardinal symptoms. Highly significant result was not found in any symptom (Table 1).

In Group II<sup>nd</sup>, 8 patients were treated with Virechana Therapy. This Therapy has provided highly significant improvement in Shvasakrichhrata (58.47%), Pinasa (30%) Ghurghurukam (45.48%) and Kaphanishivanam (61.29%). Statistically significant relief was found in Kasa (31.25%) Parshavashula (45.5%).Where as in Urahshula (30%) and Bhrama (75%) insignificant relief was found (Table 2).

In Group III<sup>rd</sup>, 9 patients of Tamaka Shvasa were treated with VK therapy in the same dose as mentioned above,had showed that this therapy has provided highly significant results in Shvasakrichhrata (78.2%) Kasa (71.14%) Pinasa (47.26%) Ghurukam (73.05%)and

Kaphnishtivanam (75%) with high percentage of improvement (Table 3).

In Group IV<sup>th</sup>, 9 patients were treated with Standard Allopathic Drug (Deriphyllin) in 1-2 tabs (100-200mg) dose TDS for 1 month with successive decline in dose. This therapy has provided highly significant results in symptoms Shvasakrichhrata (52.6%), Kasa (43.7%) Ghurgurukam (60%) and Kaphnishtivanam. Significant relief was found in Pinasa (33.2%). Insignificant relief was found in Urahshula (39.94%) Parshavashula (66.7%) and Bhrama (60%) (Table 4).

Group I has provided highly significant result in Associated Symptoms with improvement of 42.75% in Kanthodhvansanam. Statistically significant results were found in Kricchrat Bhasitam (57.14%) Vishuskasyata (31.23%), SVM (24.7%), Anidra (27.8%). Insignificant improvement was found in Lalata Sweda.

Group II provided highly significant results in Kricchratbhasitam (45.55%) Kanthodhvansanam (60%), SVM (66.66%), statistically significant results in Anidra (57.14%), Vishushasyata (28.75%) and insignificant results in Lalatasweda (50%).

Group III provided highly significant results in all associated symptoms: Kricchrat-Bhasitam (50.11%), Kanthodhvansanam (53.23%) Vishuskasyata (72.67%), SVM (60%), Anidra (59.93%). But in Lalata Sweda insignificant result was found (66.7%).

In Group IV, highly significant results were found in Kanthodhvansanam (49.62%), Anidra (54.9%). Statistically significant results were found in Kricchratbhasitam SVM (62.63%) symptom. Insignificant results were found in Lalata Sweda (60%) and Vishuskasyata (75%)

Group I, II, III, all these groups provided highly significant results in frequency of Vega

with percentage of (31.6%) (43.75%) and (50%) while statistically significant result was observed by Group IV in this symptom (35.3%)

In duration of attack Group II, Group III and Group IV provided highly significant improvements with (41.07%) (45.69%) and (38.15%), respectively. Whereas Group I has provided statistically significant result in this symptom (29.4%).

In Agni Bala Group III showed highly significant result with (59.88%) whereas Group I and Group II showed significant improvement with 33.29% and 36.23% respectively. But Group IV showed insignificant result in this symptom (22.2%)

In Deha Bala, no group showed significant result.

In Satva Bala only III Group showed statistically significant result with percentage (36.4%) Rest all the groups showed insignificant results in Satva Bala.

Group II, Group III and Group IV showed highly significant results in Rhonchi with percentage of (66.7%), (66.89%) and (46.24%) respectively. Group I showed statistically significant result (39.9%) in Rhonchi.

In Haematological Values, In Group I, Kalka therapy showed highly significant result in ESR reduction (11.86%), significant result in Eosinophil Count reduction (6.2%) and insignificant results in Hb (1.9%) TLC (0.012%) Lymphocytes (3.3%) and Neutrophils (0.019%) values.

In Group II, Shodhana therapy showed statistically significant results in Eosinophil Count (6.15%) and ESR (16.49%). In Hb, TLC (8.53%), Lymphocytes (7.5%) and Neutrophil Count (.04%) insignificant results were found.

In Group III, VK therapy gave highly significant results in Eosinophil Count reduction (6.04%) and ESR reduction (19.84%). While in all other symptoms like Hb (2.29%) TLC (6.17%), Lymphocytes (1.36%) and Neutrophils Counts (6.58%), it gave insignificant results.

