

SHVASAHARA MAHAKASHAYA AND ITS PHARMACOLOGY: A REVIEW STUDY

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ABSTRACT

Shvasahara mahakashaya denotes, group of ten medicines which act differently on Shvasa roga. Shvasa roga can be relate with the term Asthma of modern medicine. Shvasahara Mahakashaya is the 37th of the 50 mahakashaya described in fourth chapter of Sutra sthan of Charak Samhita and includes following ten ingredients. All 50 mahakashayas may further divide into the 10 sub classes on the basis of specific characteristics. Ten ingredients of shvasahara mahakashaya do not work together, perform differently to stimulate the immune system, treat the symptoms of asthma, and purify the lymph and bloodstream. All these 10 drugs help to reduce spasm and ease breath.

Shvasahara mahakashaya having Katu Tikta Rasa, Ushna Virya, Katu Vipaka and Kapha-Vataghna properties and Shvasahara mahakashaya with Ushna Virya and Katu Vipaka seem to quite naturally antagonize the Shwasa Roga, which is Kapha-Vata Pradhana disease. Shvasahara Mahakashaya has got bronchial anti spasmotic effect and the most probable mode of action is that these drugs do not act as true expectorants in as much as they do not increase the secretion of mucous or make it less viscid, they help expulsion of mucously relaxing the bronchial muscles and are the great value in this disease. All the drugs are anti spasmotic and having volatile oils which, stimulates the output of respiratory tract fluid by a direct action up on the cells of the bronchial tree & reduce the spasm. It relaxes the bronchial muscles. Which paralyses the vagal endings in the muscles & also paralyses vagal ganglia. It stimulates the sympathetic endings and thus relaxes bronchial muscles.

All the 10 drugs are having the quality to treat the shavas roga. Shvashara mahakashya helps re-establish normal physiological function in the affected tissues and organs. Physician can select the best drug among these with the help of YUKTI PRAMANA.

KEYWORDS: Shvasahara mahakashaya, Asthma, Katu Rasa, Tikta Rasa, Ushna Virya, Katu Vipaka Kapha Vata nashak, Bronchial, Anti spasmodic, Expectorant.

INTRODUCTION

Shvasahara mahakashaya denotes, group of ten medicines which act differently on Shawasa roga. Shvasa roga can be relate with the term Asthma of modern medicine. In Ayurveda ,Shvasa roga, of which five varieties are described. These include: *maha svasa*, *urdhva svasa*, *chinna svasa*, *ksudra svasa*, and *tamaka svasa*. . The last variety, *tamaka svasa* is defined in Ayurveda as a chronic and recurring condition characterized by dyspnea, cough, airflow obstruction, and wheezing(due to spasm of bronchial tube or swelling of mucous membrane) , particularly at night and awaking in the morning. *Tamaka svasa* corresponds to chronic persistent bronchial asthma of allopathic medicine. Both *Ayurveda* and modern medical Science agree regarding the *Nidana* of the disease as host factors (*Nija Hetus – Doshadushti* and *Ama*) and Environmental factors (*Agantuja Hetus – Raja, Dhuma, Pragvata*, etc). It can be easily correlated with the allergic condition. According to WHO estimates, 300 million people suffer from asthma and 255 000 people died of asthma in 2005. It is estimated that there may be an additional 100 million persons with asthma by 2025.

SAMPRAPTI

यदा स्रोतान्नि सन्नुध्य मारुतः कफपुर्वकःविश्वग्रजति सरुद्धस्तदा श्वासान्करोतिः
(Ch.Chi.17/45)

कफवातात्क्वाव'ताऽ पित्तस्थान समुद्ध्वै (Ch.Chi.17/08)

According to Acharya Sushruta,when natural movement of Prana Vyau is hampered and it is associated with Kapha then it leads to the origin of Shawasa Roga in which the upward movement of Vata is enhanced. This condition can be correlated with asthma which is a chronic inflammatory disorder of the airways in which many cells and cellular elements play a role. The chronic inflammation is associated with airway hyper responsiveness that leads to recurrent episodes of wheezing, breathlessness, chest tightness, and coughing, particularly at night or in the early morning. These episodes are usually associated with widespread, but

variable, airflow obstruction within the lung that is that is often reversible either spontaneously or with treatment of the total global disease burden.

