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KASAHARA MAHAKASHAYA OF CHARAK SAMHITA: A CRITICAL REVIEW

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ABSTRACT

The term "*Kasa*" is frequently used in ancient Ayurvedic classics The in-depth knowledge of the *Dravyas* is essential for achieving success in treatment. *Dravyas* have been classified in the Classical texts based on very keen and intelligent observations of our Acharyas. A comprehensive classification of the Dravyas is presented in the form of *Panchaashat Mahakashaya* by *Acharya Charaka*. *Kasa* is a disease of *pranavaha srotas* and mainly vitiation of *vata* (*Prana* and *Udana*) and Kapha. *Kasahar Mahakashaya* is the 36th *Mahakashaya* of Acharya Charaka which consist of ten Dravyas i, e *Draksha, Abhaya, Amalaka, Pippali, Duralabha, Shringi, Kantakari, Visscher, Punarnava* and *Tamalaki*. This work is carried out to critically analyse the pharmacological properties of all the ten *Dravyas* mentioned in *Kasahar* Mahakashaya, on the basis of Ayurvedic text as well as Modern research. Here an attempt has been made to critically analyse the pharmacological properties of *Kasahar* Mahakashaya *Dravya* to find out the probable mode of action of these *Dravyas* on Kasa and it is concluded that Kasahara Mahakashaya is the complete wholistic designed formulation with special reference to *Kasa* according to *Acharya Charaka*.

Keywords: Charak Samhita, Ayurveda, Dravya, Kasa, Kasahar Mahakashaya.

INTRODUCTION

"द्राक्षाभयामलकपिप्पलीदुरालभाशृङ्गीकण्टकारिकावृश्चीरपु नर्नवातामलक्य इति दशेमानि कासहराणि भवन्ति"

Acharya Charaka has established the perfect combination of ten drugs in Kasahara Mahakashaya which is the 36th Mahakashaya among Panchashata Mahakashaya¹. Panchashata Mahakashaya of Acharya Charaka is the most authentic and efficacious combination of ten drugs each in the form of Kashaya. Thus, he has given Fifty Mahakashaya.

Acharya Sushruta has been classified in the form of Saptatrinshata Gana in which the description of pharmacological actions of each Gana is also mentioned. Guna - Karmas of Dravyas has been separately explained in Sutra Sthana, Chapter 46. While explaining Kasa Chikitsa, Acharya Sushruta has given equal importance to the Kasahara Mahakashaya Dravyas given by Acharya Charaka and mentioned the Kasahara Yogas.

Nighantus provide information regarding the Dravyas which are traditional and authentic. Nighantus is the first reliable classical text which laid emphasis on the correct identification of the Dravyas on the basis of Morphology and Actions. Dravyas of Kasahara Mahakashaya is found to have almost similar Rasapanchaka and Guna-karma in Nighantus too. Paryaya of Dravyas is also described in Nighantus.

Acharya Charaka strongly stated that every substance on this earth can be beneficial in treatment, if and when applied with appropriate planning for a specific purpose²

Kasa is one of the important diseases and is discussed widely by all the Brihatrayi, Laghutrayi, and modern texts as symptoms of many diseases and the independent disease itself. Kapha gets aggravated due to various etiological factors and brings obstruction for the movement of Vata in the Uras leading to aggravation of Pranavata and Udana Vata. As a result, Vata moves upwards, afflicts the channels of circulation in the upper part of the body, and gets lodged in the throat & chest. This agitated Vata enters & fills up all the channels of Siras to cause bending & stretching of the body, jaws, sides of neck & eyes. Further, Vata brings contraction & stiffness of the eyes, back, chest & sides of the chest, giving rise to Kasa which may be dry or with sputum. It is associated with severe pain & loud sound like that of a broken bronze 3,4 .

The cough reflex is the irritation of the mucus membrane of the larynx or tracheobronchial tree that causes coughing. The cough reflex is almost essential to life, for the cough is the means by which the passages of the lungs are maintained of foreign matter.

Rasapanchaka and *Dosha-Karma* of all the *Dravyas* are tabulated as under to show the similarity and synchronization for the resultant *Kasahara* action.

Materials and methods

Charaka Samhita, Sushruta Samhita, Vagbhatta, Dhanwantari Nighantu, Shodhala Nighantu, Madanapala Nighantu, Kaiyadeva Nighantu, Bhavaprakasha Nighantu, Raj Nighantu, Modern medical databases (PubMed, Scirus, Science Direct and Scopus).

DISCUSSION

Rasapanchaka and *Dosha-Karma* of all the *Dravyas* are tabulated as under to show the similarity and synchronization for the resultant *Kasahara* action.

