

## REVIEW OF CHARKOKTA DASHEMANI GANA WITH SPECIAL REFERENCE TO ITS KASAHAR KARMA

<sup>1</sup>Pallavi Pardeshi, <sup>2</sup>Sheetal Chavan, <sup>3</sup>Manasi Deshpande, <sup>4</sup>Ragini Patil, <sup>5</sup>Arpita Kulkarni .

1Dept .of Dravyaguna, M.D Scholar , Bharati University ,Pune; 2Dept .of Rognidan, Assistant professor,ASS Ayurved Mahavidyalaya ,Nashik.; 3Dept .of Dravyagun, Professor , Bharati University,Pune.; 4Dept. of Rognidan ,Professor and Principal, P.D.E.A'S, College of Ayurved and Research centre ,Pune; 5Dept. of Dravyaguna , Research Associate, ASS Ayurved Mahavidyalaya, Nashik.

### Abstract:

*Dashemani* are the “Group of ten *dravyas* “mentioned by *Acharya Charaka* is a direction to use the medicine for specific conditions. Among the 50 *Mahakashay*, the drugs indicated for *Kasa* are termed as *Kasahar dashemani*.As per classics the *Kasa* [cough] occurs when the *Apana vayu* is obstructed and moves upward direction causes *Udana vayu* which expels the *vayu* upward and out of the body. Due to this *Vata* may get lodged in the chest region coughing. In *Ayurvedic* classical texts number of *Kasahardravyas* and its formulation mention. The present study reveals the mode of action of *kasahar dravyas* of *kasaharDashemani gana* from *Charak samhita* on *pranavaha strotas*.

### Introduction:

#### Nirukti:

कसनात्कासउच्यते।च.चि.१८८

The word *Kasa* is derived from the verb root *Kasa* [कास] which indicates movement. In these diseases there is movement of *Vata* in upward direction.

भिन्नकांस्यपात्रवत्हतस्वनःकासइतिप्रदिष्टः।

मा.नि.११२

#### Definition:

The irritation and inflammation [*Vidaha*] as well as obstruction [*srotorodha*] in pharynx, larynx, trachea, bronchi and sometimes oesophagus are causative factors of *Kasa vyadhi*.

When *Prana* start moving towards chest, larynx, trachea it gets provoked over there. It is forcefully exhaled through pharynx and mouth, producing a sound similar to that of broken pot of bronze. This provoked *Vata* produces pain in chest, back and head. Due to constant coughing there is obstruction to the circulation of body nourishing fluid and blood. This results in redness and swelling of face and eyes.

The chest and larynx being the main site of *Kapha*, it has major role in the pathogenesis of *Kasa*, *Kapha* produces obstruction in the movement of *Vata* which is a basic stimulation factor in the pathogenesis of *Kasa*. Therefore *Vata* and *Kapha* both are important factors in *Kasavyadhi*.

#### Aims :

To evaluate mode of action of kasahar dravyas on pranvaha strotas.

### Objective :

To evaluate Rasa ,virya,Vipak of kasahardravyas and their role in kasaharkarma.

### Material and Method:

- The drugs are taken from *Charak Samhita Sutrasthan Adhyay4 Shadavirechana shatasritiya* out of 50Mahakashay only takes the *Kasahar Dashemani*.
- For chikta of *Kasahar vyadhi* referred the *Charak Samhita, Chikitsa Sthan Adhyay 18 Kasa ChikitsaAdhyay*.

### Modern concept of Kasa :

Kasa means Cough. Modern science has described it as a symptom and not a disease. The main etiology is infection or mechanical irritation or malignancy of respiratory tract. It may occur due to reflex vagal stimulation. The mechanical irritation of respiratory tract may be due to dust, irritant gases, foreign nbodies, smoking etc.The various types of cough are described as dry or unproductive ,wet or productive,paroxysmal,with wheezing, nocturnal, barking, bovine,harsh.The dry unproductive cough occurs in allergic conditions causing eosinophilia and sometimes in early upper respiratory tract infections. The wet productive cough is present in bronchiectasis. Paroxysmal

cough is present in bronchial asthma and chronic bronchitis. Wheeze is present in bronchial asthma, while stridor indicates obstruction in respiratory tract.

