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Role of *Deepaneeya and Shwashara Dashemani* in the Management of *Tamakashwasa w.s.r.* to Bronchial Asthma: a review

Review article

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Abstract

According to Global initiative for Asthma workshop 2005 report, there will be additional 100 millions of people suffering from asthma by 2025. *Sushruta* has quoted; *Shwasa* a disease described in Ayurvedic classics is more akin to bronchial asthma. *Madhavakara* has mentioned *Agnimandya* as root cause of all diseases. *Aacharya*s have *included Pranavaha, Annavaha* and *Udakavaha Strotasa* vitiation in the etiopathogenesis of *Shwasa. Charaka* has described the treatment of *Shwasa* according to its *Karanas (etiological factors), Sthana (organ of manifestation)* and *Moola (root place of pathogenesis). Aamashaya* has been referred as an *Udbhavasthan* of *Shwasa* by *Vagbhata* and *Charaka*. *Chakrapani* explains *Aamashaya* as *Pittasthana (Agni)* indicating importance of management of *Agnimandya* (hypofunction of *Agni*). *Deepaneeya Dashemani* acts on the *Moolasthana of Strotasa* involved in *Shwasa*. *Deepaneeya Dashemani* described by *Charaka* includes *Pippali, Pipplaimoola, Chavya, Chitraka, Shunthi, Amlavetasa Maricha, Ajmoda, Bhallatakasthi* and *Hingu*. Out of these; nine *Dravyas* possess *Katu Rasa* except *Amlavetasa*. All *Dravyas* have *Ushna Veerya*, *Laghu* and *Teekshna Gunas*. Most of them possess *Katu Vipaka* and acts as *Deepana, Pachana and Strotovishodhana*. Out of ten, two *Dravyas Amlavetasa* and *Hingu* are common to *Deepaneeya* and *Shwashara Dashemani*. Research studies have reported bronchodilator, antiasthmatic, antiallergic, antibacterial, antitussive and antihistaminic actions of these drugs.

Key words: *Shwasa*, *Aamashaya, Deepan, Shwashara,* bronchodilators.

Introduction

According to Global initiative for Asthma (GINA) report 2011, ~235 million people worldwide were affected by asthma and approximately 250,000 people die per year from the disease. Low and middle income countries make up more than 80% of the mortality. WHO has reported that approximately 1, 80,000 deaths are being reported annually (1). This data reveals that, bronchial asthma is becoming a global health problem in present scenario. Increased industrialization and pollution contributes in manifestation and exacerbation of the disease. The GINA Workshop report 2005 says, "The rate of asthma increases as communities adopt western lifestyles and become urbanized". According to GINA workshop 2005 report, there will be additional 100 millions of people suffering from asthma by 2025. This alarming raise in the prevalence of *Tamaka Shwasa*

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(often interpreted as bronchial asthma) can be accounted to factors such as atmospheric pollution, rapid environmental changes, adaptation of newer dietetic preparations and tremendous psychological stress. Almost all the traditional health care delivery systems claim effective management of asthma. Ayurveda has a strong scientific background, which was translated into recommendations for clinical management of this condition. Ongoing worldwide research has also provided valuable clues regarding the precise mechanism of action of these herbal alternatives.

Asthma is a manageable disease, and it is also incurable. The 'WHO' and 'International Asthma Council' (IAC) consultation report published in 1998 on implementation of asthma guidelines, highlights that wherever there is use of traditional medicines in asthma care, the conventional therapy should not be stopped because lack of evidence of safety and efficacy of these therapies. This highlights the need for clinical researches in suitable designs to evaluate the safety and efficacy of ayurvedic therapies and drugs in the treatment of asthma.

Aims and Objectives

The role of *Deepaneeya* and *Shwashara Dashemani* in the management of *Tamakashwasa* (bronchial asthma) will be reviewed.

Materials and Methods

Pathogenesis of *Shwasa Vyadhi* mentioned in *Bhruhattrayies* is reviewed. Analysis of drugs mentioned in *Charaksamhita* dealt under *Deepaneeya* and *Shwasahara Dashemani* is carried out from Ayurvedic pharmacological perspective.

A detailed review of research data reported in various journals and monographs is made.

