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# Clinical study of *Pippalyadya Lau* in the management of *Tamaka Shwasa*

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## ABSTRACT

Our lifestyles have been driven to another level with introduction of new gadgets and science and technological interferences in living in one way or the other. The major cause of poor health conditions are diseases, improper and unhealthy dietary habits, injury, incremented mental stress levels, lack of hygiene, unhealthy lifestyle, etc. The true meaning of being healthy is apposite balance of mental, physical and a spiritual state of a being. *Shwasa Roga* is classified into 5 categories in *Ayurveda*. *Tamaka Shwasa* is one of the categories of *Shwasa Roga*. In modern *Asthma* is known as reactive airway disease. This hyper responsiveness manifests itself as broncho constriction following exercise, on natural exposure to strong as irritant fumes such as sulphur dioxide, tobacco smoke, etc. The present study deals with clinical Study of *Pippalyadya Lauh* on *Tamaka Shwasa*. In this study total 60 patients of *Tamaka Shwasa* were registered. Patients were randomly divided under three groups. Results of study reveals that all preparations of *Pippalyadi Loha* has shown significant results on *Tamaka Shwasa* patients and *Pippalyadi Loha* No I and considered to be the best among three different preparations and safe for use.

**Key words:** *Pippalayadi Loha, Tamaka Shwasa, Asthama.*

## INTRODUCTION

Asthma is a lung disease that inflames and narrows the airways. In today's stressful and modern urbanized life style, increase in environment pollution, population is some of the factors that increase cases of Asthma. Suitable inhalation is vital for good health. Breathing brings both oxygen and the vitality to every cell in the body. Briefness of breath and cough are those common health complaints which everyone

experience throughout their life with different degree. All age groups experience these problems. In *Ayurvedic* text, the clinical entity described with cardinal feature of difficulty in breathing is *Shwasa Roga*. About 16% of Indian population suffers from Asthma and 11% (approx 22million) cases are found in the USA. The GINA Workshop report 2005 says,<sup>[1]</sup> "The rate of asthma increases as communities adopt western lifestyles and become urbanized. With the projected increase in the proportion of the world's population that is urban from 45% to 59% in 2025, there is likely to be a marked increase in the number of asthmatics worldwide over the next two decades. It is estimated that there may be an additional 100 million persons with asthma by 2025." The term '*Tamaka Shwasa*' consists of two words *Tamaka* and *Shwasa*. '*Tamyati tamuglanoukwipanunasikasyaiti deerghahaishwasagatipratibandhakadoshaha*'.<sup>[2]</sup>

The attack of *Shwasa* with *Tamapravesha* occurs specially during *Durdina*. No commentator has mentioned the meaning of the word *Durdina*. *Acharya Caraka* explained that *Tamaka Shwasa* gets

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aggravated when one is exposed to cloudy atmosphere, cold water, cold weather, and wind blowing from eastern direction, *Kapha* aggravating food and regimen.<sup>[3]</sup> Hence the above conditions can be correlated with *Durdina*. *Vijayarakshita* the commentator of *Madhavanidana* explained as “*Shwasastubastrikadmanasamavatordhwagamithaiti*” i.e. in *Shwasaroga* the expired air produces sound similar to the sound of below of blacksmith.<sup>[4]</sup> *Pippalydiloha* is the classical preparation used in the treatment of *Tamka Swasa*. The formulation is prepared according to classical text *Bhaishajya Ratnavali Hikka Shwasa Rogadhikara*<sup>[5]</sup> and it is mainly indicated for the treatment of *Tamak Shwasa*. The *Pippalyadi Loha* is cost effective, and easy to prepare, here an attempt is made for “clinical evaluation of *Pippalaadi Loha* in *Tamak Shwasa*.”

### AIMS AND OBJECTIVES

1. To find out the efficacy of *Pippalyadi Loha* No 1 in *Tamaka Shvasa*
2. To find out the efficacy of *Pippalyadi Loha* No 2 in *Tamaka Shvasa*
3. To find out the efficacy of *Pippalyadi Loha* No 3 in *Tamaka Shvasa*
4. To compare the efficacy between *Pippalyadi Loha* No 1, 2 and 3 in *Tamaka Shvasa*.