According to the Modern medicine, its management includes antibiotics, antipyretic, anti-inflammatory, antihistamines, bronchodilators, mast cell stabilizers, decongestants and corticosteroids. But, these are associated with many adverse effects and lack long-term sustained effect. Ayurveda explains the pathology of respiratory allergies as immune dysfunction which is due to formation of (undigested intermediate product) Amaand Kapha dosha. Ayurveda has potent drugs possessing immunomodulatory, anti-allergic, anti-inflammatory and mucolytic effect, antitussive, expectorant which can be used for breaking the pathology of the respiratory allergy at various levels, and giving prompt symptomatic relief to the patient. The Ayurveda approach of management of Respiratory allergies is to potentiate the immune system of the individual in order to reduce the susceptibility towards the allergens and at the same time providing symptomatic relief to the patient. Thus, it is supposed that these drugs can prove beneficial and provide effective and long term solution to allergic disorders and thereby may improve the quality of life and work performance.

**Observation:**

Above table shows *Kasahar Dashemani Dravyas Rasapanchak* and *Kasaharkarma*:

Sr. No.	Dravya name	Ras	Virya	Vipak	Guna	Dosha ghnata	Karma related to Kasahar
1	<i>Draksha</i> [ <i>Vitis vinnifera</i> ] Vitaceae	<i>Madhur</i>	<i>Sheet</i>	<i>Madhur</i>	<i>Snigdha</i> <i>Guru</i> <i>Mrudu</i>	<i>Vata,</i> <i>Pittaghna</i>	<i>Snehan, Dahaprashaman</i> <i>Balya, Brumhan</i> <i>Kaphanisaarak, Anuloman'</i> <i>Hradya</i>
2	<i>Pippali</i> [ <i>Piper longum</i> Linn] Piperaceae	<i>Katu</i>  <i>Madhur</i>	<i>Ushna</i>	<i>Madhur</i>	<i>Laghu</i> <i>Snigdha</i> <i>Tikshna</i> <i>Guru</i>	<i>Kapha,</i> <i>Vataghna</i>	<i>Snehan,</i> <i>Kaphanisaarak, Anuloman,</i> <i>Kasa, Shwashar Hikkanigrahan</i>
3	<i>Duralabha</i> [ <i>Fagonia</i> <i>Arabica</i> Linn] Zygophyllaceae	<i>Kashay</i> <i>Tikta</i> <i>Madhur</i> <i>Katu</i>	<i>Ushna</i>	<i>Madhur</i>	<i>Laghu</i> <i>Snigdha</i>	<i>Vata,</i> <i>Pittaghna</i>	<i>Kaphanisaarak</i> <i>Dahaprashaman</i> <i>Kasa, Shwashar,</i>
4	<i>Kakadshrungi</i> [ <i>Pistacia</i> <i>integerima</i> ] Anacardiaceae	<i>Kashay</i> <i>Tikta</i>	<i>Ushna</i>	<i>Katu</i>	<i>Laghu</i> <i>Ruksha</i>	<i>Kapha,</i> <i>Vataghna</i>	<i>Deepan, Pachan</i> <i>Vatanuloman, Kaphanisaarak</i> <i>Shothahar, Kasahar, Shwashar</i> <i>Chhedan</i>
5	<i>Kantakari</i> [ <i>Solanum</i> <i>xanthocarpum</i> ] Solanaceae	<i>Tikta</i> <i>Katu</i>	<i>Ushna</i>	<i>Katu</i>	<i>Laghu</i> <i>Ruksha</i>	<i>Kapha,</i> <i>Vataghna</i>	<i>Deepan, Pachan</i> <i>Vatanuloman, Kaphanisaarak</i> <i>Shothahar, Kasahar, Shwashar</i> <i>Chhedan, Kanthya, Lekhan</i>
6	<i>Aamalaki</i> [ <i>Emblica</i> <i>officinalis</i> ] Euphorbiaceae	<i>Amla</i> <i>Pradhan</i> <i>Lavanvarjit</i> <i>Pancharas</i>	<i>Sheet</i>	<i>Madhur</i>		<i>Tri</i> <i>doshaghna</i>	<i>Deepan, Pachan</i> <i>Vatanuloman, Snehan, Kanthya</i> <i>Rasayana</i>
7	<i>Tamalaki</i> [ <i>Phyllanthus</i> <i>niruri</i> Linn] Euphorbiaceae	<i>Tikta</i> <i>Kashay</i>	<i>Sheet</i>	<i>Madhur</i>	<i>Laghu</i> <i>Ruksha</i>	<i>Kapha,</i> <i>Pittaghna</i>	<i>Rasayana, Dhatuvruddhikar</i>
8	<i>Haritaki</i> [ <i>Terminalia</i> <i>chebula</i> ] Combretaceae	<i>Kashay</i> <i>pradhan</i> <i>Lavanvarjit</i> <i>Pancharas</i>	<i>Ushna</i>	<i>Madhur</i>	<i>Laghu</i> <i>Ruksha</i>	<i>Tri</i> <i>doshaghna</i>	<i>Deepan, Pachan, Swarya,</i> <i>Rasayana, Kasahar,</i> <i>Shwashar</i>
9	<i>Punarnava</i> [ <i>Boerhavia</i> <i>diffusa</i> Linn] Nyctaginaceae	<i>Madhur</i> <i>Tikta</i> <i>Kashay</i>	<i>Ushna</i>	<i>Madhur</i>	<i>Laghu</i> <i>Ruksha</i>	<i>Tri</i> <i>doshaghna</i>	<i>Deepan, Pachan, Kasahar,</i> <i>Shwashar Rasayana, Shothahar</i>