Observation and Result

Description of *Shwasa*

Charaka has mentioned origin of *Shwasa* as *Pittasthana*. Root of *Pranavaha Srotasa* is mentioned as *Hridaya* & *Mahasrotasa*. *Shwasa* is diseases, which manifests in *Pranavaha Srotasa* with the derangement of *Pranavayu*. *Dushti-Lakshana* of *Pranavaha Srotasa* includes abnormal situation of *Shwasana (*respiration) with treatment which is similar to *Shwasa*. *Shwasa* may appear as an individual disease (*Swatantra Vyadhi)* or secondary condition (*Paratantra Vyadhi)*.

On the basis of clinical features, *Shwasa* has been classified as *Maha, Urdhva, Chinna, Tamaka*, and *Kshudra Shwasa*. Out of which *Maha, Urdhwa* and *Chinna* are difficult to treat *(Asadhya)*. *Charaka* has further mentioned two different stages of *Tamakashwasa* as further complication of disease, viz. *Pratamaka* and *Santamaka Shwasa*. Both differ from each other on the basis of intensity of attacks. When a patient of *Tamakashwasa* suffers with fever and fainting, then the condition is called as *Pratamaka Shwasa*. *Pratamaka Shwasa* can be considered as the condition of superimposed infection in bronchial asthma. When the patient of *Tamaka Shwasa* feels submerged in darkness, the condition is called as *Santamaka Shwasa*. This can be taken as the severe stage of *Pratamaka*. These both conditions are aggravated by *Udavarta* (Vitiated movement of *Vata*), dust, indigestion, humidity in body and suppression of natural urges. Though cooling regimen is one of the causative factors of *Tamakashwasa* but in *Pratamaka* and *Santamaka Shwasa*, the patient gets relief by administering cooling agents due to *Pitta Dosha* involvement. The etiological factors focused by *Acharya Charaka* like exposure to *Raja* (dust) and *Dhuma* (Smoke) are similar to that of the etiological factors of bronchial asthma(2).

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Sushruta and *Vagbhata* have only mentioned the term *Pratamaka*, which also includes clinical manifestation of *Santamaka*. As per the clinical features, *Pratamaka* and *Santamaka Shwasa* can be correlated with bronchial asthma and tropical pulmonary eosinophilia. In *Astangahrudaya* and *Ashtangsangraha*, *Vagbhata* has described Involvement of *Prana, Anna* & *Udakavaha Srotasa* in the pathogenesis and *Aamashaya* is referred as *Udbhavasthana* of *Shwasa*. It is also mentioned that *Kasa* as *Nidanarthakara Roga* (etiological factor) of *Shwasa* (3).

The source of therapeutic measures depends on the precise diagnosis and application of the drugs to reverse pathogenesis. In *Shwasa* also similar to any other disease condition involves *Agni* which the triggers pathogenesis .It is more rational approach to employ drugs which can address hypofunction of *Agni.* In such *Deepaneeya* drugs should be prescribed before instituting disease specific therapy.

According to the National Institute of Health (NIH), asthma is defined as a chronic inflammatory disorder of the airways in which many cells and cellular elements play a role, in particular, mast cells, eosinophils, T-lymphocytes, neutrophils and epithelial cells. Asthma is caused by a very complex interaction between inflammatory cells and mediators.

Let us analyse *Deepaneeya* and *Shwasahara* drugs to explain the mode of action of drugs in terms of their pharmacodynamics principles.

Table 1: *Rasapanchaka Deepaneeya Dashemani* of *Charaka* (4)