S. N	DRA-	RASA	GUNA	VIRYA	VIPAKA	DOSHA KAR-
1.	Draksha	Madhura, Kashaya, Amla	Guru, Snigdha, Mridu	Sheeta	Madhura	MA Vata -Pitta Shamak
2.	Abhaya	Madhura, Amla, Katu, Kashaya	Laghu, Ruksha	Ushna	Madhura	Tridosha Shamak
3.	Amalaki	Madhura, Amla, Katu, Tikta, Kashaya	Laghu, Ruksha	Sheeta	Madhura	Tridosha Shamak
4.	Pippali	Katu, Tikta	Snigdha, Teekshna, Natisnigdha, Laghu, Ushna	Sheeta, Anushn, Natiushn, Atiushna	Madhura	Kapha- vata Shamak
5.	Duralabha	Madhura, Amla, Katu, Tikta, Kashaya	Laghu, Sara	Sheeta	Madhura	Vata-Pitta Shamak
6.	Shringi	Kashaya, Tikta	Guru	Ushna	Katu	Kapha- vata Shamak
7.	Kantakari	Katu, Tikta	Laghu, Sara, Ruksha, Ushna	Ushna	Katu	Kapha- vata Shamak
8.	Vrishchir	Madhura, Katu, Tikta, Kashaya	Sara, Ruksha	Ushna	Katu	Tridosha Shamak
9.	Punarnava	Madhura, Tikta, Kashaya	Laghu, Ruksha, Ushna	Ushna	Madhur, Katu	Tridosha Shamak
10.	Tamalaki	Madhura, Amla, Tikta, Kashaya	Laghu, Sheeta	Sheeta	Madhura	Kapha –Pitta, Shamak

Table 1: Showing Rasa, Guna, Virya. Vipaka and Dosha Karma of the Dravyas of Kasahara Mahakashaya

These Medicinal plants exhibit diverse pharmacological actions. Pharmacological actions and chemical composition of all the *Dravyas* are tabulated as under to show the similarity and synchronization of the resultant *Kasahara* action.

Name	Latin Name	Family	Parts used	Pharmacological actions	Chemical composi-
Draksha	Vitis vinifera Linn.	VITACEAE	Fruit.	Antioxi-dant, ⁵ antibacteri- al, ⁶ anti-histaminic, Use in cough & respiratory tract catarrh, ⁷ Anti- inflammatory. ⁸	Flavonoids viz, quercetin, rutin, kaempferol, and luteolin. phenolic acids and β - sitosterol. ⁹
Abhaya	Terminalia chebu- la Retz.	COMBRETACEAE	Fruit rind, tender fruits.	Anti-asthmatic, mast cell stabiliser, ¹⁰ immunomod- ulatory, ¹¹ antibacterial, ¹² Anti-tussive ¹⁴	Tannins, gallic acid, chebulagic acid. ¹⁴
Amalaki	Emblica officinalis Gaertn.	EUPHORBIACEAE	Fruit pulp/fruit rind	Anti-Inflammatory, ¹⁵ anti- oxidant, ¹⁶ immunomodula- tory, ¹⁷ antitussive, ¹⁸ anti- microbial, ¹⁹ Anti- asthmatic. ²⁰	Tannins, alkaloids, phenolic, amino acids, carbohy- drates, vitamin C, 3 Ethylgallic acids. ²¹
Pippali	Piper longum Linn.	PIPERACEAE	Fruit and root.	Antimicrobial, ²² antiasth- matic, ²³ anti- inflammatory, ²⁴ immuno- modulatory, ²⁵ mast cell stabiliser and Bronchodi- lator, ²⁶ anti-histaminic, ²⁷ anti-tubercular ²⁸	Piperine, alkaloid, sesamin dihydrosti- gasterol ²⁹
Duralabha	Fagonia Cretica Linn.	<i>ZYGOPHYLLACEAE</i>	Whole plant, Yava Sarka- ra	Antioxidant, ³⁰ analgesic, ³¹ anti-inflammatory, ³² an- tiallergic, ³³ anti- mi- crobial. ³¹	Saponins, alkaloids, aminoacids ³⁴
Shringi	Pistacia inte- gerrima Stewart ex Brandis	ANACARDIACEAE	Galls.	Analgesic, ³⁵ anti- inflammatory, ³⁵ antioxi- dant, ³⁶ antimicrobial, ³⁷ anti-histaminic, ⁷ expecto- rant. ⁷	Alkaloids, flavo- noids, tannins, sap- onins, sterols, and essential oils. ³⁸
Kantakari	Solanum xantho- carpum Schard &Wendl.	SOLANACEAE	Whole plant, root, fruit.	Antioxidant, ³⁹ anti-asthmatic, ⁴⁰ anti-histaminic, ⁷ expectorant, ⁴⁰ mast cell stabilizer. ⁷	inorganic nitrate. ⁴¹ Carp sterol, sola- margine, solanocar- pine, solasonine ⁴² ,
Vrishchir	Boerhaavia vertic- illata Poir.	NYCTAGINACEAE	The whole plant, root, leaf.	Antipyretic, anti-cough. ⁴³	Alkaloids, carbohy- drates, tannins . ⁴⁴
Punarnava	Boerhaavia dif- fusa Linn.	NYCTAGINACEAE	Whole plant, root, leaf	Immunomodulatory, ⁴⁵ anti-inflammatory, ⁴⁶ ex- pectorant ⁷	Flavonoids, boera- vinone, punar- navine, boeravi- none, alkaloids. ⁴⁴
Tamalaki	Phyllanthus niruri Hook f.	EUPHORBIACEAE	Whole plant, root.	Anti-inflammatory, ⁴⁷ anti- oxidant, ⁴⁸ anti-microbial, ⁴⁹ immune modulatory, ⁵⁰ anti-asthmatic, ⁵¹ anti-pyretic ⁷ , anti-spasmodic. ⁷	Niruriside, ⁵² lignans, phyllanthin, hypophyllanthi, flavonoids, tannins, alkaloids. ^{53,54,55}