In Group IV, S.A.D therapy showed highly significant results in Eosinophil count (47.89%) and ESR (15.38%). While in Hb value there was statistically significant improvement with 6.27%. In TLC(.02%) Leucocytes (.06%) Neutrophils (0.04%) counts no significant improvement was seen.

From all above discussion, it is concluded that no therapy has provided significant result in Hb, TLC, Lymphocytes, Neutrophil Count except Group IV in Hb value gave significant improvement which was due to intake of haematinics by patients at their own will. All groups showed highly significant results in ESR, significant results in Eosinoiphil Count. But Group III provided highly significant results both in ESR and Eosinophil Count reduction with high percentage of improvement than other three groups.

In Absolute Eosinophil Count, all therapies showed highly significant results with Group II (3.9%) Group III (4.5%) and Group IV (2.5%) reduction respectively except Group I (1.6%) reduction with significant value.

In PEFR, Group II, III, IV showed highly significant results with 3.9%, 6.03%, 2.6% respectively. Whereas Group I showed significant result with 2.18%.

In Group II, Virechana therapy and Group III Virechana Kalka therapy both Upasaya, Ushanabhinandati and Assinolabhate Saukhyam gave highly significant results with (35.7%, 42.55%) and (42.85%, 64.6%) respectively.

On Ushanabinandati, Group I Kalka therapy and Group IV S.A.D therapy proved statistically significant results with percentage of (23.49%) and (36.49%).

In Assinolabhate Saukhyam, Group IV S.A.D therapy showed highly significant result (35.87%) and Group I, Kalka Therapy showed statistically significant result (42.9%).

Overall response of each therapy was worked out in the individual patient.

- The complete remission was found only in Group III with 22.2%.
- Marked improvement was seen in least % i.e. 25% in Group II, 33.3% in Group IV as compared to maximum percentage i.e. 55% in Group III.
- In Group I 66.6% patients showed moderate improvement as compared to 75% in Group II and with equal percentage of improvement in Group IV i.e.66.6%. In Group III, no patient had shown moderate improvement.
- In Group I, 33% of patients showed mild improvement with no comparison with other Group as any other group had not showed mild improvement.

So it is well observed that Group III provided better relief in amelioration of signs and symptoms in comparison to other group. Although other groups also proved its efficacy in alleviating symptomatology of Tamaka Shvasa but to lesser extent.

## CONCLUSIONS

Tamaka Shvasa is a chronic disease of Pranavaha Srotasa. This is a Pittasthana Samudbhava disease in which the Prakupita Vatadosha or Kaphadosha or both make Sthanasamshraya in Urah. Literally it is correlated with Bronchial Asthma in modern literature which is considered as chronic airway inflammatory disease. Management

principles differs in both Vata dominating & Kapha dominating pathogenesis hence diagnosis of disease is important other wise it will worsen condition. In TLC, Lymphocyte count, Neutrophil count (haematocrit values) and Deha Bala, no drug had showed any significant result. Overall improvement in Kalka Group was 27.63%, in Virechana Group it was 40.41%, in Virechana Kalka Group it was 51.54% and in Standarded Allopathic drug (Deriphyllin) Group it was 44.03% observed. It can be concluded that Virechana Kalka Therapy has provided better result with greater palatability, which is need of modern era in the Management of Tamaka Shwasa. The most important thing which had been noticed that no adverse effect of the drug was observed during the course of treatment.

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**Table 1: Effect of Kalka Therapy on Cardinal Symptoms of 9 patients of Tamaka Shvasa**

S. No.	No. of Patients	Cardinal features	Mean Score		% Relief	Mean Difference	SD	SE	t	P Value
			BT	AT						
1	9	Shvasakrichhrata	2.00±.71	1.44+.527	27.80%	0.556	0.527	0.176	3.162	<.05
2	9	Kasa	1.89+.782	1.22+.667	29.41%	0.556	0.527	0.176	3.162	<.05
3	8	Pinasa	2.13+.641	1.50+.535	29.34%	0.625	0.518	0.183	3.416	<.05
4	5	Urahshula	1.80±.84	1.00±.71	44.45%	0.8	0.447	0.2	4	<.05
5	4	Parshavashula	2.50±.58	1.25±.50	50%	1.25	0.5	0.25	5	<.05
6	7	Ghurghurukam	1.86±.69	1.29+.487	30.69%	0.571	0.535	.202	2.828	<.05
7	6	Bhrama	1.67±.82	1.00±.63	40.11%	0.667	0.516	0.211	3.162	<.05
8	8	Kaphanishtivanam	1.88±.83	1.25+.71	33.24%	0.625	0.518	0.183	3.416	<.05