No	***Dravya***	**Latin name**	***Rasa***	***Veerya***	***Vipaka***	***Guna*** (4)	***Doshaghnata***
1	***Pippali***	*Piper longum* Linn.	*Katu*	*Anushna*	*Madhura*	*Laghu,Teekshna, Snigdha*	*Vata-Kapha*hara
2	***Pippalimoola***	*Piper longum* Linn.	*Katu*	*Ushna*	*Katu*	*Laghu,Teekshna*	*Vata-Kapha*hara
3	***Chavya***	*Piper retrofractum* Vahl.	*Katu*	*Ushna*	*Katu*	*Laghu, Ruksha*	*Laghu, Ruksha*
4	***Chitraka***	*Plumbago zeylanica* Linn.	*Katu*	*Ushna*	*Katu*	*Laghu, Ruksha, Teekshna*	*Laghu, Ruksha, Teekshna*
5	***Shunthi***	*Zingiber officinale* Rose.	*Katu*	*Ushna*	*Madhura*	*Laghu, Snigdha, Teekshna*	*Vata-Kapha*hara
6	***Amlavetasa***	*Garcinia indica* Chois	*Katu*	*Ushna*	*Katu*	*Laghu, Teekshna, Ruksha*	*Laghu, Ruksha, Teekshna*
7	***Maricha***	*Piper nigrum* Linn.	*Katu*	*Ushna*	*Katu*	*Laghu,Teekshna*	
8	***Ajamoda***	*Carum roxburghianum* DC	*Katu*	*Ushna*	*Katu*	*Laghu,Teekshna*	*Vata-Kapha*hara
9	***Bhallataka***	*Semecarpus*	*Kat*	*Ushna*	Madhur	*Laghu,Teekshn*	*Laghu,*

	sthi	*anacardium* Linn.	*u*		a	*a, Snigdha*	*Snigdha, Teekshna*
10	***Hinguniryasa***	*Ferula narthex* Boiss.	*Katu*	*Ushna*	*Katu*	*Laghu,Teekshna, Snigdha*	*Laghu, Snigdha, Teekshna*

Table 2: *Rasapanchaka Shwasahara Dashemani* of *Charaka* (4)

No	***Dravya***	**Latin name**	***Rasa***	***Veerya***	***Vipaka***	***Guna*** (4)	***Doshaghnata***
1	***Shati***	*Hedychium spicatum* Buch-Ham	*Katu-Tikta-Kashaya*	*Ushna*	*Katu*	*Laghu,Teekshna*	*Kaphavatahara*
2	***Pushkarmoola***	*Inula racemosa* Hook.f.	*Tikta-Katu*	*Ushna*	*Katu*	*Laghu,Teekshna*	*Kaphavatahara*
3	***Amlavetasa***	*Garcinia pedunculata* Roxb.	*Amla*	*Ushna*	*Amla*	*Laghu, Teekshna, Ruksha*	*Kaphavatahara, Pittavardhaka*
4	***Ela***	*Elettaria cardamomum* Maton.	*Katu-Madhura*	*Sheeta*	*Madhura*	*Laghu, Ruksha*	*Tridoshahara*
5	***Hingu***	*Ferula narthex* Boiss.	*Katu*	*Ushna*	*Katu*	*Laghu,Teekshna, Snigdha*	*Kapha-Vatahara, Pittavardhaka*
6	***Agaru***	*Aquilaria agallocha* Roxb.	*Katu*	*Ushna*	*Katu*	*Laghu,Teekshna, Ruksha*	*Kapha-Vatahara*
7	***Surasa***	*Ocimum sanctum* Linn.	*Katu-Tikta*	*Ushna*	*Katu*	*Laghu, Ruksha*	*Kapha-Vatahara*
8	***Tamalaki***	*Phyllanthus urinaria* Linn.	*Tikta-Kashaya-Madhura*	*Sheeta*	*Madhura*	*Laghu, Ruksha*	*Kapha-Pittahara*
9	***Jivanti***	*Leptadenia reticulata* W.& A.	*Madhura*	*Sheeta*	*Madhura*	*Laghu, Snigdha*	*Tridoshahara*
10	***Chanda(Choraka)***	*Angelica glauca* Edgew	*Katu-Tikta*	*Ushna*	*Katu*	*Laghu,Teekshna*	*Kapha-Vatahara, Pittavardhaka*

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Table 3: Modern Researches on *Deepaneeya Dashemani*:

Drug	Chemical constituent	Research studies
Pippali *(Piper longum* Linn.*)*	The fruits of *Piper longum* contain 1% volatile oil, alkaloids Piperine and piper longuminine, a waxy alkaloid Nisobutyldeca-trans-2-trans-4-dienamide and a terpenoids substance	-In an open clinical trial study carried out on 20 pediatrics (aged 1-2 years) patients of asthma, *P.longum* fruit powder was given with milk, in a gradually increasing dose (935-1575gm)for a period of 5 weeks, significantly decreased the frequency and severity of asthmatic attacks in 85% of the patients(5). -Its antiallergic activities was evaluated using milk induced leukocytosis in mice and passive paw anaphylaxis in rats(in vivo).The extract 100µg/ml significantly (p less than 0.01)inhibited the histamine induced contraction of isolated guinea pig ileum preparation.The extract 50,100,200mg/kg showed significant p less than 0.01activity and increase in dose of extract increased the percentage protection in histamine induced bronchospasm and also showed significant P less than 0.01acticity in passive paw anaphylaxis(6). -Dried ripe fruits effectively reduce passive cutaneous anaphylaxis in rats and protect guinea pigs against antigen induced bronchospasm; a 30% protection of mast cells was observed in an *in vitro* study (7).
Chitraka *(Plumbago zeylanica* Linn.*)*	Plumbagin	-Plumbagin has bronchospasmolytic and antitussive activities. -Ethanol (70%) extract of stems was shown to inhibit mast cell dependant immediate allergic reactions in mice/rats, which had been exposed to various allergens (8).
Shunthi *(Zingiber officinale* Rose.*)*	6-shogal	-Zingiber officinale is reported to be a potent inhibitor of inflammatory mediators such as prostaglandins and leukotrienes (9). -In a study involving 240 children of different age groups suffering from frequent asthma attacks, long-term 6-Shogoal (70-100mg/kg, p.o.), the main pungent principle of ginger extract, has been found to possess intense antitussive effect in comparison with that of dihydrocodein phosphate (10).
Maricha *(Piper nigrum* Linn.*)*	Piperine	-Nasal administration of the preparation containing fruits of *Piper nigrum (Piperaceae)* with water is beneficial in asthma. The aqueous extract of *Piper nigrum* fruits at the doses of 380 mcg/ml and 640 mcg/ml significantly inhibited acetylcholine induced broncho-constriction of isolated goat trachea. Thus the present study revealed that the aqueous extract of fruit of *Piper nigrum* has significant anti-asthmatic potential (11).
Hingu- **niryasa** ***(****Ferula narthex* Boiss.*)*		-The relaxant effects of three cumulative concentrations of the aqueous extract (2, 5 and 10 mg/ml), theophylline (0.25, 0.5 and 0.75 mM) in preincubated tissues by propranolol and chlorpheniramine, contracted by methacholine. The relaxant effects of two last concentrations of the extract (5 and 10 mg/ml) were significantly lower than that of theophylline ($p<0.05$ for both case) (12).

Table 4: Modern Researches on *Shwasahara Dashemani*:

Drug	**Chemical constituents**	**Research study**
Shati *(Hedychium spicatum* Buch-Ham*)*	Monoterpenes, Sesquiterpenes, eugenol,hedychenone,7-hydroxyhedychenone	-The powdered rhizome given in divided doses of 10gm to 25 patients with recurrent paroxysmal attacks of dyspnoea for 4 weeks (Bronchial asthma), completely relieved dyspnoea, cough and restlessness in all patients. The rhonchi completely disappeared in 36% of the patients. The mean R/R was reduced by 25% and the vital capacity increased by 20 %(13).
Pushkarmoola **(***Inula racemosa* Hook.f.	Beta-sitosterol, Sesquiterpene lactones	-Petroleum ether extract (60-80%) of air dried roots of *Inula racemosa* (PEEIR) at a dose of 4 mg/ml (55.41±3.04) and 10 mg/ml (48.87±1.36) exert significant antagonistic effect ($p<0.05$) on histamine induced (1.6µg/ml) contraction as compared to its ethanol and water extract. A dose dependent contraction was observed in goat tracheal chain preparation. Significant control of milk-induced eosinophilia in mice was seen at a dose of 50 & 100mg/kg i.p. by petroleum ether extract (44.77 % & 54.36 % respectively) as compared control group (43.1±2.41) (14). -Its Aqueous and alcoholic extract showed potent ant-5-HT and antihistaminic leading to anti-allergic properties (15). -*Inula racemosa* (i.p, as well as p.o.) showed significant protection against egg albumin induced PCA. Protection against compound 48/80 induced mast cell degranulation in rats (16). -Ethanol extract of powdered root of the plant in the dose of 300mg/kg (i.p.) is known to produce significant protection against histamine and 5-HT induced bronchospasm. The extract also showed improvement protects experimental animals against number of allergens such as pollen, plants etc. -The bronchodialator effect of the root is well documented. *Inula racemosa* administered orally shows a significant improvement in pulmonary functions and reduces frequency of attacks in known asthmatic patients. The root of the plant shows potent anti-inflammatory activity in carrageenan induced odema in rats (17).