10	Vruschir [Trianthema portuiacastrum] Ficoidaceae	Madhur Tikta Kashay	Ushna	Madhur	Laghu Ruksha	Tri doshaghna	Deepan,Pachan,Kasahar, ShwasharRasayana,Shothahar
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**Mode of action according to different karma related to Kasahar:**

**Draksha:** It possess *Madhura rasa, Snigdha, Guru, Mrudu guna, Madhura vipaka* and *Sheetvirya*. Due to its all attribution it work as *Snehan, Vatanuloman* so work in *Vataj kasa*.

Due to *Snehan, Dahaprashaman, Kaphanisaarak* it work in *Pittaj kasa* and works as *Balya* so used in *Kshayaj kasa*.

**Pippali:** It contains *guna* like *Katu rasa, Laghu* and *Tikshna guna* causes alleviation of *Kapha Dosh* with opposite properties. *Pippali* with *Tikshnaguna* causes *Chhedan* of *Kapha*, which is stuck to the *Srotasa* by *Picchila* and *Sandra guna*. Once the *Dosha* is separated from the *srotasa*, the *Ushna guna* of the drug leads to *Vilayana* of *Kapha* and acts as expectorant .

**Duralabha:** It has *Tikta, Katu rasa, Ushna Virya*, it clear the channels due to obstruction of *kapha* and *liquefy* the *kapha* so act as *Kaphanisaarak*. It can use in *Vataj kasa, Kaphajkasa, and Kshayaj kasa*.

**Karkatshrungi:** It works as *Kaphaghna, Deepanpachan, Vatanuloman* due to its, *Katu vipak* and *Ushna virya* reduces the obstruction of *Srotasa* by *liquefying* mucous and also increases digesting

power so work in *Kshayaj kasa*. Its *vatanuloman* action work in *Vataj kasa*.