### MATERIALS AND METHODS

**Ingredients of *Pippalyadi Loha*:** *Pippali* (coarse powder) 80g, *Amalaki* (coarse powder) 80g, *Draksha* (coarse powder) 80g, *Kola* (coarse powder) 80g, *Vidanga* (coarse powder) 80g, *Pushkaramoola* (coarse powder) 80g, Water 7680ml.

#### Preparation of *Pippalyadi Loha I, II and III*

***Pippalyadi Loha I*** - All the above mentioned drugs *Churna* was taken in *Khalva Yantra* mix it together and trituration was done upto 6 hrs.

***Pippalyadi Loha II*** - Water was taken in a big stainless steel vessel and coarse powder of all the above herbal ingredients were poured into the vessel. All were mixed and boiled till the liquid part was reduced to

1/8th that is 960ml; it was strained by clothes and used for *Bhavana*. Then *Bhavana* was given to prepare already *Pippalyadi Loha*. And process was repeated three times.

***Pippalyadi Loha III*** - Already prepared *Loha Bhasma* taken in *Khalva Yantra* and *Bhavana* was given by *Kwath* of herbal drug (Qty sufficient) which was prepared in first step of procedure. Total three times *Bhavana* given to *Loha bhasma*. Then third formulation was prepared.

### Study Design

In this study total 60 patients of *Tamaka Shvasa* were registered. Patients were randomly divided under three group's viz. Group A, Group B and Group C.

1. Group A: in this group 20 patients of *Tamaka Shvasa* were treated with classical *Pippalyadi Loha* No 1.
2. Group B: in this group 20 patients of *Tamaka Shvasa* were treated with classical *Pippalyadi Loha* No 2.
3. Group C: in this group 20 patients of *Tamaka Shvasa* were treated with classical *Pippalyadi Loha* No 3.

### Method of Drug Administration

1. Group A: *Pippalyadi Loha* No 1. Dose: 500mg twice a day *Anupana*: Lukewarm water
2. Group B: *Pippalyadi Loha* No 2. Dose: 500mg twice a day, *Anupana*: *Madhu* and *Sharkara*.
3. Group C: *Pippalyadi Loha* No 3. Dose: 500 mg twice a day *Madhu* and *Sharkara*. *Anupana*: *Madhu* and *Sharkara*.

**Duration of Trial:** The total duration of the trial drug is 60 days

### Selection of patients

Patients of *Tamaka Shvasa* with history of dyspnea were primarily selected in accordance with the following inclusion and exclusion criteria from the O.P.D and I.P.D of the Desh Bhagat Hospital, Mandigobindgarh, Punjab.

**Inclusion Criteria**

Patients having classical features of *Tamaka Shwasa* (Bronchial Asthma) like, breathlessness, wheeze, paroxysm of attack, cough etc. irrespective of Sex and Religion. Age - 18 to 60yrs.

**Exclusion Criteria**

Patients suffering with pulmonary tuberculosis, Lung Cancer, Lung fibrosis, Emphysema, Bronchiectasis, Cor- Pulmonale, IHD, Hypertension were excluded.

**Criteria for assessment**

The patient is assessed on the basis of subjective and objective criteria;

Various signs and symptoms were graded according to severity. Like *Shvasakashtata*, *Kasa* (cough), *Kapha Nishthivan* (sputum expectoration), *Ghurghurukam* (audible wheeze), *Asino Labhate Saukhyam* (get relief in sitting posture), *Shleshma Vimokshante Sukham* (get relief after expel out the sputum), *Peenasa* (Running nose) sneezing, *Kasatahsannirudhyate* (darkness before eyes in effort to expel, etc. Patients will also be asked about any growing feeling of physical and mental wellbeing after therapy.

**Laboratory Examination:** Before and after treatment

- Haematological investigation.
- Respirator function test - PEFR (peak expiratory flow rate) .
- Radiological Examination of the chest was done for ruling out other pulmonary complications. (If Required)

**Follow-up study**

After the completion of the treatment, the follow up was taken once in a fortnight up to one month.