Ela ***(****Eletteria cardanomum* Maton)	3-8% volatile oil, Terpineol and acetyl terpineol, penetration enhancer for the diffusion of prednisolone through mouse skin in vitro (18).	-Flavonoid rich fraction also inhibits contraction induced by acetylcholine and BaCl2 on rat ileum. These results suggest flavanoids present in cardamomum has significant antioxidant and spasmolytic activity (19). -Bio-assay directed fractionation revealed the separation of spasmogenic and spasmolytic components in the aqueous and organic fractions respectively (20).
Surasa (Tulsi) (*Ocimum sanctum* Linn.)	Flavonides like apigenin, Triterpenoides, eugenol	-The ethanolic extract of fresh leaves, volatile oil extracted from fresh leaves and fixed oil from the seeds significantly protected the guinea pigs against histamine- and acetylcholine-induced pre-convulsive dyspnoea (PCD) (21). -The ethanolic extract at 100 and 200 mg/kg body weight inhibited degranulation of mast cells to an extent of 62.44% and 67.24%, respectively in albino rats which were sensitized by horse serum along with triple antigen containing *Bordetella pertussis*. -The isolated flavonoidal fraction of *Ocimum sanctum* at 75 and 150 mg/kg body weight inhibited degranulation of mast cell to an extent of 54.62 and 60.48% respectively (22). -The extract and oil of plant shows significant anti-inflammatory activity against carrageenan, serotonin, histamine and PGE2 induced inflammations (23).
Jivanti ***(****Leptadenia reticulata* W. & A.)	Steroieds, Stigmasterol, Sitosterol, Flavonoides, Triterpenoides etc.	-Hydro alcoholic extract of leaves *Leptadenia reticulata* (Retz) Wight & Arn (LRLHE) is evaluated for its anti-asthmatic activity in guinea pig ileum, tracheal chain and rat ileum preparation, compound 48/80 induced mast cell degranulations , passive cutaneous anaphylaxis in rats and HPTLC analysis of isolated sapogenin fraction from the plant against ß-sitosterol as standard marker. LRLHE exhibited a significant ($P<0.05$, $P<0.01$) anti-asthmatic activity with the doses of 100, 200 and 300 mg/kg body weight in rats and significant ($P<0.05$, $P<0.01$) inhibition in histamine and acetylcholine induced contraction of smooth muscle preparations (24).

Discussion

In the pathogenesis of *Shwasa*, *Charaka* has explained *Pittasthana Samudbhava Vyadhi* where as *Vagbhata* explained as *Aamashaya Samudbhava Vyadhi*. *Chakrapani* has quoted that *Pittasthana* is related with upper part of *Aamashaya*. But no clear description

regarding *Pittasthana* is available in *Samhita*. Whether all *Pittasthana* should be considered or it is confined to only *Aamashaya* (upper part of stomach) remains controversial. *Phupphusa* which is enumerated under *Koshtangas* is not mentioned in the context of pathogenesis of *Shwasa* (25). As lungs are situated in *Urah* (Thorax) there should not be any objection to consider it as *Shleshmasthana* as vitiated *kapha* plays an important role in *Shwasaroga.* Association of HCL with gastric juice seems to be controversial as Achlorhydria & Hyperchlorhydria both conditions are associated with asthma. In all it is mainly concerned with digestive enzymes which play an important role in digestion. According to *Charaka*, *Grahani* is included under *Aamashaya*; its upper part is related with number of enzymes, secreted from pancreas, liver in G.I.T. itself. *Aacharya Charaka* has explained two types of pathogenesis i.e. vitiated *Vata* enters into *Urahsthana* and vitiates *Sthanika Sama Kapha* leading to *Kaphavrita Vata*. Vitiated *Kapha* in *Urahsthana* obstructs the natural *Gati* (movements) of *Vayu* leading to *Kaphavrita Vata*. In another pathogenesis both may be vitiated with their own etiological factors leading to *Aavarana* of *Vata*.

