

Preliminary Standardization of Shrungyaadi Shaarkar – A Potential Drug for Tamaka Shwasa

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Abstract—*Tamaka Shwasa* is a troublesome, stressful disease of today's era and is well known for its episodic and chronic course which afflicts the human race. Though incidence of *Tamaka Shwasa* is increasing in day to day practice and at alarming rate but very few patients need intensive care and most of the patients can be managed effectively by Ayurvedic line of treatment. The drug *Shrugyadi Shaarkar* consists *Karkatashruni, Sunthi, Pippali, Maricha, Kachura, Nagarmotha, Puskarmula, Sharkara* ingredients which excellently balancing each other in *Rasa-Panchaka* and enhancing the *Vatakaphahara, Deepana, Pachana* and *Vatanulomana* properties. The main factor in this disease as in many other diseases is *Ama* and the *Deepana-Pachana* properties of the drug will digest the *Ama* and *Sothaharatwa Karma*. So this compound was analyzed and standardized scientifically through qualitative and quantitative analysis by physico-chemical parameters, This will help for the use of this formulation in *Tamak Shwasa*.

Keywords— *Shringyadi Shrungyaadi, Tamaka Shwasa, Bronchial Asthma, Ayurveda.*

I. INTRODUCTION

T*amaka shwasa* is a disease in which patients experience severe symptoms of respiratory distress with extreme weakness fatigue and mental glooming.¹

Tamaka shwasa is one among the *pranavaha sroto vikara*, characterized by cardinal symptoms due to vitiated *vata* and *kapha* which originates in *pittasthana*, namely *adhoamashaya*. It affects the *Hrudya* and *rasadi dhatu*.

Due to the etiological factors as described in the *nidana* of *Shwasa vyadhi*, the increased *vata dosha* enters into the *pranavaha srotas* and gets vitiated. The vitiated *vata* stimulates *urastha kapha dosha* and produces *shwasa roga*, which can be life threatening. In the specific *Samprapti* of *Shwasa roga*, obstruction in the *pranavaha srotas* is the prime pathology. When *kapha* along with *vata* obstructs the *srotas*, as a result of which the *vata* itself gets obstructed and moves in all directions in the body resulting in *shwasa roga*.²

As per explanation given in *Ayurveda*, the disease resembles with *Bronchial Asthma* in modern parlance.

Asthma is defined as a disorder characterized by chronic air way. Inflammation and increased airway responsiveness to a variety of stimuli. It manifested physiological by a widespread narrowing of air passage which may be relieved spontaneously or as a result of therapy and, clinically by paroxysm of dyspnoea, cough and wheezing. *Asthma* is an episodic disease with acute exacerbation, interspersed with symptoms free episodes. This phase may mild with or severe obstruction persisting for weeks, the later condition is known as 'status Asthmaticus' a life threatening condition³.

As declared by 100-150 million of global populations are suffering from *bronchial asthma*, out of which 1/10th are Indians and the prevalence of *asthma* is increasing everywhere.

Per data available, and *Asthma* is prevalent in 1.2 - 6.3% adults in the world³. The number has risen by around 50% in the last decade⁴.

The drug *Shrugyadi shaarkar* consists *Karkatashruni, Sunthi, Pippali, Maricha, Kachura, Nagarmotha, Puskarmula, Sharkara*⁵ ingredients which excellently balancing each other in *Rasa-Panchaka* and enhancing the *Vatakaphahara, Deepana, Pachana* and *Vatanulomana* properties. The main factor in this disease as in many other diseases is *Ama* and the *Deepana-Pachana* properties of the drug will digest the *Ama* and *Sothaharatwa Karma*. Choorna and kwath form is not user-friendly. This paper tries to establish quality parameters, in a patient friendly- Syrup form.

Aim and Objectives: Pharmacognostical and phytochemical analysis of *Shrungyadi Shaarkar* for *Tamaka Shwasa*.

II. MATERIAL AND METHOD

- Collection, identification and authentication of raw drugs
- Preparation of drug at pharmacy
- Phytochemical analysis of compound drugs.

Collection, Identification and Authentication of Raw Drug:⁶

The raw ingredients were procured from Vadodara Gujrat. The ingredients and the parts used are given in table I. The raw drugs are identified and authenticated by the Dept. of *Dravya guna*, Parul Institute of Ayurveda, Parul University, and Vadodara. The coarsely powdered drug was used for powder microscopy.