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Table 7. Chowing	Dhammaaalagiaal	Actions and	Chamical Com	nocition of I	Lacabara Ma	holzoghovo	Dunga
radie 2: Showing	FIIaIIIIaCOIOgical	ACTIONS and	Chemical Com	DOSILION OF I	Nasahata ivia	nakasnava	Diugs

Effect of Draksha on Kasa:

Draksha possesses Madhura Rasa, Snigdha, Guru, Madhura Vipaka, and Vatapittahara. It is indicated in Vata Pradhana Kaphaja Kasa and acts as Rasayana. The anti-inflammatory activity of Draksha. may be attributed to the presence of high content of flavonoids viz, quercetin, rutin, kaempferol, and luteolin in addition to phenolic acids and β -sitosterol which are all reported to have an anti-inflammatory effect. The antioxidant activity of Draksha. may be attributed to the presence of phenolic acids and flavonoids.

Effect of Abhaya on Kasa:

Abhaya has Madhura, Amla, Katu, Kashaya Rasa, Laghu, Ruksha Guna, Ushna Virya, Madhura Vipaka and Tridosha Shamaka properties. Abhaya is also named 'Pathya' since it removes obstructions from channels in the body. Based on a recent study report, the ethyl acetate and methanolic extract of the fruit of Abhaya demonstrated significant antitussive activity. The traditional use of the fruit of Abhaya is used in the treatment of cough and respiratory disorders.

Effect of Amalaki on Kasa:

Amalaki has Amla Pradhana, Pancha Rasa, Guru, Ruksa Guna, Sheeta Virya, Madhura Vipaka and is Tridoshahara as well as a Rasayana. The dry extract of Amalaki exhibits antitussive activity not only due to ant-spasmolytic and antioxidant efficacy effects but also to its effect on mucus secretion in the airways.

Effect of Pippali on Kasa:

Pippali with the *Guna* like *Katu Rasa*, *Laghu*, and *Tikshna Guna*, causes alleviation of *Kapha Dosha* with opposite properties like *Madhura*, *Guru*. *Pippali* with *Tikshna Guna* causes *Bhedana* of *Kapha*, which is stuck to the *Srotas* by *Picchila* and *Sandra Guna*. Piperine, which is the prime constituent of *Pippali* has anti-inflammatory activity. It is effective against many gram-negative and gram-positive bacteria.

Effect of Duralabha on Kasa:

Duralabha has *Madhura Rasa. Madhura rasa* has the dominance of *Prithvi* and *Jala Mahabhuta* in its formation or composition. It alleviates *Vata* and *Pitta* due to its *Brimhana, Balya, Snigdha, Sheeta,* and

Guru Guna. Duralabha has Katu Rasa, Katu rasa comprises of Vayu and Agni Mahabhuta. Katurasa breaks or disintegrates the accumulation of Kapha. It has Tikta rasa, Tikta rasa alleviates Pitta-Kapha by its Laghu-Ruksha guna. Having Kashaya Rasa alleviates Pitta-Kapha due to the presence of Prithvi-Vayu Mahabhuta, so it is useful in all types of Kasa. Duralabha acts as an antioxidant, anti-inflammatory, and anti- microbial it has been proved in modern research papers.it cures cough due to the presence of any inflammation and bacterial infection in the respiratory tract.