**Table 2: Effect of Virechana Therapy on Cardinal Features of 8 patients of Tamaka Shvasa**

S. No.	No. of Patients	Cardinal features	Mean Score		% Relief	Mean Difference	SD	SE	t	P Value
			BT	AT						
1	7	Shvasakrichhrata	1.71±.76	.71±.49	58.47%	1	0.577	0.218	4.583	<.01
2	8	Kasa	2.00±.76	1.38+.744	31.25%	0.625	0.518	0.183	3.416	<.05
3	8	Pinasa	2.50±.76	1.75+.463	30%	0.75	0.463	0.164	4.583	<.01
4	5	Urahshula	1.60±.89	1.00±.71	37.50%	0.6	0.548	0.245	2.449	>.05
5	5	Parshava Shula	2.20±.84	1.20±.84	44.45%	1	0.707	0.316	3.162	<.05
6	7	Ghurghurukam	1.57±.79	.86+.69	45.48%	0.714	0.488	0.184	3.873	<.01
7	4	Bhrama	1.00±.82	.25±.50	75%	0.75	0.5	0.25	3	>.05
8	6	Kaphanishtivanam	2.17±.75	.83±.75	61.29%	1.33	0.516	0.211	6.325	<.001

**Table 3: Effect of Virechana Therapy on Cardinal Features of 8 patients of Tamaka Shvasa**

S. No.	No. of Patients	Cardinal features	Mean Score		% Relief	Mean Difference	SD	SE	T	P Value
			BT	AT						
1	9	Shvasakrichhrata	1.56+.527	.33+.50	78.20%	1.22	0.441	0.147	8.31	<.001
2	7	Kasa	2.00±.82	.57±.79	71.14%	1.429	0.535	0.202	7.07	<.001
3	8	Pinasa	2.38±.92	1.25+.57	47.26%	1.12	0.641	0.227	4.97	<.001
4	4	Urahshula	1.00±.82	.50±.58	50%	0.5	0.577	0.289	1.732	>.05
5	3	Parshava Shula	2±1	.33±.58	83.30%	1.667	0.575	0.333	5	.05
6	9	Ghurghurukam	1.67±.87	.44±.53	73.05%	1.222	0.667	0.222	5.5	<.001
7	5	Bhrama	1.00±.000	.4+.548	60%	0.6	0.548	0.245	2.45	>.05
8	8	Kaphanishtivanam	2.00±.76	.50±.76	75%	1.5	0.535	0.189	7.937	<.001

**Table 4: Effect of Virechana Therapy on Cardinal Features of 8 patients of Tamaka Shvasa**

S. No.	No. of Patients	Cardinal features	Mean Score		% Relief	Mean Difference	SD	SE	t	P Value
			BT	AT						
1	9	Shvasakrichhrata	2.11±.60	1.00+.87	52.60%	1.11	0.601	2	5.55	<.01
2	9	Kasa	1.78±.67	1.00+.86	43.70%	0.778	0.441	0.147	5.29	<.01
3	8	Pinasa	1.88±.64	1.25+.46	33.20%	0.625	0.518	0.183	3.42	<.05
4	3	Urahshula	1.67±.58	1.00±1.00	39.94%	0.667	0.577	0.333	2	>.05
5	3	Parshava Shula	1.67±.577	0±0	99.70%	1.667	0.577	0.333	5	.05
6	8	Ghurghurukam	1.25±.46	.50±.76	60%	0.75	0.463	0.164	4.58	<.01
7	5	Bhrama	1.00±.00	.40±.55	60%	0.6	0.548	0.245	2.45	>.05
8	6	Kaphanishtivanam	1.67±.82	.83+.75	49.88%	0.833	0.408	0.167	5	<.01

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