The genesis of Shwasa first involves only vitiation of Vata Dosha all over the body. This vitiated Vata which is in Urahasthana in turn creates Rukshata, Sankocha and Kharata in Pranavaha Srotas. Vitiated Vata affects the normal Kapha in Urahasthana which results in Vilomata of Pranavayu through obstruction to its natural Gati by Kapha. Sometimes, Kapha gets vitiated independently or through Rasadhatwagnimandya, its Mala, i.e. Kapha gets located in Urahsthana and causes obstruction to normal motion of Vayu which ends up with Vilomata of Vayu. In the third type, both Vata and Kapha get vitiated independently along with the production of Amavisha This contributes to the manifestation of Shwasa.

The signs and symptoms of this disease are vividly enumerated in both the Caraka Samhita and the Astanga Hridayam and are worth noting:

- The breathing becomes very fast and audible.
- The patient becomes tremulous on occasion
- There is chronic nasal discharge and stiffness of the head and neck
- There is excessive thirst
- The patient coughs constantly, sometimes to the point of senselessness
- If the obstructing phlegm does not come out during the cough, the patient becomes exceedingly miserable and after expectoration there is relief for some period of time.
- The throat becomes inflamed and he speaks only with great difficulty
- Due to his dyspnea (difficulty breathing), he does not sleep even after lying down in bed.
- Breathing is difficult while lying and there is some relief with sitting
- The patient desires to have hot things
- The eyeballs are gazing upwards (i.e. wide open) and perspiration appears on the forehead
- The mouth is dry
- There are periods of frequent attacks of dyspnea followed by periods of no attacks

The condition is aggravated by the onset of clouds in the sky, rain, cold breeze, drinking cold water, wind coming from the east, and regimens and diets which are cold in quality. So have to see pharmacologically effective drugs which are having anti asthmatic properties.

In this connection, Shvashara Mahakashaya is the 37th of the 50 mahakashaya described in fourth chapter of Sutra sthan of Charak Samhita and includes following ten ingredients. All 50 mahakashayas may further divide into the 10 sub classes on the basis of specific characteristics as:

1. Jeevaniya, Bringaniya, Lekhaniya, Bhedaniya, Sandhaniya and Deepniya- bZ; izR; kUr (suffix used as meaning of do good to)
2. Balya, Varniya, Kanthiya, Hridayas - ; izR; kUr (suffix used as meaning of assistance)
3. Triptighna, Arshoghna, Kushthagna, Kandughn, Kramighn, Vishaghna ?u ¼jksx uk'kd½ (suffix used as meaning of slayer for ailments.)
4. Stanyajanan, Stanyashodhan, Shukrajanan, Shukrashodhan (similarity in between stanya & shukra) (suffix used as meaning of production, purification)
5. Snehopaga, Swedopaga, Vamanopaga, Virechnopaga, Asthapanopaga, Anuvasnopaga, Shirovirechnopaga (Useful in panchakarmas)
6. Chchardinigrahan, Trishnanigrahan, Hikkanigrahan fuxzg.k iwoZd ¼iw.kZr% osxkas dks jksd nsuk½ (suffix used as meaning of stop totally.)
7. Purishsangrahaniya, Purishvirajniya, Mutrasangrahaniya, Mutravirajniya, Mutravirechaniya (Effective on urine & stool)
8. Kasahara, Shwashara, Shothara, Jwarahara, Shrimhara (Effective on general ailments)
9. Dahaprashaman, Sheetprashaman, Udardprashaman, Shoolprashaman, Angamardprashaman- iz'keuiwoZd dk;Zdkjh suffix
10. Shonitsthapana, Vedanasthapana, Sangyasthapana, Prajasthapana, Vayasthapana LFkkiuiwoZd

MATERIAL AND METHOD

These ingredients do not work together, perform differently to stimulate the immune system, treat the symptoms of asthma, and purify the lymph and bloodstream. All these 10 drugs help to reduce spasm and ease breath. It is specifying as under:

S.No.	Hindi/ Sanskrit Name	English Name	Botanical Name	Part used
1.	Shati	Spiked ginger lily	Hedychium spicatum	Rizhome
2.	Pushkarmool	Elicampane	Inula racemosa	Root
3.	Amlavatus	-	Garcinia pedunculata	Fruit
4.	Elaa	Greater cardamom	Amomum subulatum	Fruit
5.	Hingu	Asafoetida	Ferula narthex	Resin (Niryasa)
6.	Aguru	Agarwood	Aquilaria agollocha	Aromatic resinous Wood,