**OBSERVATIONS AND RESULTS**

In the present study, total 67 patients of *Tamaka Shwasa* were registered. Out of which 60 patients completed the course of the treatment with follow up and 7 patients discontinued.

**Effect of therapy**

**Table 1: Effect of Pippalyadi Lauh no. 1 on the cardinal symptoms of 20 patients of Tamaka Shwasa (Group A).**

N	Cardinal symptoms	Mean Score		% of relief	SD (±)	SE (±)	t	P
		B T	A T					
20	<i>Shvasakashtata</i>	2.75	0.62	77.45	0.50	0.12	17.00	<0.001
12	<i>Kasa</i>	2.37	0.70	78.90	0.50	0.12	15.00	<0.001
8	<i>Kaphashthivanam</i>	2.00	1.10	45.00	0.32	0.10	9.00	<0.001
18	<i>Ghurghurkama</i>	2.35	0.70	78.35	0.98	0.24	07.39	<0.001
20	<i>Asinolabhat e Saukhyam</i>	2.11	1.06	49.76	0.68	0.17	7.32	<0.001
18	<i>Shleshma Vimokshante Labhate Saukhyam</i>	2.44	0.89	63.40	1.23	0.41	3.76	<0.001
16	<i>Peenasa</i>	2.15	1.23	42.71	0.86	0.23	3.84	<0.001
10	<i>Parshvagraha</i>	1.00	0.20	80.00	0.45	0.20	04.00	<0.001

The above table shows the result of *Pippalyadi Lauh* No.1 on cardinal symptoms of 20 patients of *Tamaka Shwasa* of Group A. Out of 20 patients of *Tamaka Shwasa* 77.45% relief in *Shvasakashtata*, relief in *Kasa* was 78.90%, *Kaphashthivanam* was reduced up to 45%, *Ghurghurkama* was reduced up to 78.35%, relief

obtained in *Asinolabjate Saukhyam* was up to 49.76%, relief in *Shleshma Vimokshnte Labhate Saukhyam* upto 63.44%, relief in *Peenasa* 42.71% and 80% was relief in *Parshvagraha*. All these values were statistically highly significant ( $P < 0.001$ ).

**Table 2: Effect of Pippalyadi Lauh No. 2 on the symptoms of 20 patients of Tamaka Shwasa (Group B)**

N	Cardinal symptoms	Mean score		%of relief	SD (±)	SE (±)	t	P
		BT	AT					
20	<i>Shvasa kashtata</i>	2.13	0.76	64.31	0.75	0.20	6.85	<0.001
10	<i>Kasa</i>	2.76	1.84	33.22	0.64	17.00	5.17	<0.001
11	<i>Kapha shthivanam</i>	2.84	1.34	45.67	0.75	20.00	6.50	<0.001
17	<i>Ghurghurkama</i>	2.41	0.66	72.61	0.43	0.13	13.46	<0.001
15	<i>Asinolabhat e Saukhyam</i>	2.19	1.31	40.18	0.72	0.18	4.87	<0.001
15	<i>Shleshma Vimokshante Labhate Saukhyam</i>	2.38	1.54	35.29	0.55	0.15	05.50	<0.001
13	<i>Peenasa</i>	2.58	0.67	74.03	0.51	0.15	12.89	<0.001
13	<i>Parshvagraha</i>	1.55	0.44	71.42	0.33	0.11	10.00	<0.001

The above table shows the result of *Pippalyadi Lauh* No. 2 on the cardinal symptoms of 20 patients of *Tamaka Shwasa* of Group A. out of 20 patients of *Tamaka Shwasa* there was 64.31% relief in *Shvasakashtata*, relief in *Kasa* was 33.22%, *Kaphashthivanam* was reduced up to 45.67%, The symptom of *Ghurghurkama* was reduced up to 72.61%, The relief obtained in *Asinolabjate Saukhyam* was up to 40.18%, relief in *Shleshma Vimokshnte Labhate Saukhyam* upto 35.29%, relief in *Peenasa*

42.71% Patients, 74.03% was relief in *Parshvagraha*, which were statistically highly significant ( $P < 0.001$ ).