**Kantakari :** It has *Tikta, Katu rasa, Katuvipaka, UshnaVirya* and *Ruksha, Sara, Laghu guna* act as *Deepan, Chhedan* action *liquefy* the *Kapha* and eliminates obstruction of *Kapha* from the *Pranavaha srotasa*,.

**Aamalaki:** It has *Amla pradhana pancharasa, Guru, Rukshaguna, SheetVirya, Madhur vipak* and *Tridoshaghna*. It does not directly acts as *Kasahar* but it works as *Rasayana*.

**Tamalaki:** It has *Tikta rasa, Laghu, Ruksha guna* work as *Dhatuwardhan* by *Dhatwagnideepan karma*, so act as *Rasayana*.

**Haritaki:** It is not directly act as *Kasahar* it work as a *Rasayana*, but it's all attributes, it act as *Tridoshaghna* and act as *Vatanuloman, Srotorodhahar, Kaphanisaarak*. Its all *karma* work as *Kasahar*.

**Punarnava:** It mostly used as *Rasayana, Tridoshahar*. Due to its *Ushna Virya, Tikta rasa* it helps in expelling *doshas* accumulated in *Srotasa*, . Mostly used in *Kaphaj, Kshataj, and Kshayaj Kasa*

**Vruschir:** It's all *gunas* and actions are similar to *Punarnava*.

**Discussion:**

Sr. No.	Type of Kasa	Drug used in Kasa	Preparation	Chikitsa	Karma related to Kasahar Chikitsa
1	<b>Vataj Kasa</b>	<b>Pippali</b> <b>Duralabha</b> Tamalaki Haritaki <b>Draksha</b> Aamalaki Kakadshrunji Kantakari	Pippalyadi ghruta, Vidangadi churna, Dusparshadi leha, Vidangadi leha, Chitrakadi leha, Agastya haritaki, Saindhavadi yog Kantakari ghruta Vidangadi churna Tryashunadi ghruta	Vataghna	Snehan Deepan Pachan Vatanuloman
2	<b>Pittaj Kasa</b>	<b>Pippali</b> <b>Draksha</b> Aamalaki Kantakari	Pittakasanashak leha-9 Draksha swaras Sharadi kshirapak	Pittaghna	Deepan Pachan Kaphanisarak
3	<b>Kaphaja Kasa</b>	<b>Pippali</b> Duralabha Tamalaki <b>Haritaki</b> Draksha Aamalaki <b>Kakadshrunji</b> Punarnava Vruschir <b>Kantakari</b>	Kataphaladi Kwatha Pathadi kalka Nagaradi yog Pippali prayog Kasamaryadi yog Dashamooladi ghruta Kantakari ghruta Kaphaja kasanashak yog	Kaphaghna	Deepan Pachan Srotorodhak Kaphanisarak Vatanuloman Lekhan Chhedan Kanthya
4	<b>Kshataja Kasa</b>	<b>Pippali</b>	Pippalyadi leha Kulthyadi ghruta	Tonic are used to increase the Strength	Deepan Pachan Srotorodhak Kaphanisarak Vatanuloman Balya
5	<b>Kshayaj Kasa</b>	<b>Pippali</b> Duralabha Tamalaki <b>Haritaki</b> <b>Draksha</b> <b>Aamalaki</b> Kakadshrunji Punarnava	Draksha siddha gruta Shrunji siddha ghruta Dwipanchamooladi ghruta Guduchyadi ghruta Kasamardadi ghruta Haritaki leha Drakshadi leha Chitrakadi leha Padmakadi leha	Tonic and Digestion power increasing	Deepan Pachan Srotorodhak Kaphanisarak Vatanuloman Balya