Vishamashana (irregular food habits) results into *Ajirna* & *Samashana* also results into *Dosha Utklesha* as described in *Viruddha-ahara*. Many scholars have correlated *Viruddha-ahara* with allergic phenomenon. As per modern view, some ingested substances including salicylates, food preservatives, monosodium glutamate and food colouring agents cause asthma symptoms in some patients. All these findings support the place of pathogenesis as *Aamashaya.*

Atipravriddha Pipasa (increased thirst) results due to loss of water through breathing. Patient keeps his/ her mouth open during breathing which results into dryness of tongue & increased thirst are the symptoms of *Udakavaha strotodushti lakshanas*. *Arochaka* results due to *Mandagni*, as *Shwasa* is a *Pittasthana Samudbhava Vyadhi*. Among *Pranavaha Strotodushti*, *Atisristha Shwasa* and *Sashabda* & *Alpalpa Shwasa* are the symptoms narrated. In asthmatic persons, spasm of smooth muscle in bronchi results into *Atisrishta Shwasa* as it cannot expel the air easily & requires longer gap. It is associated with wheeze / rhonchi which are nothing but *Sashabda Shwasa*. It also results due to spasm of airways.

In the pathogenesis, *Pratiloma Vayu* plays an important role & inflammatory condition of airway results due to *Saama Vayu* which causes *Shotha* & *Srotorodha*. Hence patients of *Tamakashwasa* should be classified broadly under *Vatapradhana* & *Kaphapradhana* in nature.

Aacharya has described various guidelines for the management of *Shwasa*. Among that *Nidanaparivarjana* plays major role, as disease is Allergic and episodic in nature (*Vegavastha)*. Various preventive measures are explained which helps in preventing asthma exacerbation as well as development of asthma. Treatment modalities mainly include *Shodhana* and *Shamana* therapy. Among *Shodhana*, *Vamana* & *Virechana* have been advised whereas *Aacharya Sushruta* has contraindicated *Sneha Basti*. During *Vegavastha* local *Sneha*na with *Salavana Taila* & *Swedana* is advised. In today's lifestyle, patients don't get proper time for *Shodhana* procedures. In *Shamana* therapy drugs having *Kapha Vataghna*, *Ushna* & *Vatanulomana* properties are prescribed. *Charaka* has explained different management principles according to stages of disease. He has explained two types of patients i.e. *Balawana* (strong) and *Durbala* (weak). He has narrated that single side treatment like *Karshana* (lightning) or *Brumhana* (alleviating) should be avoided. As *Kapha* alleviating treatment will aggravate *Vata* and vice-versa. Thus the *Brumhana* (promotive) or

Shamana (pacifying) treatment has given importance rather than *Shodhana* (26). *Brumhana* therapy is just like *Rasayana* therapy in this context.

According to *Sushruta*, *Shwasa, Kasa* and *Vilambika* are difficult to treat (27). The *Shamana yoga* in *Shwasa* is expected to provide *Deepana* and *Pachana* activity as well as *Balya* effects on *Pranavaha Strotasa*. In *Shwasa*, provocation of *Vata* and *Kapha* are considered to be the main factors as they are providing important role in the pathogenesis. *Kledaka Kapha* produced in *Aamashaya* controls all the *Kapha* moieties of the body and helps in relieving indigestion. If the *Kapha* is vitiated due to etiological factors, it circulates in the body and localize in *Pranavaha Strotasa* and causes disease.