**Table 3: Effect of Pippalyadi Lauh No. 3 on the cardinal symptoms of 20 patients of Tamaka Shwasa (Group C)**

N	Cardinal symptoms	Mean score		% of relief	SD (±)	SE (±)	t	P
		BT	AT					
20	<i>Shvasa kashtata</i>	2.11	0.70	66.00	0.50	0.12	11.04	<0.001
9	<i>Kasa</i>	2.80	0.80	71.42	0.70	0.18	10.74	<0.001
10	<i>Kapha shthivanam</i>	2.43	0.75	69.50	0.59	0.15	11.05	<0.001
17	<i>Ghurghurkama</i>	2.26	1.00	62.40	0.79	0.21	8.25	<0.001
15	<i>Asinolabhat e Saukhyam</i>	1.93	0.80	58.50	0.63	0.27	6.64	<0.001
15	<i>Shleshma Vimokshante Labhate Saukhyam</i>	2.50	0.90	64.00	0.71	0.19	8.42	<0.001
13	<i>Peenasa</i>	2.24	1.00	54.40	0.67	0.18	6.68	<0.001
13	<i>Parshvagraha</i>	2.38	0.90	60.80	0.67	0.18	7.14	<0.001

The above table shows the result of *Pippalyadi Lauh* No.3 on 20 patients of *Tamaka Shwasa* of Group A. out of 20 patients of *Tamaka Shwasa* there was 66.6% relief in *Shvasakashtata*, relief in *Kasa* was 71%, *Kaphashthivanam* was reduced up to 69.5%, The symptom of *Ghurghurkama* was reduced up to 62.4%, relief obtained in *Asinolabjate Saukhyam* was up to 58.5%, relief in *Shleshma Vimokshnte Labhate Saukhyam* upto 64%, Where as relief in *Peenasa* 54.71% Patients, 60.8% was relief in *Parshvagraha*, which were statistically highly significant ( $P < 0.001$ ).

**Table 4: Effect of Pippalyadya Lauh No 1 (PLI) (Group A), Pippalyadya Lauh No 2 (PLII) (Group B) and Pippalyadya Lauh No 3 (PLIII) (Group C) on Peak Expiratory Flow Rate (PEFR)**

Groups	Mean score		% of relief	SD (±)	SE (±)	t	P
	BT	AT					
PLI (Group A)	350	540	54.28	45.23	17.14	13.24	<0.001
PLII (Group B)	265	410	54.71	39.58	33.72	4.62	<0.001
PLIII (Group C)	200	300	50.00	37.3	19.97	5.07	<0.001

According to above table the initial mean score of PEFR in group A was 350 B.T. which was increased to 540 A.T. The percentage relief was 54.28% the result is highly significant statically ( $p<0.001$ ). GROUP B: the initial mean score was 265 B.T. which increased to 410 A.T. The percentage relief was 54.71%, the result is significant statically ( $p<0.01$ ). GROUP C: the initial mean score was 200 B.T. which increased to 300 A.T. The percentage relief was 21.7%, the result is significant statically ( $p<0.01$ ).

**Table 5: Comparison of results of patients of three group under the present study.**

Percentage improvement/relief	Group A	Group B	Group C
Decreased in mean duration of cardinal symptoms	64.01%	54.56%	50.00%
Decreased in mean duration of the associated symptoms	66.88%	58.39%	65.39%
Change in PEFR	54.28%	54.71%	50%

The above table shows that decreased in mean duration of cardinal symptoms of group A 64.01%, group B 54.56% and group C 50%. Decreased in mean

duration of the associated Symptoms group A 66.8%, group B 58.39% and group C 65.39%. Change in PEFR group A 54.28%, group B 54.71 and group C 50%.