- Total 13 formulation of *Vataj Kasa* are mentioned in *Charak Chikitsa sthan Adhyay 3*. Out of them total 10 Formulation contain the 8 *Dravyas* from *Kasahar Dashemani*. *Pippali* used 8 times in *Vataj Kasa*.
- Total 9 formulations are mentioned of *Pittaj Kasa* . out of them 3 formulation contain the 4 *Dravyas* from *Kasahar Dashemani*. Total 9 *Avaleha* are mention out of them 8 *Avaleha Pippaliis* the ingredient of them. *Drakshais* used in 7 *Avaleha preparations*. *Draksha swaras* is used as *Anupan* in *Pittaj Kasa*.
- Total 9 formulations are mention of *KaphajaKasa* out of them 8 formulationsare contain total 10 dravyasof *Kasahar dashemani*.*Pippali* used in 5 formulations. *Karkatshrungr* is used in 4 formulatins,*Haritaki*,*Kantakari* used in 3 formulations.
- Total 5 formulations are used in *KshatajaKasa*, but only 2 formulations contain a single *Dravya Pippali* in both formulations.
- Total 9 formulations are mention in *Kshayaj Kasa*; out of them 8 formulations contain 8 *dravyas* from *Kasahar Dashemani*. *Draksha* and *Aamalaki* is used in 4 formulations. *Pippali* is used in 7 formuations.*Haritaki* is used in 5 formulations.

Below table shows chemical constituents and their action:

Sr. No.	Drug	Chemical constituents	Mode of Action
1	<i>Draksha</i>	Fruits-catechin, epicatechin, beta-sitosterol, ergosterol, jasmonic acid, glucose, fructose, galactose, mannose, arabinose, rhamnose, Tannic acid, mallic acids. Flavanoides-Quercetin Kaempferol, myricetin Polyphenols- catechins	The anti inflammatory activity of <i>Vitis vinnifera</i> may be attributed to the presence of high content of flavonoids viz. quercetin, rutin, kaempferol and luteolin in addition to phenolic acid and beta sitosterol which are all reported to have anti-inflammatory effect
2	<i>Pippali</i>	Piperine Lignans Sesamin, pulvuatilol, fargesin and volatile oil, starch, protein and alkaloids, saponins, carbohydrates,	The petroleum ether extract of <i>P. longum</i> produced respiratory stimulation in smaller doses in various species. Morphine and pentobarbitone induced respiratory depression was antagonized by the extract. The study indicates the presence of some medullary stimulant factor in the extract[1] The crude extract of <i>P. longum</i> as well as <i>piplartine</i> , one of its alkaloids, suppressed

		and amygdalin	<p>the ciliary movements of the esophagus of the frog, which may be due to the suppression of cough reflex.[ 2]</p> <p>An extract of the fruits in milk reduced passive cutaneous anaphylaxis in rats and protected guinea pigs against antigen-induced bronchospasm[3]</p>
3	<i>Duralabha</i>	Saponins and tannins, flavonoids and cardiac glycosides, stigmasterol & Kaempferol	-
4	<i>Kakadshruni</i>	contains alkaloids, sterols, saponins, flavonoids and their glycosides and also carbohydrates, fatty acids, amino acids	<p>Significant protection against histamine aerosol-induced bronchospasm in guinea pigs and showed the spasmolytic activity against histamine induced contractions in isolated guinea pig tracheal chain preparation. It revealed the antiasthmatic activity of aqueous extract of <i>P.integerrima</i> galls.[4]</p> <p>inhibits 5-lipoxygenase enzyme activity and DPPH scavenging activity [It showed anti-allergic activity by inhibiting induced mast cell degranulation.[5]</p>
5	<i>Kantakari</i>	carpenterol, glucosyl alkaloid solanocarpine, solanine-S, solasodine, solasonine, solamargine, cycloartanol, stigmasterol, campesterol, cholesterol, sitosterol-glucoside, stigmasterol glucoside, solasurine, flavonol glycoside, quercetin-	<p>Plant powder is anti-tussive and its effect on patients with bronchial asthma and nonspecific cough has been explained as due to depletion of histamine from lung and its expectorant action as due to inorganic nitrogen content progressive improvement in the ventilatory function.[6]</p> <p>The improvement in [peak expiratory flow rate] PEFr and the reduction in other symptoms rhonchi, cough, breathlessness and sputum were reduced bronchodilator effect, a decrease of oedema and secretions in the airway lumen[7]</p> <p>antihistaminic, mast cell stabilizing and decreased capillary permeability effect and</p>