Effect of *Shringi* on *Kasa*:

Shringi has Tikta Rasa. Tikta rasa alleviates Pitta-Kapha by its Laghu-Ruksha guna. Guru Guna increases the strength of the body. Due to Ushna Virya, *it* leads to Vilayana of Kapha and generates easy expectoration, this clears the channels and hence, vitiation of Vata gets correct so it provides relief from cough. It acts as an antioxidant, anti-inflammatory, and anti- microbial, it has been proved in modern research papers. So, it inhibits inflammation and bacterial infection in the respiratory tract and cures cough. Being antihistaminic inhibits the physiological effects of histamine so that it is used especially in the treatment of allergic cough.

Effect of Kantakari on Kasa:

Kantakari has Tikta and Katu Rasa, Ruksha and Laghu Guna, Ushna Virya and Katu Vipaka, hence Deepana in nature. It is quoted as the best drug of choice for Kasa by Acharya Vagbhatta. Kantakari powder is anti-tussive and is effective in bronchial asthma and nonspecific cough. Its root is an expectorant. The expectorant action is due to inorganic nitrate content.

Effect of Vrishchir on Kasa:

Vrishchir has Katu Rasa. Katu rasa comprises Vayu and Agni Mahabhuta. Katu rasa breaks or disintegrates the accumulation of Kapha. The presence of Madhura rasa gives strength to the body. It has Tikta Rasa, Tikta rasa is composed of Vayu and Aakasha Mahabhuta. Tiktarasa alleviates Pitta-Kapha by its Laghu-Ruksha guna, it also has Kashaya Rasa which is made up of Prithvi-Vayu Mahabhuta. and alleviates *Pitta-Kapha* so it can be used in *Vataj* and *Kaphaja Kasa*.

Effect of Punarnava on Kasa:

Punarnava has *Ushna Virya*, which leads to *Vilayana* of *Kapha* and generates easy expectoration, this clears the channels and hence, vitiation of *Vata* gets correct. *Punarnava* have *Ruksha Guna*, it is *Kaphahara* in nature. *Punarnava* is immunomodulatory which helps in eliminating the infection or regulating the allergic responses. *Punarnava* is expectorant in nature, promotes the secretion of sputum by the air passages, and treats the cough.

Effect of Tamalaki on Kasa:

Tamalaki have Madhura Vipaka. It promotes the formation of Dhatus in the body. It has Tikta Rasa. Tikta rasa is composed of Vayu and Aakasha Mahabhuta. Tikta rasa alleviates Pitta-Kapha by its Laghu-Ruksha guna. Tamalaki has Kashaya Rasa, which is made up of Prithvi-Vayu Mahabhuta, it alleviates Pitta-Kapha, so it cures Pittaja and Kaphaja Kasa. Tamalaki has anti-microbial and antiinflammatory properties, it can be used for infectious disorders of the respiratory system.

Most of the drugs including *Draksha*, *Abhaya*, *Amalaki*, *Pippali*, and *Tamalaki* have shown antimicrobial or anti-bacterial properties, hence can be used for infectious disorders of the respiratory system.

Antihistaminic: a drug or other compound that inhibits the physiological effects of histamine, used especially in the treatment of allergies *Draksha*, *Pippali*, *Shringi*, *and Kantakari* are antihistaminic.

Antitussive: tending or having the power to act as a cough suppressant *Abhaya, and Amalaki* are antitussive drugs.

From a modern perspective, these drugs act as potent antitussives probably by blocking the vagal sensory afferents by counter-irritant and local anaesthetic mechanisms. *Piperine*, one of the principal components present in *Pippali* has recorded its role in modulating the membrane permeability which may permit potassium ion influx and have a role on the ion gated mechanism of the mucosal C - type vagal receptors and may up- regulate the cough threshold. **Expectorant:** The drug which promotes the secretion of sputum by the air passages, is used to treat cough. *Shringi, Kantakari, Punarnava* are expectorant in nature.

Mast cell stabilizer: They block mast cell degranulation, stabilizing the cell and thereby preventing the release of histamine and related mediators. *Abhaya, Pippali, Kantakari* are mast cell stabilizer in nature. All the pros and cons have been taken care of while deciding on this combination of Drugs. All the *Dravyas* work synergistically by their pharmacological properties to cover every aspect of the disease. Thus, it is clear now that these ten drugs have also been proved on experimental bases for *Kasahara* Action.

CONCLUSION

Kasahara Mahakashaya is one of the most important groups of drugs among the 50 mahakasaya. From the classical literature and recent clinical trials, it is observed that the drugs of this mahakashaya have the potential to treat the *Kasa* effectively. It should be used singly or in combined form in different pharmaceutical forms as per the need. Hence, it is proved that these ten drugs work synergistically by their pharmacological properties to produce the resultant Kasahara action. *Kasahara Mahakashaya* is the complete wholistic designed formulation related to the treatment of *Kasa*.

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