				Oil
7.	Tulasi	Indian basil/Holy basil/Sacred basil	Ocimum sanctum	Whole plant
8.	Bhumyamlaki	Chamber bitter	Phyllanthus niruri/P.amarus/P.fraternus	Whole plant
9.	Jeevanti	-	Lepta denia reticulata	Root
10.	Chorpushpi	-	Angelica glauca	Root

If we see the ingredients of shavashar mahakshaya and its effect.

S.No.	Hindi/ Sanskrit Name	Rasa	Vipaka	Virya	Guna	Effect on Doshas
1.	Shati	Katu	Katu	Ushana	Laghu,Ruksha,Tikshana	KV↓
2.	Pushkarmool	Katu,Tikta	Katu	Ushana	Laghu,Ruksha,Tikshana	KV↓
3.	Amlavatus	Amla	Amla	Ushana	Laghu,Ruksha,Tikshana	KV↓
4.	Elaa(Greater) *Lesser	Katu	Katu *Mdhur	Ushna *Sheeta	Laghu,Ruksha,Tikshana	KV↓ *VPK↓
5.	Hingu	Katu	Katu	Ushana	Laghu,Ruksha,Tikshana	KV↓
6.	Aguru	Katu	Katu	Ushana	Laghu,Ruksha,Tikshana	KV↓
7.	Tulasi	Katu	Katu	Ushana	Laghu,Ruksha,Tikshana	KV↓
8.	Bhumyamlaki	Tikta	Madhur	Sheeta	Laghu,Ruksha	KP↓
9.	Jeevanti	Madhur	Madhur	Sheeta	Laghu,Snigdha	P KV↓
10.	Chorpushpi	Katu	Katu	Sheeta	Laghu, Tikshana	KV↓

Shwashara mahakashaya having Katu Tikta Rasa,Ushna Virya,Katu Vipaka and Kapha-Vataghna properties and Shwashara mahakashaya with Ushna Virya and Katu Vipaka seem to quite naturally antagonize the Shwasa Roga, which is Kapha-Vata Pradhana disease.

Almost all the classics have used Shati & Pushkarmoola in treating the disease Shwasa, and the chief therapeutic indication of These drugs is Shwasa.

Acharya Sushruta proclaims vidarigandhadi, sursadi, Dashmool gana for the disease Shwasa.

PROBABLE MODE OF ACTION

The properties of wholesome formulation of Shwasahara Mahakashaya are as follows :

Rasa-Katu, Tikta

Vipaka -Katu

Virya-Ushna

Guna -Laghu, Tikshana, Ruksha

Dosh shamakta- KV↓

Panchbhotik composition-

S.No.	Rasa	Panchbhautk composition
1.	Katu	Vayu, Agni
2.	Amla	Prithvi, Agni
3.	Lavana	Jala, Agni
Agni-3,Prathvi-1,Jala-1,Vayu-1		

All these properties of Shwashara Mahakashaya render it a bronchial antispasmodic formulation, because, these properties are contrary to the properties of Medodhaatu Secondly these properties of shwashara Mahakashaya, make it a jatharaagni promoting formulation. Jatharaaghi stimulation corrects hypofunctioning of Medodhaatwagni and checks increase in the quantity and subsequent deposition of Medo dhaatu in the body. Relevant actions of shwashara Mahakashaya because of each one of these properties are as follows: Laghu guna is characteristic of drugs constituted of Vaayu and Agni mahabhoota Drugs, possessing this property produce lightness in the body and promote the jatharaagni. Both of these actions help in reducing accumulation of medo dhaatu in the body. Tikshna guna is characteristic of drugs, constituted of Agni mahabhoota. These drugs perform action of Shodhana ,lekhana and kaphahara karma. Owing to the above mentioned properties, shwashara Mahakashaya is igneous in nature, stimulates jatharaagni and performs shothara karma in the body. When we look at characteristics and actions of contents of shwashara mahakshaya, researches says, the alcoholic extract of Hedychium spicatum (Shati), The drug is valued for treatment of bronchial asthma in Ayurveda showed spasmolytic effect on the smooth muscles and tracheal chain. It could counteract the effect of spasmogens like histamine. the powder of rizhome completely relieved dyspnoea, cough and restlessness in 4 weeks. The researches about Inula racemosa, study says that it reduced the rasepiratory rate & increased the deapth of the respiration, marked protective effect against bronchospasm. It showed improvement in pulmonary functions, haematological picture and general health. Ferula narthex have distinct sedative effect showed in researches. Aqualaria agollacha quoted by Acharya charka that it is best among the drugs which will be helpful in enhancing the warmth and also useful in external application. Ocimum sanctum showed antispasmodic activity through researches. So, it is concluded that each of the content of the shwashara Mahakashaya contributes to make it an ideal formulation.