			hence possesses potential role in the treatment asthma and allergic disorders*the significant inhibition of histamine induced contractions[8]
6	<i>Punarnava</i>	B-Sitosterol, a-2-sitosterol, palmitic acid, stearic tetracosanoic, hexacosanoic, arachidic acid, ursolic acid, Hentriacontane, b-Ecdysone, triacontanol. Boeravinone A-F, Punarnavine, Quercetin, Kaempferol	It also acts as anti-inflammatory drug. As it acts on the kapha dosha and thus suppresses the mucous formation. inhibit the contractions induced by acetylcholine.
7	<i>Vruschir</i>	It is the type of Punarnava so similar to punarnava.	-
8	<i>Aamalaki</i>	Ascorbic acid, chebulinic acid, chebulagic acid, 3-ethylgallic acid, gallic acid, ellagic acid, corilagin. Isostrictinin, Terchebin, Emblicanin - A and B, Punigluconin, Pedunculagin, trigalloyl glucose, Quercetin2. Tannins, alkaloids, phenols.	The drug inhibits prostanoid synthesis which in turn inhibits airway smooth muscle contractility, and this may also be one of the factors to account for its anti-tussive action. [9], [10], [11]
9	<i>Haritaki</i>	mannitol, ascorbic acid (vitamin C), tannins, and uronic acid (gallic acid, chebulic acid, punicalagin, chebulanin, corilagin, neochebulinic, ellagic acid, chebulegic acid, chebulinic acid Flavonal glycosides, triterpenoids	Gallic acid (3, 4, 5-trihydroxybenzoic acid) is one of the main endogenous phenolic acids found in <i>T. chebula</i> plant, which possesses the anti-inflammatory activity[12]
10	<i>Tamalaki</i>	saponins, terpenoids, and steroids, coumarins and saponins, Lignans Phyllanthus, hypophyllanthin, Flavonoids Astragaloside, rutin, quercetin Triterpenes Lupeol, sitosterol  Alkaloids, Tannin Geraniin	-

**Conclusion:**

From the above study we concluded that *Kasahar Dashemani Dravyas* are used to treat all 5 types of *Kasa*. Most of the dravyas work as *Deepan, Pachan, Vatanuloman, Kanthya, Srotoshodhan, Kaphanisarakarma*, which are related to the *Pranavaha Srotasa vyadhi Kasa*. All 10 dravyas mention in *Kasahar Dashemani* work as *Kasahar* by singal use or in compound form. For *Vataj Kasa Pippali, Duralabha, Draksha* are used mostly. *Pittaj kasa Draksha, Pippali* are used mostly. *Kaphaj Kasa Pippali, Haritaki, Hankakari, Kakatshrungi* used mostly. *Kshataj kasa Pippali* is only one drug used. For *Kshayaj kasa Pippali Haritaki Draksha, Aamali* are used. **Pippali is the common drug used in all types of *Kasa vyadhi*. It works as *Kaphavataghna***

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which are main *Dosha* affected in *Kasa vyadhi*. Due to balance these *Vata, Kapha Dosha* it work as *Vatanuloman, Deepan Pachan* by its *Ushna virya*. So it work as *Dhatuposhan* by increasing *Dhatwagni* of *Dhatu* related in *Kasa Vyadhi* It also work as *Kaphaghna* to clear the channels of *Pranavaha Srotas* and expels the obstruction, so work as *Kaphanisarak, Kasahar, Kanthya*. After studied of all chemical constituents it has been noticed that **Tannic acid, Flavonoids** content **Quercetin** and **gallic acid, B-Sitosterol** contains **anti-inflammatory action**, Anti-allergic, Anti-asthmatic, Anti-histamine action which work as **Anti-Tussive**.

Pippali is one of the different Dravya which contains Piperine, and work as Anti-tussive

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