## DISCUSSION

The clinical study was carried in Desh Bhagat University's PG School of Ayurveda and Research, Mandigobindgarh (PUNJAB). In the present study patients were divided into three groups A, B and C, in each group there were 20 patients to study the effect of Pippalyadi Loha I,II and III respectively. At the start of the study 67 patients of Tamaka Shwasa were registered. Out of which 60 patients completed the course of the treatment with follow up. Trail drug Pippalyadi Loha contain herbal ingredients of this medicine include Chotippali, Amla, Ber ki guthli (kola), Vidang and Pushkar Mula. It also contains honey and Mishri. The only mineral ingredient is Lauha Bhasma. It is a Lauhakalpa. Lauhakalpas are Ayurvedic medicines having Lauha Bhasma (calyx of iron) as the major ingredient along with the other herbal ingredients. Pippali is Ushna, stimulant, carminative, alterative, laxative and useful in cough, hoarseness, asthma, dyspepsia, paralysis, etc. Draksha, is sweet, refrigerant, laxative, demulcent, hematinic, haemostatic, and expectorant. Amla is nutritive tonic of Ayurveda. It is healing and rejuvenating. Its intake gives good eyesight, keeps hair black and helps in better absorption of iron. It is a rich source of Vitamin C. Vidanga has carminative and hepatoprotective activity. It is antihelmintic, astringent, alterative and tonic. Lauha Bhasma is calcined iron. It is an inorganic preparation. The process of Lauha Bhasma preparation involves several steps, including Shodan (purification), Maran (powdering), Chalan (stirring), Dhavan (washing), Galan (filtering), Putan (heating) and Mardan (tirturating).<sup>[6]</sup> The analysis under the study shows cardinal symptoms like Shyasakshata, Kasa, Ghurghurkama and Parshvagraha of group A patients were reduced drastically by using Pippalyadi Lauh No. 1. The associated symptoms like Lalate Sveda and Shvassa Sannirudhyate were reduced up to 84.79% and 84.61% respectively by using this drug. PEFR rate is increased positively by 54.28%. Haematocrit values

of 20 patients of group A were also affected positively due to the regular use this drug by the patients. In Pulse rate and Respiratory rate were came under the normal limits due to the regular use of drug no.1. In this study, clinical trial of *Pippalyadi Loha* performed on patients of *Tamak Shwas* (Bronchial Asthma) and comparative efficacy in comparison to three different preparatory *Pippalyadi Loha*. Symptomatic improvement was observed in patients of *Tamak Shwas* in all the groups. And it was also observed that *Pippalyadi Loha* I have given more symptomatic relief than other two.

### CONCLUSION

In *Tamaka Swasa* clinical signs and symptoms largely depend upon severity of disease duration of attack and pattern of asthma and may differ from patient to patient. All three types of *Pippalyadi Loha* has shown significant result in *Tamak Swasa* patients, but *Pippalyadi Loha* I has shown comparatively better efficacy and fast recovery. Clinical study reveals the efficacy of study of *Pippalyadi Loha* No I and considered to be the best among three different preparations and safe for use.

### REFERENCES

1. Koul, Parvaiz A., and Raja Dhar. "Economic burden of asthma in India." *Lung India: official organ of Indian Chest Society* 35.4 (2018): 281.

2. Raja RadhaKanta Deva; Shabda Kalpadrum, 3<sup>rd</sup> Edition, Chaukamba Sanskrit Series Office, Varanasi, Part II, pp. 590, Part IV, pp. 178-179.
3. Agnivesha (2000), Charaka samhita with English Translation by Bhagwandasha R.K. Sharma), Volume IV, II Edition, Chowkamba Sanskrit Series Office, Varanashi, pp. 117-125. Cha. Chi. 17/62
4. Madhavakar, Madhavanidana, Madhukosha Sanskrit Commentary with Vidyotini Hindi Commentary Part II, Edtr. Prof. Yadunandana Upadhyaya. 25th Edition, 1995, pp. 388, Part I 281, 289, 290, 291, 292, 293-301. M.Ni. 12/12
5. Govindadas, Bhaishajya Ratnavali, 13th Edition, 1999. Editor Shashri R.D., hikkaswasaadhikar 61-62 Chaukamba Sanskrit Bhavana, Varanasi, pp. 329 to 339.
6. Pippalyadi Lauha (accessed on 10nov 2020) available from <https://www.bimbima.com/ayurveda/pippalyadi-lauha-ingredients-uses-diretcions/136/>

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