TABLE I. Macroscopic & microscopic characters

Sr. no.	Ingredients	Botanical Name	Parts used	Part
1.	Karkatashruni ⁷	<i>Pistacia Integerrima</i>	Galls	1 part
2.	Sunthi ⁸	<i>Zingiber Officinale</i>	Rhizome	1 part
3.	Pippali ⁹	<i>Piper Longum</i>	Fruit	1 part
4.	Nagarmotha ¹⁰	<i>Cyperus Rotundus</i>	Roots	1 part
5.	Puskarmula ¹¹	<i>Inula Racemosa</i>	Roots	1 part
6.	Kachura ¹²	<i>Curcuma Zedoaria</i>	Rhizome	1 part
7.	Maricha ¹³	<i>Piper Nigrum</i>	Fruit	1 part
8.	Sarkara ¹⁴	<i>Sugar</i>		7 part

Preparation of the Drug at Pharmacy

The ingredients enlisted from 1-7 are made into coarse powder and is mixed well in equal quantity in mass mixer till a homogenous mixture was obtained.

Kashaya preparation: 14 kg of above mention drug is taken and 100liter of water is added and reduced to 1/8 part.

Preparation of shaarka: to the kashaya added 40 kg of suger converted into syrup form. As a preservative sodium benzoate is used. *Shrungaadi Shaarkar* is kept 7 days for observation. Final product is in the form of Shaarkar (syrup).

Phytochemical Analysis of Compound Drug: Shrungaadi Shaarkar was analyzed at Vasu Research Center, Vadodara.

TABLE II. Physico-Chemical Analysis

Sr. No	Parameters	Result
1	Description	Viscous liquid
2	Color	Brown
3	Taste	Sweet& spicy
4	pH (10%)	4.82
5	Specific gravity	1.286
6	Viscosity	892.64cP

TABLE III. Microbial Analysis

Sr. No	Parameters	Result
1	Total Bacterial count	186 cfu/gm
2	Total yeast and mould count	<10cfu/gm
3	<i>E.coli</i>	Absent
4	<i>Salmonella</i>	Absent
5	<i>S.aureus</i>	Absent
6	<i>Pseudomonas</i>	Absent

III. DISCUSSION

Discussion on Physico-Chemical Analysis:

Taste: Sweet& Spicy: because of the sweet taste is palatable and due to spicy in taste it may act as expectorant in nature.

pH: The pH value is 4.82 so it is acidic in nature it can't be given in empty stomach so this drug should be advised after meal.

Specific Gravity: The specific gravity is 1.286.

Viscosity: If viscosity is decreases with increase temperature vise-versa so viscosity measures the provided consistency and quality, high viscosity liquid more power to pump than the low viscosity.

Microbial Analysis: *E.coli*, *Salmonella*, *S.aureus*, *Pseudomonas* are absent and Total Bacterial count are normal in limit, and Total yeast and mould count are also normal in limit.

Discussion on drug:

- *Katu, Tikta rasa, Ushana veerya, Katu vipak, Rookshna, Tikshna, Laghu, Guna Deepana, Pachana, Kapha Vatahara, Vataulomana dravyas* can be used in the management of Tamaka shwasa.
- *Shrungaadi Shaarkar* encounters *Vata & Kapha Dosha* by virtue of its *Katu-Rasa* dominance & *Ushna-Virya. Vatahara* action is also achieved by *Snigdha* property.
- *Katu-Rasa* performs *Pachana* of *Ama* in the body and Also *Kaphaghna* and *Kaphanissaraaka guna* will helps in the removing of blocked channels of the bodyline. *Srotorodha*

will be cured and *Vatanulomana* will be achieved so that the *Kupitavata* will attain its *Samyaka* state and there will be relief in the symptoms of *Tamaka Shwasa*.

- *Balya Guna* of these medicines on the other hand will prevent the prakopa of *vayu* which may occur due to Continuous use of *Kapahnashak & Kaphanissaraka Aushadh*.
- The pharmacological studies already reported on the individual drugs, also favours the effectiveness of various contents of *Shrungaadi Shaarkar* in disease tamaka shwasa as given below¹⁵.

IV. CONCLUSION

Churna form of this is having good result in *Tamaka Shwasa* patient, but is not possible to everyone to do it regularly; *Shaarkar* (syrup) is easy to take daily. The ingredients of *Shrungaadi Shaarkar* are well known to have *Shwasahar* property. In this compound preparation part used and form of drug is modified, in order to make it cost effective and easily available. For palatability, absorption *Anupana* of drug is used as warm water. It is an attempt to standardize the formulation of compound. The phytochemical tests are under normal limits so it can be used for further pharmacological evaluation for its efficacy and safety. The probable mode of action of the drug is in line with the properties of the ingredients via, Anti-inflammatory, *Srotoshodhana*, Antitussive, Antibacterial, Bronchodilator & Expectorant, and Antihistamine.

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