Out of 10 *Dravyas* of *Deepaneeya Dashemani* 9 *Dravyas* possess *Katu Rasa* predominantly. *Katu Rasa* causes *Deepana*, *Pachana*, *rochana*, *strotoshohana* and *Kapha*ghna action. All 10 *Dravyas* possess *Ushna Veerya* which pacifies *Sheeta Guna* of *Vata* and *Kapha*. Six drugs possess *Katu Vipaka* which is kind of *Laghu Vipaka* possessing *Laghu*, *Ruksha*, *Vishada* and *Teekshna Gunas* which pacifies *Kapha*. All the drugs possess *Laghu* and *Teekshna Guna*. *Laghu Guna* is *Kaphahara*; it decreases *Mala* and clears the channels (*Strotasa-Shodhana*) and also improved digestion. On the psyche (manasa) it has positive effect by improving activeness and providing inspiration. *Teekshna Guna* is responsible for the quick activity of the drug and helps in expulsion of *Doshas;* thus helping curative treatment. *Teekshna Guna* causes *Kapha-Vatahara* activity and enhances *Mala* excretion. Drugs like *Pippali* and *Shunthi* have *Snigdha Guna* and *Madhura Vipaka* along with *Laghu*, *Teekshna Gunas*. By *Snigdha Gunas* and *Madhura Vipaka*, it increases the *Bala* in the *Pranavaha Srotasa* and acts as a *Rasayana*. Thus, *Agnimandya* (diminished digestion power) is corrected by *Pippali. Strotodushti* is *Sanga* (occlusion) is relieved by the *Ushna* (*hot*) properties and *Shwasahara* properties of the drugs. *Adhistana* (site of disease)for the disease is *Aamashaya* (upper part of stomach), which is seat of *Kapha* and the ingredient of *Deepaneeya Dashemani* are *Katu*, *Tikta Rasapradhana*, act over *Kapha Dosha* and help in restoring the normal function of *Aamashaya*. By these properties *Samprapti -vighatana* (breaking of the pathogenesis) can be achieved.

The sum total properties of *Shwasahara Dashemani* are *Tikta- Katu Rasa*, *Laghu and Teekshna Guna* (light and penetrating properties), *Ushna Veerya* (hot potency) and *Vata-Kaphaghna* (decrease *Vata* and *Kapha Dosha*). The *Gunas* of the drug i.e. *Laghu, Teekshna* which are antagonistic to the *Gunas* of *Kapha dosha* are help in normalizing *Kapha dosha*. The *Veerya* (potency) of the drugs of this group antagonizes the *Sheeta Guna* of *Vata*. The anti-allergic of Inula racemosa *(Pushkarmoola)* and anti-inflammatory effect of Hedychium spicatum *(Shati)* have been proved clinically which may help in the treatment of Asthma.

The drugs commonly found in *Deepaneeya* and *Shwasa*hara *Dashemani's* are *Hingu* and *Amlavetasa*. *Charaka* has explained the treatment of disease according to *Karana* (etiological factors), *Sthana* (organ of manifestation) and *Moola* (root site of pathogenesis).*Vatanulomana* is a prime goal of the treatment for which *Sneha*na, *Swedana* are supported. In *Shamana* yoga, *Hingu* by its *Ushna Veerya* and *Amlavetasa* by its *amla Rasa* cause *Vatanulomana*. It has been mentioned by *Charaka* when there is condition like *udavarta* and *adhmana .Hingu Amlavetasa* etc. *Dravya* should be given with food for *Vatanulomana* purpose.*Hingu* has been repeatedly mentioned by *Charaka* in different *Yogas* like *Churna, Rasa,* and

Ghruta and along with food in the management of *Shwasa.*

Conclusion

Deepaneeya Dashemani is effective in reducing the severity of asthmatic attacks by acting on the root place of manifestation of the disease. The drugs are quite safe and can be a therapeutic option in asthma control as drugs are useful in correcting the site of origin *(Aamashaya)* of disease manifestation. The drugs of *Shwasahara Dashemani* are proved by research and clinically to be effective in controlling the disease. *Hingu* and *Amlavetasa* are the common to both *Dashemani* groups should be given importance in the treatment. The ingredients of both *Dashemani* may be collectively effective on airflow obstruction and airway hyper-responsiveness by bronchodilator, anti-inflammatory, antiallergic and antihistaminic properties. Scientific validation can be produced by evidence based clinical studies for establishing clinical efficacy of *Deepaneeya Dashemani*.

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