AVALEHA IN SHVAS ROGA

However, a large number of Avaleha have been described for the treatment of Shwasa Roga as these have Brimhana property which is very much needed while dealing with this

disease. Acharya Kashyapa has given importance to this Kalpana and has described a separate chapter, namely, Leha Adhyaya in Sutra Sthana. Contemplation of the ancient classics reveals no such specific property of *Avaleha* regarding the pharmacokinetics, except its site of action starts from mouth. *Avaleha* may work as *Rasayana* for the *Pranavaha Srotas* and also shows *Kapha Vatahara* effect. Most of the *Avaleha* contains Madhura Dravya Ghrita and Prakshepa Dravya as base ingredients. Here, the use of Madhura Dravya is of great importance because it reduces the Tikta Katu, Kashaya taste of drug, ultimately making it more palatable, and it also nourishes all Dhatus along with Oja Ghrita exhibits the property to pacify Vata as well as Pitta and also has the properties like Agnidipana Balakara Vrishya etc. Prakshepa Dravyas serve specific functions, e.g. Pippali (Piper longum) acts as a bioavailability enhancer and is antibacterial. They also act as flavoring agents because most of the Prakshepa Dravyas have aroma, which improves the acceptability of a product. However, the quantity of Prakshepa Dravyas should be just sufficient to suggest the desired flavor and should not leave an intense taste in mouth. Regarding *Avaleha* two more points are to be kept in consideration. These are mode of administration, i.e. licking, and high percentage of sugar in the medicament. Both these factors facilitate the oral absorption. Due to its mode of administration, i.e. licking, it produces soothing effect in throat, relieving local irritation. Although there are some Samskaras like Toyagni sannikarsha, Manthana, Kala and Bhajana in the preparation of *Avaleha*, the quality of any dosage form depends upon the raw material taken for the preparation. As Kamsa Haritaki *Avaleha* is prepared with the Kwatha of Dashmula drugs which exhibit Shwasahar property, whereas Kantakari, Bharangi and Vasa also have the quality to conquer the disease Shwasa. The other probable reason for the interesting results may be due to the “Brimhana” (Nutrient and Energy supplementing) properties of drugs, which is very essential in the treatment of Shwasa Roga. *Avaleha* has predominately Madhura Rasa, along with Tikta, Katu, Kashaya Rasa, Sheet Veerya and Katu Vipaka contribute to the pharmacodynamics of *Avaleha*. Also, Guda (Jaggery) has Laghu, Pathya, Sara and Hridya properties which are useful to overcome the Rukshata of drugs. It has Madhura Vipaka which shows Srishta Vita Mutra action, i.e. Vatanulomana action.

Guda also provides nourishment to all Dhatus as it has Balya property which is necessary while dealing with this disease.

CONCLUSION

Shawashara Mahakashaya has got bronchial anti spasmotic effect and the most probable mode of action is that these drugs do not act as true expectorants in as much as they do not

increase the secretion of mucous or make it less viscid, they help expulsion of mucously relaxing the bronchial muscles and are the great value in this disease. All the drugs are anti spasmodic and having volatile oils which, stimulates the output of respiratory tract fluid by a direct action up on the cells of the bronchial tree & reduce the spasm. It relaxes the bronchial muscles. Which paralyzes the vagal endings in the muscles & also paralyzes vagal ganglia. It stimulates the semipathetic endings and thus relaxes bronchial muscles.

All the 10 drugs are having the quality to treat the shavas roga. Shvashara mahakashya helps re-establish normal physiological function in the affected tissues and organs. Physician can select the best drug among these with the help of YUKTI PRAMANA.

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